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Teaching, Media and Bildung

In this chapter we present an interpretive framework that connects three theoretical concepts – Teaching, Media and Bildung. The framework makes it possible to generate a *non-deterministic* understanding of education and digital media (see the introduction to this book). This in opposition to mainstream thought in which media is either ignored or the relationship is understood to be more or less deterministic, as if technology and media have a certain unconditional impact on education and teaching, either good or bad, big or small; or hold a certain potential that ought to be realised by schools (to adapt to digital society). Instead of such mainstream views we want to pursue the thesis that the relationship between media and teaching should be thought of as more open, uncertain and unfixed. We understand and develop the German concept Bildung as a way of reflecting on the relationship in a non-deterministic way (see also Kergel 2017). In the tradition of Bildung we find a distinction between *vulgar* (i.e., common) ideas about education, in which the formation and cultivation of students is determined from pre-given (internal or external) ideals, and *reflective* ideas, in which formation/cultivation is considered more openly (explorative and/or experimentally) (Koselleck 2007). Yet, in the tradition of Bildung, this is mostly not linked explicitly to a deeper consideration of media and technology. What we want to do in this chapter is, however, exactly this: to develop the concept of Bildung into a reflection about the open and non-deterministic relationship between teaching and media. Thus, we will understand Bildung theories as reflections about how societies, schools and teachers can and should link teaching and media; where the vulgar Bildung theories think the relationship is a given, the reflective theories do not believe it is already fixed. Or to put it differently: we use and develop the Bildung semantic to compare different educational theories in relation to the rise of digital media and ask how one ought to respond educationally to this new

media situation.¹ Through this, it becomes possible to acknowledge and understand how societies, schools, teachers and students can respond to and modify the new digital situation, inventing different strategies and transforming the situation differently. Only then does it become fully understandable that very different norms, societies and practices can be developed through more or less the same technical media matrix; e.g., democratic or totalitarian actualisations. We therefore regard our proposed framework as both necessary and superior to mainstream thought. Basically, we argue that teaching is impossible without media, but also that media, though a necessary condition of teaching, does not determine teaching; rather it opens up a field containing problems that can be solved in different innovative ways, depending on how one cultivates the teaching-media relationship (Deleuze 1994).

The chapter is divided into three main parts: the first two deal with teaching and media respectively, while part three deals with Bildung and the relationship between teaching and media. The upshot is a theoretical distinction between teaching and media, reflected through the Bildung concept. This whole trinity – Teaching, Media and Bildung – we regard as the main theoretical contribution of this book. It is an invented theoretical framework, contingent, but not arbitrary, insofar as we garnish it with arguments and validation. Following the idea of radical hermeneutics (Caputo 2018) it can be understood as an interpretive framework or a perspective that makes possible new understandings of education in the digital age; creating novel conceptual and interpretative capacities which we actualise in the following chapters.²

¹ See the introduction to this book for a short and concise explanation of the Bildung concept and why we use this German concept in an English text. Simply put the concept denotes both *what* education should be about and *how* it should proceed; often translated into English as *Self-Cultivation* (e.g., Bruford 1975) or *Self-Formation* (e.g., Sorkin 1983); where 'self' in both cases underlines the necessity of active engagement of the student in the process of forming and cultivating 'one self', through support from others. Literally, the term Bildung means *imaging*, which raises the most basic question in education: what ideal image(s) of an educated man should guide educational activities? But also, how can one replicate this image, through a journey, in which one moves through three stages: (1) *Home* (a non-educated state, the starting point); (2) *Away* (going through a Bildung-process, becoming different by moving through an unfamiliar region; and (3) *New Home* (ending up in an educated state, in which one has become 'an educated man') (Gadamer 2013).

² Our distinction between teaching and media is both *theoretical* and *reflective* because we (a) mark both sides of the distinction Teaching AND Media; but also (b) through the Bildung concept reflect on the unity of the two sides. This is in opposition to everyday distinctions where one only marks one side of a distinction while leaving the other unmarked and also carries out no reflection of the distinction itself. This is the case when one says: 'Oh, how beautiful!'. In such a claim one draws a mere distinction between beautiful and non-beautiful, but it is only beautiful that is marked, while the non-beautiful remains a non-thematised 'void', left unmarked as a non-clarified 'rest of the world'; but also, nothing is said here of the validity or character of the distinction itself, between beauty and non-beauty and the criteria of beauty. Yet, as Spencer Brown (1969) and Luhmann (1995) both stress, all distinctions, including those that are theoretical and reflective, inevitably leave an 'outer space' unmarked; implying that there is something non-thematised and non-reflected in all

The Teaching Concept

In this section we put forward a *descriptive* analysis of the teaching concept.³ In the next section about media, we pursue what we call a *subscriptive* analysis; dealing with what lies behind or underneath teaching (i.e. what makes teaching possible at all). And finally, in the last section of this chapter, which deals with Bildung, we bring out a *prescriptive* and thus a pedagogical understanding of teaching, considering what schools and teachers ought to do, not merely what they can do or what they actually do, or have done. Thus, what we propose is a new ontological understanding – or what could be called an *onto-cartography* (Bryant 2014) – of *Teaching, Media and Bildung*. The cornerstone of this new ontology is that instead of a David Humean absolute distinction between facts (what is) and values (what ought to be), we make room for values and freedom in the descriptive and subscriptive understanding of mediated teaching reality –thereby showing why value-based stances (based on Bildung theories) towards teaching and media are necessary.

Historically, teaching has been developed on three different levels (micro, meso and macro): firstly, and primordially it has been established as *interaction* between teachers and students who communicate with each other via reciprocal roles; the teachers as those with the expected responsibility of educating the students, the students as those who are intended to be educated. Secondly, these interactions have been institutionalised through the invention of schools, being the *organisations* where formal teaching is framed organisationally. Thirdly, the schools have not fall from heaven but has been developed as part

distinctions. When one, for instance, distinguishes between teaching and media, one also distinguishes between 'teaching and media' AND everything else – where 'everything else' is left unmarked. If we try to be specific about this 'everything else', the problem recurs; no matter how many distinctions we make, there will always be an outer unmarked void. Thus, even a theoretical and reflective distinction is only a limited and contingent perspective, cleaving the world in a specific way, making some of the world seen/understandable, but only from this narrow perspective, while also concealing what could be seen/understood with other distinctions. In the language of systems theory this means that observation is a paradox because invisibility is the condition of visibility (Luhmann 2018: 381). In hermeneutical terms it means that there is always something we don't understand when we understand something as something (Heidegger 2002). The implication of such a *multi-perspective epistemology* is that each new *drawn* distinction is also a *creative* act in a world making this 'ontologically' possible (Deleuze 1994).

³ We base our descriptive understanding of teaching mainly on sociological systems theory. We do this, because it brings out a clear and general theoretical reconstruction of teaching as a socio-historical phenomenon. This general conceptualisation of teaching makes it possible for us to analyse and discuss how teaching can be arranged very differently depending on (1) what media it relies on (before and after the arising of the internet era) and (2) what kind of Bildung (i.e. idea of education) it aims for.

of the education systems of modern *society* (Luhmann 2006). For instance, secondary schools in Denmark, function in relationship with primary schools on the one hand, and higher education on the other hand; supported by and controlled by the Danish state. To grasp teaching adequately one must take account of all three contextual levels. In the following we describe each of the three levels.

The Interaction Level

Teaching can basically be understood as social interaction between teachers and students, *aiming at* educating the students. Such social interaction can take on many forms, ranging from teacher-dominated and dictatorial instruction to student led and democratic arrangements. But whatever format teaching takes, it is a kind of communication and interaction in which symbolic meaning content is produced and exchanged *between* teachers and students (Biesta 2006). Teaching must therefore take the form of interaction systems that are maintained and developed through the participants' mutual observations and contributions, bringing out an educational complexity that students can benefit from in different ways and that teachers can reflect on and reconsider their contribution to. It is important to stress, that there is no strict causal relationship between teaching as *social* interaction and *individual* learning and development of the students (Luhmann 2006). Just because something is said in the social interaction, it does not imply a given effect on each student. If the teacher has the necessary competence, she can perhaps lead the educational interaction in a way that promotes opportunities for students' learning, but she cannot directly control the learning of the individuals (Luhmann 1998, Tække 2011, 2014). Punishments, rewards, motivation, encouragement, challenges, instructions, role models, tricks etc. *might* convince the singular student – but not necessarily – that she should participate in activities, which *might* imply some learning and development effects, but these effects are uncertain and *might* have some unintended and unwanted effects. Thus, the teacher can, with some *risk*, contribute to the social interaction and perhaps dominate it by organising it, but she cannot carry out the *individual* learning operations of each student. She can try to convey something to the students by speaking to them, drawing for them, etc., but this only contributes to the class' educational interaction – it does not have certain and necessary effects on the students. It is up to the students, to make inferences, think about them, remember them, put them in context and thereby, perhaps, learn and develop.

The Organisational Level

Schools constitute the organisational level of teaching. They function as decision systems deciding how educational aims are interpreted and realised organisationally (Luhmann 2018). *School classes, classrooms, lessons* and *subjects* are the historically developed and institutionalised *general frames* for organising formal teaching, limiting *who* can attend (e.g. qualified teachers and students at certain ages or levels of competences), *where* teaching can be expected to take place, *when* and how long, and *about* what. Different schools have different programmes to ‘fill out’ these general frames for organising teaching (and even experimental schools usually use one or more of these general formats, if not anarchically and informally). For instance, how many students should be in a classroom, which type of teacher should be hired, how many meetings should the teachers have and in what groups should the teachers engage. The school, as an organisational system, makes decisions that work as decision premises for the teachers teaching in the classes. However, the schools as organisation systems not only make educational decisions, but also economic decisions, mass media decisions, political decisions and so on. They thereby reduce societal complexity “around” teaching and make *structural couplings* between the education system and other functional systems of the society.

The Societal Level

The education system constitutes the societal level of teaching. By this we mean that each teaching interaction and each school function as a part of and make a contribution to the education system of society *as a whole*. Following Luhmann (2006), the modern education system is an out-differentiated functional system in line with other (but different) functional systems such as the political system, the economic system and the legal system. Luhmann defines the binary communication code of the education system as *teachable/not teachable*, which is what *all* schools and teachers supposedly are reflecting on while they plan, initiate and evaluate teaching. The knowledge focused on in the education system is not the same as in the science system, where possible untruths can be tested, but a form of knowledge that creates opportunities for the students which, over time, can participate ‘more and more’ and ‘better and better’ in the society including their own life sphere. According to Luhmann, the education system has also developed general educational ‘reflection theories’ consisting of pedagogy that helps teachers to reflect on the aim of teaching and how the communicative selections in the classroom interaction system can increase the chances of successful/fruitful teaching.

The Role of Education

In the functionalist tradition, from Durkheim to Parsons (drawing on Kant and especially Hegel), it is argued that the main role of education – and thus formal schooling and teaching – is to lift children and young people from the family sphere to the wider sphere of the whole society. Thus, school is said to take over the role of socialisation, as a bridge between family and society as a whole, preparing new generations for adult roles in society (and also allocating human resources within the role structure of adult society; i.e., fulfilling the selection function). While children in the family sphere, are assessed by particular standards (i.e., through what parents think is best for the family and/or the particular child), they are met by (more) universal standards in the school (i.e. the same standards are applied to all pupils and the standards is about what is good for society as a whole). By this shift, the school prepares children to participate in wider society. Thus, the school is based on meritocratic principles, sustaining a modern society, characterised by merits, rather than tradition and innate positions.

Yet, there are at least three major problems with this story. The first is that the functionalist tradition confuses descriptive and prescriptive levels of analysis. In Kant, for instance, it is still clear, that he – based on his theory of *Bildung* – argues that schools *ought* to be based on universal standards but, at the same time, criticizes contemporary upbringing, schooling and education for being, *de facto*, too particularistic, because it relies on the interests of particular families or states, thus not on an idea of what would be good for humanity as such (and good for the individual as a human being which, for Kant, is not in opposition to what is good for humanity).

Secondly, many, especially Marxists, but also thinkers like Bourdieu (1977), Foucault and others have criticised the functionalistic picture of education. According to this critique it is basically wrong that actual education systems of the modern society pertain to universalistic values. Rather, modern schools tend to transmit and sustain the values of the ruling class and/or the ruling structures, orders and hierarchies of the society and thus reproduce inequality and the status quo. The idea that the school (and society as a whole) is meritocratic is at least partly a myth, because, in reality, chance equality has never been realised (which we will return to in Chapter 2).

Thirdly, it has been argued that education is able to fulfil several functions. If education only has one function, namely to help children to make the transition from the ‘family sphere’ to the ‘sphere of adult civic society’, then adult education

would be pointless (because adult education is not about helping children). Biesta (2010) argues, therefore, that education can have at least three important functions: (1) qualification; (2) socialisation; and (3) subjectification. However, the status of these is unclear in Biesta's own educational theory and, again, the descriptive and the prescriptive level of analysis are blurred. Our theoretical solution to all this has been to leave it open on the descriptive level, what the educational aim of teaching more precisely ought to be. Or, to put it differently: In our descriptive account of the concept of teaching, we have conceptualised education as generally as possible and have thereby also emptied the concept – so far – for more specific normative values (i.e., educational aims and specific understandings of education). Only then will it be meaningful to compare different educational understandings and aims as different solutions to the same problem; the problem of what it can mean – or rather ought to mean – to 'educate through teaching'.

Summing up: Thus, we suggest that teaching is a historically invented social phenomena, especially developed in modern societies, taking the form of social interaction between people ascribed the reciprocal roles of teachers and students, with the general aim of contributing to the education of students, organised typically as classroom teaching taking place in schools, as part of the wider education system of the whole society. This general and open format can be 'filled out' differently by different societies, schools and teachers/students; and can also be developed and deviated from, in all kinds of experimental and alternative forms of schooling and teaching. The main point is, that teaching is a historical-social phenomenon, with its own complexity, so teachers can only try to contribute to, modify and alter this social complexity by interacting *with* students, without any certainty that they will have any direct educational effects on the students. Finally, this concept of teaching not only leaves open as to *how* teaching as a social interaction is possible, but also *what* education – as the aim of teaching – basically ought to be about. The next main section about media attempts to answer to the first of these two questions; while the subsequent and final section, about Bildung, reflects pedagogically about what it can mean – or rather *ought to mean* – to 'educate through teaching'.

The Media Concept

We now move to the next concept in our theoretical framework – the *media* concept. Our motivation for this is that teaching is impossible without media.

Thus, media is the core concept at the substantive level of analysis; answering the question: what is behind or beneath the development and possibilities of teaching. Such an analysis and theoretical resource can help us to understand how all teaching is mediated, and later in Chapter 2, can be used to analyse and clarify the new media situation – how it differs from the situation before the rise of digital media and the internet.

Media of Teaching: Semiotic Accessibility and Flexibility

Our focus is on teaching as mediated and, therefore, the *media of teaching*. In the previous section we argued that teaching could be understood as communicative sense-making and social interaction taking place *between* teachers and students. This demands a *materiality* (different than only each of the interacting bodies taken separately) which is (1) *accessible* for both parties; and (2) *semiotic flexible*. It must be intersubjectively accessible, to make it possible for both parties to *perceive* the and take advantage of the shared activities (and figure out how to respond to and initiate new activities). But it must also be *semiotic flexible*, to make it possible for both parts to *contribute* to – and modify – the shared activities in a manner that continuously creates new informative expressions, *formed* by the participants.

Both semiotic accessibility and flexibility are relative notions. Stones and runes are, for instance, less flexible than paper and ink, but stones and runes have been used as writing media. In a similar manner, sounds are not accessible to deaf people, while visual gestures are not to blind people. Harold Innis (1951), one of the pioneers of Canadian medium theory, has proposed that all media have either a bias toward time or space. We would add that this can be understood in terms of different degrees of accessibility and flexibility of different media. Time-bias media, which include stones, are media that are durable in character. They have a high accessibility in time, meaning that the same signs can be accessed by different generations, but at the same time they have a low material flexibility, insofar they are hard to make inscriptions on and carry fixed meanings. Yet, according to Innis they, for the very same reason, favour societal stability and tradition. Space-bias media, on the other hand, which includes modern mass media such as newspapers, television and radio, but also writing on papyrus, and later printing, are more ephemeral. They have a higher accessibility in space, meaning that they are easy to spread across a large area but also, because of their ephemerality, are highly flexible and changeable thus, according to Innis, favour innovation and large empires. Yet, as Innis also indicates, each historical situation

is unique and relies on a specific matrix of media, calling for concrete, not abstract, analysis.

Yet, the basic idea we want to stress is that communication, sense-making and social interaction between teachers and students is not a kind of mere spiritual being-togetherness, a kind of direct mental contact between them, during which teachers and students without further ado, would be able to solve mathematical equations and other things together (Luhmann 1995: 158; 1990: 87). Rather, teaching as social interaction takes place in and through the media of communication and sense-making (Luhmann 1995: 271, 2012, vol 1: 120). The advantage of such a setup – compared to a kind of immediate contact or mind reading (if that was possible) – is that it allows for greater degrees of freedom on both sides (alter and ego can interpret the same social event differently and can thus also bring forth a greater surplus of perspectives and original innovations and thoughts expressed socially).⁴

Expansion of the Capacity of Teaching Through Media

The most basic media of teaching is *bodily oral language*, understood as a kind of phonetic sign system, which develops and becomes accessible to both parties by being articulated through spoken *sounds* (phonemes) and *visual* gestures/facial expressions that both teachers and students can perceive and (learn to) decode. Also, bodily oral language is relatively flexible, because it allows both parts to combine (and invent) words and gestures in many different ways, forming different language games, to use Wittgenstein's phrase.

Yet, underneath bodily oral language are even more basic media – brains, memory, perception, behaviour, bodies, sounds and lights. But with bodily oral language this basic media matrix is transformed and each of these media achieve a new status. Brains are raised to consciousness, memory to remembrance, perception to experience, behaviour to action and bodies, sounds and lights to faces, voices and signs of meaning.

⁴ Our concept of media is based on a combination of systems theory (Esposito 1999; Luhmann 2000, 2002, 2012; Brauns 2002; Paulsen and Tække 2010c), medium theory (McLuhan 1967; Eisenstein 1983; Meyrowitz 1985; Postman 1993; Finnemann 2005) and our own thoughts (Paulsen 2006; Tække 2006) as well as others (Heider 1959, Deleuze 1994; Latour 1994; Krämer 1998; Bryant 2014, Krutka 2015). Our application of media theory within educational theory runs contrary to those of Arendt (1998) and later Biesta (2006), who claim that teaching understood as action can take place directly and non-mediated, as activities that are not materially mediated. But it also diverges from media theories (e.g., Brügger 2002) claiming that media has a certain effect or gives rise to certain possibilities that only need to be realised, without changing the media; which makes teaching into a passive residual.

During the last (approximately) 7,000 years (but especially the last 3,000 years), other media have also been invented, which have *expanded* both *accessibility* and *flexibility*; that is, first of all: *writing, printing, electronic analogue media*, and now also *digital media*. Through these media, the *capacity* of communication, sensemaking, social interaction and thus also teaching has been transformed and expanded.⁵ Thus, modern teaching – as described in the previous section – has been developed and made possible through the invention of these media (before the invention of bodily oral language, teaching is hardly thinkable). Yet, with the advent of new media, the impossibilities of teaching has also increased; because the media cannot just be used to mediate ever-advanced forms of teaching, but also other activities, some of which can counteract, obtrude or undermine certain kinds of teaching (see Chapter 2).

What We Can Learn from Media History

Since McLuhan (1967), there has been a historical media view that has identified a number of phases that can be understood as *historical media societies, media ecologies or media matrices*.⁶ According to Finnemann (2005; 2008) six distinct epochs are suggested in the medium theoretical literature:

- I. Societies based on Prelinguistic media (e.g., mere perception, behaviour⁷)
- II. Societies based on Prelinguistic media + Oral language

⁵ We use the term *capacity* throughout this chapter to make it clear that a given 'media society ecology' (e.g. the contemporary media-based society) should *not* be understood in Aristotelian terms like a gigantic seed, with a pre-given finality and potentiality (set of possibilities), just waiting to be actualised and thus fully realised. Rather it should be understood as a field of capacities, powers or differences, from which can be invented and created *new* expressions, social activities and media, that also might transmute the capacity of the media society ecology. Only then can one understand, how new and unpredictable things can be created, including new media. The main inspiration for this theoretical maneuver is – of course – Deleuze (1994) and his concept of the virtual as a field of difference. Yet, we have chosen here the less technical term 'capacity' for the sake of clarity.

⁶ *Media matrix* (matrices in plural) is a term for all the media a society relies on at any given time and which gives it its capacity for communication and sensemaking (including, for instance, the ability to store and retrieve information). Cf. Meyrowitz 1985: 339. Media theorists have often focused on historical studies of the shift from one epoch to the next; e.g. the transition from societies based on only orality to societies also based on writing (Havelock 1982, Ong 1982, Innis 1951, McLuhan 1995, 1994) or the further transition to 'the printing revolution' (Eisenstein 1979) or the age of electronic media (Meyrowitz 1985).

⁷ For instance: Alter learns from Ego, *vaguely* that something is forbidden, because every time Alter tries to do X it is followed up by being hit by Ego. This is a kind of *non-linguistic teaching*, based on the media of perception and behaviour. In a wider sense, however, this might also be called a kind of (semi)linguistic activity, insofar as Alter takes the hit not simply as a hit, but as a *sign of something else* – the forbidden thing. Thus, the prelinguistic media epoch should not literally be understood as absolutely non-linguistic, but as a 'border concept' – indicating something hypostasised before the invention of doubly articulated oral and gesture language games. Ong (1982) is one of the few media theorists taking account of this prelinguistic media epoch.

- III. Societies based on Prelinguistic media + Oral language + Writing
- IV. Societies based on Prelinguistic media + Oral language + Writing + Print
- V. Societies based on Prelinguistic media + Oral language + Writing + Print + Analogue electronic media
- VI. Societies based on Prelinguistic media + Oral language + Writing + Print + Analogue electronic media + Digital media

A crucial point is that old media do not necessarily disappear when a new one arises. Instead, the media matrix of each new epoch is an expansion of the former. Therefore, old media are *refunctionalised* in each new epoch (Finnemann 2005). When, for instance, writing is invented, orality is partly relieved from the function of social memory, giving rise to more dialogical and free forms of speech. What matters in each epoch is therefore the media matrix or media ecology of that epoch and thus the total capacity of the whole media environment. This is not to suggest that concrete technics always survive from one epoch to the next; on the contrary: old techniques might be substituted by new ones, but on the most general media level, orality did not disappear with the advent of writing and, still today, in the digital age, we have not stopped talking to each other.⁸ Generally speaking, the communicative infrastructure has, from the

Figure 1.1 Media epochs and the possibility of teaching.

⁸ The capacity of spoken language increases with each new medium. Thus, it is estimated that spoken language before writing had only a few thousand words, while grapholects have tens of thousands of words, a capacity which has again increased with the printing technology (in English there are as many as one-and-a-half million words) (Ong 1982).

invention of language until today, been both transformed and expanded meaning, in this context, that the capacity of teaching has become altered and expanded throughout the last five media epochs. Before the invention of speech, teaching, as a concept, was inconceivable and teaching as social interaction had hardly any meaning, other than limited prelinguistic practises. We can, therefore, as illustrated in Figure 1.1, state that with each new media epoch, a new infrastructure of teaching with transformed and expanded capacities, problems and (im)possibilities evolves.

Beyond Media Determinism

Within medium theory one often finds a tendency to suggest that each new media matrix leads to a certain kind of society, and thus also affects education and teaching in a certain way (e.g., Innis 1951; McLuhan 1995, 1964; Toffler 1980, Ong 1982, Debray 1996). Or, more abstractly, that each epoch gives rise to a new increased space of possibilities for communication, sensemaking and/or other cognitive activities (e.g., Brügger 2002; Finnemann 2005). This way of thinking implies either a strong or weak kind of determinism, in which one is inclined to think that new media affects society and human history in certain ways. It thereby does not pay enough attention to the fact that all media are invented creatively by people and societies, thus transforming themselves and the media. Also, some different cultures and societies have relied on pretty much the same media, indicating no strict cause-and-effect-relationship (e.g., China versus Europe). Thus, one must take account of the specific societal and cultural ways media are selected, innovated, understood and used within a given society (Finnemann 2008). The connection between media and society/teaching should therefore not be thought of in terms of a one-way 'cause-and-effect' relationship – not even on the level of 'potentiality'. What we can learn from media history is that each new media environment and society brings forth a unique creative and self-transforming/open *capacity* for creating social activities like teaching (Pool 1983). Such capacity is not something fixed or pre-given; because it includes the power to invent and create new things, new kinds of teaching, new media it tends to transmute. Following Deleuze (1994), we could say that each media and society environment can be regarded as a *problematic field*, to which different transformative 'solutions' might be invented and actualised, transforming the environment in different unpredictable 'directions'. Thus, each new environment implies a transformation and refunctionalisation of former media – their properties, relations and uses. With the rise of oral language for instance behaviours and perceptions are

transformed into actions and experiences; that is, into the possibility of linguistic articulated and reflected understandings (instead of mere perception) and decided doings (instead of mere behaviour). The same goes for print and other media. But only non-deterministic thinking makes it understandable that one cannot foresee new media or the consequences of an invention of a medium; only retrospectively can media history be theorised. Thus, we agree with medium theory that media matters, but disagree that new media has certain effects on society (the strong version of determinism) or that new media give rise to a certain new set of possibilities waiting to be realised (the weak version of determinism).

A Post-Human Media Ecology

Bryant (2014) proposes a post-human media ecology that can help us to clarify the idea that a medium environment and society possesses an open capacity for teaching and other things. To begin with, Bryant follows the idea of McLuhan that a medium extends human organs or abilities. For instance: a car extends the human feet, television extends the eye, radio extends the ear, and so on. Thus, Bryant says, more generally, that *something functions as a medium when it modifies and extends the powers and capacity of something else*. To do this, the *materiality* of the medium matters. Cars, for instance, can only extend and modify human abilities and activities, or way of life, because of the internal properties that cars possess; wheels, seats etc. Yet, Bryant also adds to McLuhan in two ways. Firstly, McLuhan focuses on media extensions of *sensory organs*. Bryant expands this to the more general claim that anything that extends and modifies something else – its powers, activities and becomings – function as a medium (for that other thing). Thus, vitamin B functions as a medium for our human body because it can modify our mood. Secondly, McLuhan only pays heed to the extension of *human* abilities, while Bryant suggests a more general media concept. Thus, for instance, electric light not only expands the power of human beings, their sight, it also modifies and extends the powers and activities of some non-humans, whose environment is changed because of it (e.g., bringing forth new hunting conditions). Also, a cat-owner can be the medium of a cat, whose conditions and capabilities are expanded and modified by being taken care of. Further, a shark can be a medium for other beings living on it. This implies that media can be regarded as anything that, through being structurally coupled to something else, can modify its capacities, activities and becomings. The implication is that human beings, function in a wider ‘more than only human’ media ecology; that is, an environment consisting of many different

things mediating each other. To map and understand such an environment Bryant has developed *onto-cartography*, which we will return to in Chapter 5.

Yet, it is not explained by Bryant, how it can be that media, like language, printing etc., has developed and has become so important in human society. What is not sufficiently accounted for, is that (some) media becomes important only when they are invented, selected, used, modified and applied by human actors. Bryant claims that media modifies human activities but does not acknowledge that such modifications are only realised when human beings decide to use such media in specific ways. Or, to put it differently: Media does not directly modify human actions; rather the modifications are 'mediated' through how human beings relate to, understand, use and modify media. Thus, something does not become a medium by directly modifying something else; rather it becomes a medium by being used by *someone*, an actor, to transform the latter's capacities, activities and becomings (whether this is conscious or unconscious, controlled or experimental).

In the context of contemporary teaching, the upshot is that teachers and students can modify and transform their capacity through many different things (i.e., media) – the architecture of the classroom, blackboards, books, social rules, norms, bodies, vitamins, energy flows, outdoor surroundings, field trips, projects, writing, electronic light, digital media etc. – all are potentially modifiable parts of the media environment of teaching today. What kind of teaching is actually possible and what effects – positive or negative – it can lead to, is therefore an open question depending on how the whole media environment is understood, used and experimented with and thus is also a question of how a specific society, school, class and concrete encounter between teachers and students *develops* and *transforms* the environment and thus *the capacity of teaching*.

The Transformation of Social Norms and Structures

McLuhan (1967) understood transitions from one media society to another (within which we initially seek to solve new problems with old solutions) as *media revolutions*. According to McLuhan, and with him many other media theorists, the whole of society and culture has been changed as a *result* of the rise of this new media revolution. Or, as Postman (1993:18) put it, the medium changes *everything*. It is often said that newer medium theorists like Meyrowitz (1985) still see the new media as triggering the mechanism of social change, but he is not as deterministic when it comes to causality giving away explanatory power on the level of micro sociology. Yet Meyrowitz also put forward a (weak) deterministic account of the media revolution that he has analysed most

profoundly: the invention of electronic analogue media, especially television. According to Meyrowitz, new media, exemplified by television, changed the information situation of society, triggering the development of new norms for *social behaviour*; a development which, according to Meyrowitz, runs through *effect loops*, towards a new equilibrium, where norms again adequately function, in this new information situation. Thus, the point is, that norms for social behaviour *adjust*, over time, to the new media environment. The problem with this account, however, is that it is caught up in a deterministic and behaviouristic way of thinking. It is claimed that new media *causes* social change and that new norms and social behaviour will simply *adjust* and find a new equilibrium. This leaves no room for genuine innovation – for creativity and human actors taking the new situation in different, unpredictable and transformative directions. It takes for granted that the new medium has a specific effect. It is as if the medium brings forward a fixed set of possibilities and a certain new information situation, in relation to which the adequate norms already exist as ‘the right solution’, which only need to be found, applied and developed and then everything will be stable again.⁹

Instead, we wish to propose, that each new media society ecology makes up a new problematic field, tendentially opening up new information and communication situations that call for new norms, tools, theories, practices etc, and also make former norms and theories *more or less* obsolete. But also, we propose: (1) There is not necessarily just one set of possible new norms waiting to be realised, which will adequately work. (2) When and if one specific ‘solution’ is developed and actualised, it alters and transmutes the whole ecology, what is possible and not possible, what is needed and what is now obsolete. (3) The new media is developed in and out of the old media society environment, indicating that there is always a level of continuance between different media epochs. (4) The core of media of teaching and society – social complexity per se – is, as we have argued, semiotic accessibility and flexibility; but if the development of society simply, in each media matrix, runs towards a new equilibrium, then increased flexibility would be pointless. If there is any immanent kind of telos within societal media, such as writing, it is not a fixed equilibrium of social norms, at each stage of human development, but only increased practicable semiotic accessibility and flexibility, enlarging and transforming the capacity of humanity, for good or for bad.

⁹ For a critique of equilibrium theory see Deleuze (1994) and Luhmann (2002).

Yet, there is one final point which Meyrowitz (1985) and medium theory make clear, and which we want to stress and take account of: if we want to understand the relationship between teaching and media – we have to acknowledge that new media like writing and printing, not only open up new teaching capabilities, but also new capabilities, possibilities and impossibilities *for society as a whole indirectly* having importance for the education system and teaching. This can be exemplified by television. Selwyn (2017: 57) says that television, despite huge levels of investment, never became a big success *directly* when it comes to teaching. However, the point here is that *indirectly* television changed society at large. According to Meyrowitz (1985) it was because of television – and the new information situations it created – that the teacher's position of authority was diminished in the 1960s, when it became illegal to beat the school students, and mixed classes were introduced. The whole of society was changing, through the women's liberation movement, children's rights and the youth movement. According to Meyrowitz, the more a medium supports the relationship between physical isolation and informational isolation, the more it supports the separation of people into distinct positions. The more a medium allows people to gain access to information without leaving old places and without severing old affiliations, the more it fosters homogenous positions (Meyrowitz 1985: 61). The rigorous school hierarchy became more fluid because information could no longer be given drip-by-drip, year-by-year. The younger students already knew secrets that they had not been told before – if ever – before they were older. The older generation's inconsistency on issues such as sex, drugs and politics was revealed, the authorities were on the decline and young people marched under the slogan 'don't trust anyone over 30' to general outrage (Meyrowitz 1985:139).¹⁰

We agree with Meyrowitz that it is important to look at how a society as a whole transforms through a new medium and how this might have consequences for the education system, the school and what is taught (content) and which social rules and role models are accepted. But we disagree that television without further ado has had certain and specific effects – for all the reasons we have already outlined above – criticising media determinism.¹¹ The upshot is that the great media revolutions are open media society experiments that imply that the capacity of teaching and other social activities are transformed into new open

¹⁰ Those over 30 were, in fact, those who had not grown up with television (Meyrowitz 1985: 137).

¹¹ Television, in itself, did not trigger the same consequences in places like China and the Middle East as in the western democracies.

problematic fields, of unfixed possibilities and impossibilities, without pregiven effects or developments towards pregiven equilibriums or specific finalities. Thus, revolutions are not something external that just happen to people in society which they just passively adapt to, until everything is once again brought into balance. Instead of such a mechanical metaphysical account we suggest that revolutions are better understood immanently as societies and people (e.g., teachers and students) experimenting, though media, with their capacities, transformations and actualisations.

Does a Medium Revolution Change What It Is To Be a Human?

In Postman's book, *Technopoly*, he presents a famous passage from Plato's dialogue Phaedrus, in which an Egyptian king, Thamus, by the god Theuth, who was the inventor of many things, is presented for letter writing. Theuth argues that this invention will improve both memory and wisdom. However, Thamus is not so easy to convince and points to the opposite conclusion, that 'Those who acquire it will cease to exercise their memory and become forgetful' (Postman 1993: 4). There is no doubt that Plato has a point, as human memory became poorer because of letter writing (Ong 1982).¹² But as we left the long rhythmic memory-friendly verses in favour of alphabetic writing, we gained a much greater vocabulary and the ability to make longer and much more complex coherent arguments, etc. The philosophy that Plato and the other ancient philosophers exposed could never have been developed without the letter writing that can be distributed in time and space and constitutes a medium through which one can include oneself in the social sphere while still being alone (Luhmann 1995: 87). So yes, we lost something as we relieved the mind and the oral communication with the script, but we gained something else that at the time of the introduction was impossible to predict, which allowed for many fundamental changes in society: what it means to be a human being.

Viewed from such a media-ecological mindset, we think it is important to develop an educational thinking that can respond wisely and innovatively to the new. We must take Postman's and others' scepticism with us, and not leave the development of schools to technocratic efficiency agents and commercial interests. However, we must also not identify the medium with the negative

¹² Where Plato is perhaps the first western media-pessimist, Postman (1992) is one of the biggest, in *Technopoly* which examines the technologically determined development of society steering directly towards total instrumentalisation.

examples, but as already stated, seek to influence the development in a positive direction. And here, it is necessary for the school, as an important community-creating institution of society, to become involved and help citizens to experiment with and shape the society of the future. In the next and final section of this chapter, about *Bildung*, we reflect about this project, comparing four different educational stances towards teaching and media.

The Bildung Concept

The German *Bildung* concept goes back to the thirteenth century and can be seen as a development of the ancient educational concepts *Humanitas* and *Paideia* (Gadamer 2013; Klafki 2005; Straume 2017; Paulsen 2020). In English, the *Bildung* concept is often translated as *Self-Cultivation* or *Self-Formation* (Bruford 1975, Sorkin 1983). Yet, these translations are partly misleading. The matter is difficult, because different, conflicting theories have developed around *Bildung* and the ways of using the term in German literature. So, it's a term with many senses. Literally 'Bild' means 'image' and *Bildung* can be seen as the process of becoming similar to an image, and as the result thereof. In a teaching context, the *Bildung* tradition raises *the question* of what image(s) students should become similar to and how the teacher could and should support such a process and reflection. *Bildung* theory therefore addresses the two most important questions of teaching and education: *What* should it be about and *How* should it proceed?

The descriptive and subcriptive framework put forward in the two previous sections showed that teaching through media is normatively 'open' and calls for prescriptive and value-based understandings and answers to what it *ought to* mean to educate through mediated teaching. In the modern and post-modern *Bildung* literature (accounted for in Koselleck 2007, Klafki 2005, Luhmann 2006, Straume 2017, Paulsen 2020, Biesta 1995, Gustavsson 2017, Gadamer 2013 and Andersen 1999) we mainly find four different answers to this. On the one hand, *vulgar* (i.e., common) ideas of *Bildung* as a process in which a student is formed either from outside, externally to conform to a pre-given image (decided by the society and the teacher – what is taken to be the preferred good citizen) or formed by itself internally to conform to an innate, pre-given image (and thus actualising its own human potential) only facilitated by the teacher. On the other hand, *reflective* (i.e., more philosophical) ideas of *Bildung*, developed by Kant and others (especially Humboldt, Hegel, Schelling and Schleiermacher), basically

understand Bildung as a pedagogical process, in which a teacher (or someone else) encourages and challenges the students to think through, by themselves, critically and reflectively, what image(s)/ideals they could wish to set up and, at the same, could desire that everybody else also set up for their doings and developments. The crucial point here is, that the image is not pre-given, neither from outside (society), nor from inside (the individual). Bildung is a way to critically explore one's assumptions and way of being in the world; critically examining all kinds of ungrounded socialisations, natural habits, egoism, social conformism and immediate inclinations. It is, therefore, a process where one is challenged to leave one's home, what is taken for granted, to attain an attitude of doubt, reflexivity and homelessness, but with the final goal of rebuilding a better home; that is, a true grounding of one's being in the world (Gadamer 2013). This reflective and critical understanding of Bildung is further developed in post-modern thinking (Paulsen 2020, Hansen 2019), focusing on Bildung as an infinitely transcending process, in which the aim is to create and experiment with *new* expressions and ways of being in the world, that transcend the existing order and stratified way of life. Thus, we can distinguish between two vulgar variants and two reflective variants of Bildung theory:

1. Vulgar Bildung thinking:
 - (a) Bildung as an external shaping of someone by the society and culture;
and
 - (b) Bildung as a facilitated internal development of innate potential.
2. Reflective Bildung thinking:
 - (a) Bildung as a critical exploration of different ways of being in the world;
and
 - (b) Bildung as an experimental and creative transgression of existing order.

In the following text, we elaborate on each of the four variants in turn. In relation to the first two variants, we are mostly rejective and sceptical. First of all, neither of these vulgar variants pay enough heed to the contingent and mediated character of teaching and education. Rather they reify human beings and take for granted that they ought to conform to certain (external or internal) standards. With regard to the two reflective variants, we are more positive and endorse these as genuine and valuable Bildung theories because both variants take account of the open and mediated character of human beings, education and society. Thus, when we talk of Bildung in the following chapters, we rely mainly on a combination of the two reflective theories of Bildung – the critical and the explorative experimental, in contrast to the more common – but inadequate – ideas around education. This,

however, does not imply that we completely dismiss the two vulgar variants. What we propose is rather to subsume these into the two reflective variants.

(1) Bildung: External Shaping of the Individual by the Society

The first and, perhaps, most common view of Bildung is that it is a kind of shaping of an individual to conform to a pregiven normative image of 'the good citizen' established by society and or certain authorities and executed by the school and its teachers or other educational institutions. Here, Bildung and education is seen as something that can be delivered. Everybody (or only a certain 'privileged' segment of society) growing up is required to attain as much Bildung as possible – that is to conform, as much as possible, to a pregiven image of what is taken as the ideal of an 'educated man'. In this view it is possible to distinguish clearly between people with and without Bildung (educated and uneducated people). The specific content of what it means to be an educated man, a good citizen, can be very different from one society to another; the image can be religious or secular, nationalistic or bureaucratic, broad or narrow, consisting of knowledge, social norms, morality or mere skills. Whatever the specific content, this view on Bildung gives the school and teachers the task of influencing and shaping students to conform with a predetermined ideal image 'X' of a good citizen – with certain specific knowledge, manners and values. Such a view assumes that some already educated adults (normally at the top of the societal order) have the ability, power and legitimate right to recognise and decide what it means to be a 'good citizen'. Teaching is then seen as a causal relationship, where the teacher's job is to select efficient methods in relation to pregiven goals and optimise certain effects, adding something externally to students (e.g., knowledge) or removing something from them (e.g., bad manners). The aim of teaching and education is therefore to produce good citizens. The teacher functions as an engineer, who ensures that all students achieve the same 'X' or come as close as possible to the ideal. In this way, teaching is seen as an input-output system. What the teacher wants to produce is basically determined before they start teaching (by the curriculum). Dewey (1997) calls this *traditional education*. The main task is to pass on X (knowledge, skills, etc.). This means that it is determined from above and from outside of teaching what the students do and what they should become. Biesta (2006) calls this *a technological expectation of education*. The core idea is that one wants to produce and control a certain output. In educational literature, variations of this view are not difficult to find. An example is positivistic and behaviouristic approaches, like Skinner and his idea of a complete program, to determine

Figure 1.2 The external understanding of Bildung.

desired behaviour that educational systems should produce (Beck et al., 2014). But this view is also presupposed when one argues that students should be made into good citizens through education (Biesta 2017). Also, in non-Western educational traditions, the idea of education as passing on something specific features heavily (Reagan 2017). Bildung is consequently regarded as coming from ‘outside’ and ‘above’ the student and consists of shaping the student so that they conform to the X-ideal. The school’s various subjects function as moulds, in which students are shaped (mathematically etc.) into becoming identical to this X-ideal. Thus, the role of the school is to adapt the students to a given (religious, nationalistic, bureaucratic or other) order. Yet, there are basic problems with this view of Bildung. It reifies human beings and naturalises certain standards, that might lead to exclusion, loss of meaning and reproduce an unjust social order. But, most importantly, it conflates Bildung with mere socialisation and indoctrination and does not pay heed to the contingent and open character of mediated teaching. It assumes both that it is possible and legitimate to effect and control students in certain pre-given ways and priorities society’s existing order over the individual and the new. Also, in this view of Bildung, media is seen only as a controlling remedy for optimising effects. We will return to this in chapter 2.

Figure 1.2 outlines the external understanding of Bildung as an approach which assumes there is assumed a cause-and-effect relationship between a controlling teacher, representing society, and their affected students. Our point is not that such a causal nexus exists, but only that it is taken for granted in this view.

(2) Bildung as Facilitated Internal Self-Development

In opposition to this external understanding of Bildung, progressive thinkers have put forward an internal understanding (Beck 2014). Bildung is here understood as the self-development of inner potential. The main pedagogical task of the teachers is therefore only to secure and facilitate students’ free self-development of their own innate potential. The task is not, as in the external understanding of Bildung, to produce certain effects, but rather to create a protective, safe, meaningful and facilitating environment for the free self-development of each individual. The goal of this environment is that each student will become able to unfold and actualise all their human potential and develop a true and sound character. The function of the

teacher is to be a ‘gardener’, who cultivates and ‘fertilises the soil’ that makes it possible for each student to grow without being distorted and alienated by the society they grow up into. Thus, *Bildung*, in this view, is regarded as free and personal self-development of human potentials coming from ‘inside’ and already waiting to be actualised. School subjects are used to cultivate and facilitate aspects of such human self-development (e.g. the ability to bring out the potential musical talent that lies dormant in each individual student). The role of the school is to protect the students from society (and its distracting ideas and images) thereby making it a ‘free space’ for unspoiled self-development. In this space it is the task of pedagogical agents to create a good environment for each individual’s self-development using activities like games, projects and quests. The assumption is that everyone within themselves possesses talents, and abilities that can grow, unfold, and become actualised if one is cared for, protected and placed in the right environment with the right activities. Thus, the role of the teacher is not to influence the students from outside but to facilitate each student’s own active inner self-development. Dewey (1997) calls this *the progressive model of education*. Different variations can be traced at least back to Rousseau and progressive education. However, it is also a widespread model within Western humanism – going back to ideas about active learning and education as actualisation of potential (Beck 2014). It can also be found in non-Western educational thoughts. An example is Confucianism, where Mencius famously argues that education must awaken the innate abilities of the individual through social activities – abilities that, he argues, are directed toward goodness and which he calls ‘the four sprouts’ (Paulsen and Garsdal 2017). However, there are also problems with this view on education. Firstly, it is assumed that human beings – independently of media and society – are born with only good-natured potentials, described and understood only as some kind of living organisms. Secondly, the school and the teacher are likewise only understood as protectors and facilitators; they are reduced to instrumental roles. The idea that the school ought to be a free space, protecting students from society, also ignore the fact that the school and its social activities always will be part of a given society. Thus, in this view, *Bildung* in the end is conflated with some kind of hypostasised natural self-development, where society and the media do not have a constitutional role. Media is only seen as facilitating and protecting instruments in relation to the development of independent potential.

Figure 1.3 outlines the idea that *Bildung* is about protecting students and creating a good environment – like cultivating plants in a greenhouse – facilitating each student’s self-development. The point is not that this potential necessarily exists or can be awakened but only that it is assumed in the internal view of *Bildung*.

Figure 1.3 The internal understanding of Bildung.

(3) Bildung as a Critical Exploration of Ways of Being in the World

The classical variant of reflective Bildung theory has been developed as a critical alternative to both the external and internal view. In this alternative and reflective view, Bildung is instead seen as a critical exploration of ways of being in the world. This understanding was developed in the period 1770–1830 by Kant and other German thinkers, mostly idealists, attached to enlightenment, democratic and secular movements (Klafki 2005). According to Luhmann (2006: 205) it was a societal response to the situation that occurred after the introduction of printed books, where the idea of one fixed definition of man was finally undermined. When we do not know for sure what man is or should be, we do not know what education should aim for. In the literature of the eighteenth century so many versions of the ‘ideal human being’ were circulating, that none of them could really convince fully. However, the critical alternative to one fixed image had roughly been hinted at by Plato in ancient times and later on also by renaissance thinkers such as Pico (Paulsen 2020). Yet, the Bildung thinking that the German idealists developed was an explicit critical response to the vulgarised pedagogical educational literature of the eighteenth century (Koselleck 2007). Against this literature, Kant and others argued that Bildung should not be understood as something that has been initiated ‘from the outside in’ or from ‘the inside out’. Here, Bildung is reduced to either (a) socialisation/indoctrination (man as a *tabula rasa*, which must be shaped in the best way for society, see Locke) and/or (b) actualisation (man as a seed, who just has to have good growth conditions, see Aristotle; but also Rousseau’s *Emile*, by whom Kant was both inspired and challenged). Instead, the reflective Bildung thinkers proposed that it should be understood as the development of critical consciousness, that reflects on and eventually transgresses the social and historical context that makes this

development possible. *Bildung*, in this critical variant, suggests that, during teaching, students should be encouraged, supported and challenged to (a) think and act critically-reflectively *by themselves*, (b) think and act *rationally* (i.e., from the point of view of humanity as such), and (c) think and act *historically and contextually consciously*. And, to this we will add: (d) think and communicate *using different media in critical-reflective-conscious ways*. The pedagogical task of the teachers is then to encourage and challenge the students to relate critically to their ways of being in the world. Thus, the function of the school is neither to influence the students, nor to protect them from society, but instead to support their critical engagement in and with society. *Bildung* is, therefore, about critically exploring one's ways of being in the world, how one relates to oneself, others and the world. The teacher's task is to question the student's presence in the world, encouraging and challenging them to explore their ways of being by confronting them with challenging otherness – other ways of being and thinking – which allow them to question what they might otherwise take for granted.

This critical challenging of students' ways of being in the world concerns (a) knowledge; (b) attitude; and (c) existence which, in our eyes, marks the three most central *Bildung* dimensions.¹³ With regard to 'knowledge' the teacher should make it a living question among the students whether *what* they think they know is actually something they know and not just a belief and also think about whether what they actually know offers a sufficient foundation for creating a good life together with others. In other words: the teacher should encourage and challenge students to critically explore their knowledge and ignorance, the limit and value of what they know – their cognitive way of being present in the world and its assumptions, validity, drawbacks and possibilities for improvement. With regard to 'attitude', the teacher should try to make *how* they are present a living question among the students. Do they, for instance, relate naively or critically, egoistically or altruistically, short-term or long-term. According to Kant and most other classical *Bildung* thinkers this means that teachers should encourage students to attain the viewpoint of 'humanity' as such, i.e., Is my way

¹³ The three classical dimensions of *Bildung* (that we propose as a reconstruction of classical *Bildung* theory) – *knowledge, attitude and existence* – apparently correspond with the three main functions of education that Biesta (2010) proposes: *qualification, socialisation and subjectification*. Yet, only subjectification is conceptualised by Biesta as a genuine *Bildung* dimension and qualification so socialisation is therefore not identical with what we call knowledge and attitude but is understood by Biesta to be more in line with the external view of education. This makes his educational theory unclear, as seen from the point of view of classical *Bildung* thinking. Biesta, however, seems to only have a reduced understanding of 'Bildung' (because he mainly understands it, as a failed attempt to form an educational theory of subjectification but, in reality, ending up with what we, in this chapter, call either an 'external' or 'internal' understanding of education).

Figure 1.4 The dimensions of critical Bildung.

of being present in the world not only good for me, my fellow beings or the state I live in, but also good for humanity? (or, we would add today, for the whole life of this planet). Bildung is about encouraging the students to raise their reflexivity to this general level. Concerning 'existence' it amounts to the question of *who* the students think they are and want to become (i.e., questioning their self-image). Again, the point is not to impose certain images on students, but to challenge their self-understanding and encourage them to explore critically who they really are, can be, and want to become in the world in which they live.

Thus, the task of the teacher is to appeal to critical explorations of our ways of being in the world, with regard to both knowledge, attitude and existence. Bildung is, accordingly, about becoming critical-conscious about how we are present in the world, what assumptions about a good life we rely on, where these assumptions come from and what consequences they have. The school subjects are frames, that make it possible to explore these assumptions using different perspectives (e.g., a biological perspective in relation to environmental consequences). Thus, the function of the school is to *challenge* the students to become critically engaged world citizens (Paulsen and Tække, 2019a). Biesta (2017) calls this *a world-orientated view on education*. However, it can be traced back to the modern idea of *Bildung* (Klafki 2005; Koselleck 2007) but also features some aspects of Socratic Midwifery Art (Beck 2014). Also, it could be argued that part of Dewey-derived ideas about *problem-based learning* support the idea of the teacher as a challenger (Beck 2014; Dewey 1997). The same holds true for *critical hermeneutics*, when Gadamer (2003) insists that new knowledge and learning is only possible through negative experiences. Also, some parts of Bakhtin-derived forms of *dialogical teaching* (Dysthe 2013) stress that true

learning and knowledge can only appear through the confrontation of different voices challenging one another. In this strain of thinking, the goal is neither to influence the students from outside (this would imply what Bakhtin calls ‘the dominance of the authoritarian voice’), nor to facilitate students’ internal self-development (because this will lack the element of confrontation which triggers critical self-reflexive development). Instead, the teacher’s role is to question students’ voices, opinions, and attitudes – that is, all they take for granted – with the aim of triggering them to develop better ways of being in the world.

The assumption behind this *Bildung* project is that such critical development is both possible and necessary (Gustavsson 2017). Simply put, no one is perfect or lives a perfect life; all of us can benefit from being challenged on our basic beliefs. Yet the point is not that our beliefs are necessarily false, but that they should be maintained only if they somehow can resist being challenged; furthermore, that such challenges are likely to trigger further critical self-reflexive development (Straume 2017), in the direction of more comprehensive world-views and self-understanding (also a necessary condition for a well-functioning democracy, which we will touch on in Chapter 5).

The basic problems with the critical variant of reflective *Bildung* is, however, that it is too intellectual, placing too much emphasis on argument and thought reflection, without necessarily making it possible to create new and better alternatives. Likewise, it puts too much emphasis on negative aspects, critique and scepticism, challenging the students more than helping them to create and sustain new things. One could even accuse the critical and modern variant of *Bildung* of valorising a ‘hidden curriculum’, based on a certain pre-given image of the good citizen – the critical and reflective man – to which the school tries to make its students adjust; making the critical variant close to the external understanding of *Bildung*. In a similar way, one could argue that the critical variant relies on a philosophical anthropology in which each human – like in the internal variant – is seen as having a rational potential, which is waiting to be actualised. Thus, the critical *Bildung* understanding is better seen as complementing and modifying the vulgar understanding in a critically direction, than being a completely other view. Yet, with regard to media and society and human beings, the critical *Bildung* theory is a more elaborate response to the contingency of the modern world and the complexity and unfixed capacity opened up successively by new media. Instead of forcing students to adapt to totally fixed ideals or just facilitating their own self-development, uncritically, the critical *Bildung* understanding advocates for an ongoing examination of our mediated being in the world.

Figure 1.5 outlines the idea of Bildung as one in which the teacher sets up questions in relation to how the students are in the world. Here, the teacher not only tries to pass on something specific to their students or influence them in certain ways but they also try to protect and facilitate the student's own self-development; on the other side, the critical teacher disapproves of self-development and confronts the students with difficult foreign voices, disturbing otherness and resistance.¹⁴ Whether such challenges are a good thing, or are even possible, is taken for granted in this critical understanding of Bildung.

(4) Bildung as Experimental and Creative Transgression of the Existing Order

Post-modern thinking is generally sceptical about modern Bildung thinking and thinks it comes too close to both the external and internal understanding of Bildung, as described above (Lyotard 1979; Løvlie 2003, Biesta 2006). As a response to this, ideas of a more 'open' way of thinking about humanity and society has been proposed by post-modern thinking (Paulsen 2020). In this response, Bildung is seen as 'pure becoming', never coming to an end, not even in principal or teleologically speaking. In this view, Bildung is understood as *transgression* and, thus by definition, negating any finality. Yet, we regard this fourth variant of Bildung as only complementing the critical understanding of Bildung. While critical Bildung theory emphasises reflection, understanding and argumentation, the experimental understanding of Bildung that can be derived

¹⁴ See Plato's *Meno*, where the 'passing over' model of education is rejected but so, also, is pure self-development. This is developed further by Plato in his reconceptualisation of *Paideia*, especially in the *Republic*, being a forerunner to the *Bildung* concept (and the concept of *Humanitas* – the Latin translation of *Paideia* by Cicero – developed further in the renaissance and then finally transformed into the *Bildung* concept (Jaeger 1993, Andersen 1999, Paulsen 2020)).

from post-modern educational thinking (Roy 2003, Paulsen 2020), emphasises creativity, action and experiments. Both variants are critical of the existing and prevailing order and try to bring out images of education different from vulgar educational theories (Hansen 2019). What distinguishes the two reflective variants is mostly a matter of emphasis.

Yet, the fourth variant is relevant as a complement to the too-intellectualistic critical understanding. In the experimental understanding of *Bildung*, the task of the teacher is first to initiate and support experiments through connecting differences, which might prove to be productive and result in *new and different ways of acting, perceiving and creating* (Roy 2003). Thus, teaching is seen as a workshop, in which potentially new things can be created experimentally by putting differences together in unique ways – different teachers, students, materials, problems and other alterities. The goal is to find out which differences can resonate with each other to create something new and valuable. The teacher functions as a creator and sorcerer, who experiments with getting new things to happen in the encounter between powerful texts, beings and materials that can be capable of more together than separately (Roy 2003, Deleuze 1994, Deleuze and Guattari 2000, Braidotti 2011; 2013). In this view, *Bildung* is capable of perceiving, acting and creating in new and different ways that surpass the world, society and oneself in their current state, i.e. transcending the existing order and stratification of the earth, society and way of life.

The school subjects are seen as potential remedies that can be combined and used to create something new, that also recreates and transcends the borders of the subjects themselves. Thus, the school is seen as a place in which experiments ought to take place and in which the world/society/individual ‘opens up’ and becomes something else than it is currently positioned (Lyotard 1979, Deleuze and Guattari 2000, Ranciere 2007, Roy 2003).

Yet, if teaching is based solely on this post-modern view of education, one could object that it is not certain that students will learn what is required according to the prevailing order – the political-technocratic-bureaucratic education system of the state (specified through laws and state curriculum). The post-modern thinkers might reply that this is actually also the point – in post-modern *Bildung* theory students should learn *something else* – something more transversal and transformative than that already specified by the state. Yet, some post-modern thinkers would agree that the post-modern view of education is only meant to complement, not substitute, other views (e.g., Roy 2003). Thus, they will see basic schooling (e.g., learning to read and write, calculate, play, draw etc) as necessary conditions of more transgressive *Bildung* (edification) but

pinpoint that, in the end, the latter ought to be the final task of education, while the former only should be instrumental to this undertaking (Klafki 2005, Rorty 1989 and 1999, Larsen 2014).¹⁵

When it comes to media and society, the post-modern Bildung theory is the most media-elaborated educational theory (of those we deal with in this book), because it basically reflects on the contingency and capacity that new media opens up, in relation to the societies that develop and are then transformed by using them (Deleuze 1994, Bryant 2014). Thus, media are seen as constitutive in developing new productive educational spaces (i.e., new possibilities of resonance and creation of new ways of perceiving, acting and creating (Latour 1999).

Figure 1.6 outlines the idea of Bildung as one in which *different* teachers together with *different* students try to create *resonance between differences* and thus produce new transformative and transversal differences – that is, new ways of being in the world. Here the teacher does not try to influence the students directly, nor facilitate their internal self-development, but neither do they try to challenge the students to reflect on their ways of being in the world. Rather the post-modern teacher tries to be an affective and creative force, who *becomes* different to anyone else and, together with different students, tries to create something anew, experimentally and rhizomatically (Deleuze and Guattari 2000), without being totally sure of what this is, and allowing everyone to pick up what they are capable of and wish to ‘follow’ (Deleuze 1994, Roy 2003).

Figure 1.6 The experimental understanding of Bildung.

¹⁵ Luhmann (2006) observes this as a general paradox within classical Bildung thinking. It is also called the most *basic pedagogical paradox* by Oettingen (2001) in his exposure of classical Bildung thinking. On the one hand, the classical Bildung thinkers like Kant think that students must learn to think for themselves *independently of others* but, on the other hand, they must be educated to do this *by others, effecting the students from outside*. Yet, in post-modern theory, paradoxes are not theoretical calamities, but basic conditions of thinking (Deleuze 1994), moreover, the boundary between external and internal is only a contingent product of a certain way of thinking. Also, already in the classical variant of Bildung thinking, the paradox is ‘solved’ by giving the teacher not the role of an external determinator, but also the role of one who only ought to appeal to and encourage the individual. After all: an invitation ‘to think for yourself’ should not be interpreted as an external determination.

Conclusion

In this chapter we have outlined our educational theory of teaching, media and Bildung. We have argued that teaching is a historical and social invention, that opens up for contingent and risky interactions and relationships between teachers and students, taking place in schools (or other educational institutions) within the system of education. Also, we have argued that teaching only becomes possible through media such as speech, writing, printing, electronic media and now, also, digital media. Before the first great media revolution – the invention of oral language – teaching was hardly imaginable and did not exist in any similar form to what is understood by teaching today, but also with each new media revolution the capacity of teaching has increased, letting teaching come to fore as we know it today. Finally, we have argued that the open and contingent character of mediated teaching calls for a prescriptive and value-based pedagogical understanding of what it ought to mean to educate through mediated teaching. With recourse to the German Bildung tradition, but including post-modern thinking, we have outlined, compared and discussed four basic pedagogical understandings and answers. On the one hand, two vulgar or common ideas of what it ought to mean to educate through mediated teaching. These two answers – the external and internal understanding of Bildung and education – we have mainly rejected as being not sufficiently elaborated with regards to the mediated and contingent character of teaching, society and the human being. On the other hand, we have discussed two reflective and more philosophically elaborated answers and variants of Bildung – respectively, a critical and explorative and an experimental and creative understanding of education. It seems to us that these variants, together, take sufficient account of the mediated and contingent character of teaching, society, humans and other beings. Also, we have argued that only these views can be assessed as genuine Bildung theoretical understandings. Together they bring out an image of education as a critical and experimental affair, in which teachers, through the media ought to encourage, challenge and support the students to become capable of exploring, critically and passionately, their mediated ways of being in the world – their knowledge, attitude and existence – but also become capable of experimenting with and creating new alternative ways of being in the world, i.e. new and potentially valuable ways of perceiving, acting and creating, which transcend the prevailing repressive world order. Taken together, we call this a critical-constructive Bildung approach.