

CHAPTER THREE

The Mediatic Turn: Exploring Concepts FOR Media Pedagogy

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I don't know who discovered water but it certainly wasn't a fish.

-MARSHALL MCLUHAN¹

INTRODUCTION

The roots of terms such as 'mediatization,' 'medialization,' and 'mediality' can be traced back through much of the history of Western thought. This goes as far back as Aristotle's consideration of various media of expression in the context of his *Poetics*; the question appears again (among other places) in Augustine's discussion of the medial characteristics of the biblical "Word" in Book 11 of his *Confessions*. The question of media and the mediatic reemerges more recently in Peirce's proto-semiotic theory, and again in Cassirer's consideration of the fundamental mediality of culture and human knowing in *Philosophy of Symbolic Forms* (1953). However, it is with Marshall McLuhan's more recent and famous claim that "the medium is the message" that the contemporary significance of media—and with it, of 'mediatization,' 'medialization,' and 'mediality'—begins to take shape. Indeed, it is relatively uncontroversial in German-language media studies that with this declaration (and its exposition in *The Gutenberg Galaxy* and

Understanding Media), McLuhan's place was secured as "the founder and figure-head of modern media theory" (Margreiter 2007, p. 135):

With the thesis that media themselves are the message, and the implied transition of research interests to mediatic forms, McLuhan himself actually created the terrain for an independent science of the media (*Medienwissenschaft*). (Leschke 2003, p. 245)

The "transition of research to mediatic forms" invoked here by Leschke has been surprisingly interdisciplinary and widespread in German-language scholarship. Conspicuous attention to mediatic forms began in German literary theory (e.g., Kittler's 1985 *Aufschreibesysteme 1800/1900*). It subsequently extended to philosophy (e.g., Hartmann's 2000 *Medienphilosophie*), and it has recently been evident in cultural and historical studies as well (e.g., Giesecke 2002, 2007).

It is our contention that these texts and others like them, and more importantly, the theoretical and empirical developments they present, are not exhausted by the ideas such as mediality and mediatization. Instead, they are all illustrative of what can be called a *mediatic turn*. The phrase refers not simply to a recent trend in research and thinking, but something that can be articulated in the more foundational terms of a cultural or, indeed, an epistemological and existential condition or exigency. This chapter focuses on the *mediatic turn* as an empirical, sociocultural "event," and also as a related development in theory and philosophy. The idea of such a "turn" serves as a way of developing an integrated perspective on concepts such as 'mediation,' 'medialization,' 'medialization,' and 'mediality.' Giving special emphasis to theoretical developments in German-language discourses, this chapter then explores a number of consequences of these empirical and theoretical developments in the area of media literacy and education.

THE SOCIOLOGY OF THE MEDIATIC TURN

It hardly bears repeating that in today's world, media, in their different forms, have thoroughly interpenetrated everyday life and knowledge, making even the most banal tasks all but unimaginable without these forms and technologies. We listen to or look up the weather forecasts rather than checking the color of the sky at night. E-mail, texting, voicemail, and Facebook increasingly connect us interpersonally. And the internet and the Web have opened up multiple channels for instant access to specialized knowledge that previously would have been available only in print or face to face. Media and the messages they broadcast can consequently be said to penetrate more deeply into everyday consciousness. And newer interactive or participatory media (e.g., mobile phones, texting, blogging, etc.) increasingly *inter*penetrate everyday practical activity. Media in this





sense profoundly influence the realm of everyday, unstructured understandings and activities (or what German philosophers and sociologists have termed the *Lebenswelt* or lifeworld). As Sybille Krämer puts it, "Everything we can say, find out and know about the world is being said, found out and known with the help of media" (Krämer 1998, p. 73).

There are many different ways in which this "mediatic turn" as an empirical, sociological development has been understood in German-language scholarship. Gebhard Rusch, for example, describes such a turn in terms of a "historically unique degree" of integration of the technological and the sociocultural. Referring to information and communication technologies (ICTs) generally, Rusch identifies the processes and effects specifically of digitization as being decisive in this sociotechnical integration:

Actually, from a technological perspective this integration appears as a deepening penetration of public and private spheres by ICT-infrastructures. From a sociological point of view this means an immensely increased accessibility of different kinds of information, people and services together with a corresponding multi-optionality. From a sociotechnical perspective, finally, this integration sets up a restructuration of media and communication following the infrastructural connectivity and processablity...And this is because the "ICT-sation" of our lifeworlds also includes the digital conversion of communication and media. (Rusch 2008, p. 33)

The mediatic turn is manifest here in terms of increased access and flexibility, in which the widespread digitization of mediatic forms and contents plays a decisive role.

Others, referring to Habermas' familiar system-lifeworld distinction, give expression to the mediatic turn in terms that are less sanguine. For example, Göran Sonesson, a Swedish semiotician explains that Habermas describes the lifeworld principally "in opposition to organized society, the so-called 'system world.'" One of Habermas' points, of course, is that lived, informal, and culturally grounded understandings and activities are gradually being permeated or "colonized" by instrumental-scientific and technical structures and controls. "Now we are suggesting," Sonesson ventures, that media could be "playing a similar role to this instrumental system." Media, in other words, are seen as gradually systematizing and organizing the relatively unstructured realm of the everyday. A lifeworld free from this systematizing influence, Sonesson explains,

...would be *immediate* (or as little mediated as possible) and *taken for granted—but* more than science and social institutions, media may well be able to transform secondary interpretations into significations taken for granted. Media, rather than the system world, may already be "colonizing" the Lifeworld. (Sonesson 1997, p. 67)





Sonesson sees the mediatic turn, in other words, not in terms of increased flexibility and accessibility, but in terms of a process with unambiguously baleful consequences. Media, mediatization, or mediality are increasingly structuring and controlling the realm of subjectivity and freedom of the lifeworld, and they are doing so in a way that is not readily evident, or at least "taken for granted."

Knuth Hickethier (2003) takes this further by contending that these kinds of processes have resulted in identifiable effects on consciousness. "If people as cultural beings are modeled through media (and these media are not isolated cultural instances), then [it should be possible to] create a open and changeable catalogue of associated medial effects" (emphasis in original; p. 230). He includes in this catalog of effects the construction and standardization of temporality; the shaping of attention and emotions; and an emphasis on the semiotic nature of individuals' relationships to the world around them, among others (Hickethier 2003, pp. 230-242; see also Schmidt 2008, p. 96). Media, in this sense, can be said to constitute a kind of a priori condition, in the sense similar to Kant's transcendental a priori. Just as water constitutes an a priori condition for the fish, so do media for humans. Like Kant's understanding of the "always-already" existing categories of time and space that are constitutive of experience, media today can be said to structure our awareness of time, shape our attentions and emotions, and provide us with the means for forming and expressing thought itself. Media, in slightly different terms, become epistemology: the grounds for knowledge and knowing itself.

THE PHILOSOPHY OF THE MEDIATIC TURN

With the notions like the mediatic a priori and media as epistemology, we move from the study of the social and empirical of realm of philosophy. Just as knowledge is seen as being increasingly contingent on media in empirical, quotidian terms, a similar mediatic contingency has been articulated in terms of the philosophy of language, culture, and knowledge (or epistemology). Referring to the work of Mead, Cassirer, Whitehead, and others, Reinhard Margreiter (2007), explains that thought itself has gradually come to be seen as mediatically contingent:

... the sign- and symbol-systems that determine thought stand in close relationship to media, or can even be said to be identical with media. Media can be defined in terms similar or identical to those of sign or symbol-systems. This further reflexive move must then be formulated as follows: *Thought [itself] takes place symbolically-medially*. And this can then be characterized as the "mediatic turn." (p. 32)

Media not only present a necessary precondition for knowledge in everyday practice, understood as semiotic systems, media also shape what it is possible to know





and also to think. In their 1999 preface to Kittler's Gramophone, Film, Typewriter, Winthrop-Young and Wutz come to a similar conclusion. They arrive at it not by following Mead, Cassirer, and Whitehead, but by tracing continuities in the thought of Saussure, Derrida, and Foucault, and presenting these in terms of a genealogy of discrete phases or steps:

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Step 1: We recognize that we are spoken by language. Step 2: We understand that language is not some nebulous entity but appears in the shape of historically limited discursive practices. Step 3: We finally perceive that these practices depend on media. (p. xx)

In other words: We are not masters of language, but language—as a highly structured system of signs and meanings—instead "masters" us and our thoughts and our efforts to communicate. Foucault's understanding of discourse-as-power extends this ontological "ventriloquism" to the dimensions of the political and historical, making the case that official and historically contingent vocabularies and means of expression enable some meanings while limiting or excluding the expression of others. McLuhan and his (largely German) successors remind us, finally, that this also extends to technologies through which language and discourse become manifest:

All our cognitive and communicative processes are suppositions which rely on presuppositions. The most important presuppositions in this respect are language and media, modeled in terms of frameworks of interactive dependencies which interrelate materialities and possible semantic contents in a systematic way, followed by collective cultural knowledge as the basis and outcome of socialization...Discourses function via the co-presence of materiality and meaning construction processes. This contemporarity defines the mediality of our relation to the world. Language is inseparably bound to materialities; media are necessarily bound to technicality. (Schmidt 2008, p. 101)

The linguistic turn, in other words, led to the discursive turn, and this led, finally, to a mediatic turn. "In short, structuralism begot discourse analysis, and discourse analysis begot media theory. Media," as Winthrop-Young and Wutz conclude, "are [at] the end of theory because in practice they were already there to begin Please provide with" (1999, p. xx). The practical and material characteristics of media systems and technologies shape what can be thought and expressed. Print, as McLuhan and others remind us, is relentlessly linear and centralizing: Information that is mass produced in the form of lines of standardized type on a page only radiates from places where print-based "information technologies" have attained critical mass. Broadcast media follow a similar centralizing logic, relying as they do on expensive and advanced means for gathering, assembling, and distributing information.





also social organization.

But unlike book culture, what radiates from the centralized broadcast media is not rigidly fixed and linear like print, demanding the quiet, reflective repose of its audience. It instead takes the form of an audiovisual flow, demanding of its audience more emotionally involved or visceral reception. The conditions of what is possible and impossible in human communication, expression, and social organization are in this sense shaped and conditioned by mediatic forms. Through the mediatic turn, the material and logical characteristics of media present the conditions for the possibility of forms of, and of collective and personal, knowledge and

The mediatic turn designates a point in theory and practice in which media are no longer seen as constituting a special case or merely one element among many. In this sense, media contain these other social and epistemological elements rather than being contained by them. Just as we are spoken by language, rather than being its speakers, media express themselves through us rather than serving as neutral tools ready to do our own expressive bidding.

It goes without saying that invoking the mediatic turn, like earlier invocations of the semiotic and discursive turns before it, represents a theoretical move of some audacity. In its more extreme articulations, the mediatic turn can be understood as tantamount to making the assertion attributed to Derrida, that "there is nothing outside of the text." Elevating media technologies to a position of this importance—casting them, in effect, as that which contains, causes or explains all else—is to open oneself to the charge of determinism (or worse). Determinism, of course, refers the idea that every event is ultimately determined by particular kind of event or cause—in this case, a particular medium or set of media. Such a view would ascribe to media a power so total that they would ultimately be seen as capable of "creating what they transport" rather than "merely setting and shaping limits to what they transport. Such an understanding is termed "fundamentalist" by media theorist Sybille Krämer. Like her, the authors of this chapter wish distance themselves from such a totalizing take on the mediatic turn. Like Krämer, we wish to articulate

an approach to media that is nondeterministic, [in which] the phenomena that become interesting are related to the heteronomy or the other-determined character of the [medium or] messenger. For media simply do not present themselves as autonomous "givens." We understand therefore the medium less as a conduit than as "middle" or as "mediator." There is always something outside of the medium. (p. 16)

Similarly, we seek to articulate an understanding of media that sees it a related to heteronymous factors, that recognizes it as manifest in terms of cultures and practices that are not entirely reducible to media's materiality or logical form.







MEDIALITY, MEDIATIZATION, AND MEDIALIZATION

Keeping this discussion of the mediatic turn and the mediatic a priori in mind, the meaning of the terms mediality, mediatization, and medialization can be readily defined. In experience that is significantly contingent on mediation, mediality, first, refers to the changing constellations of interrelated media that at any point in history constitute the condition of the mediatic a priori (Margreiter 1999, p. 17). Margreiter understands mediality as central characteristic of human thought and as adequate redefinition of transcendental philosophy. But in contrast to the Kantian concept of the a priori, Margreiter sees the constructive character of the mediatic a priori condition as historically relative. It should not be confused with a putatively timeless and unchanging cognitive structure. It is instead a relational, alterable structure that can be described empirically to some extent. In other words, similar to implicit knowledge as described by Polanyi (1966) and others, these historically relative conditions cannot be expatiated fully, but only partially. Theories of media dynamics as developed by Rusch (2007) and previously by McLuhan (1964) and Postman (1986) provide good examples of how historic media conditions can be tracked.

The term "mediality" can be understood, in other words, as designating the interaction of technology, society, and cultural factors through which institution-alized media of communication such as the press, television, or the World Wide Web produce, transform, and circulate symbols in everyday life. It is this total media system, and not specific instances of communication, that are of principal importance. Mediality in this sense can be said to develop out of or to supersede communication activity or communicativity:

The evolution of the total media system of modern media-culture societies from writing to the internet has fundamentally changed our relation to the world and our modes of communication. This change can be described as [the] transition from communicativity to mediality. (Schmidt 2008, p. 95)

Mediality in this sense is conspicuously resonant with what in North America is referred to as *media ecology*. Again, if it is the water in which the fish swims that is of interest, then this ambient condition is best studied as an environment or ecology. Neil Postman describes this approach to media as follows:

Media ecology is the study of media as environments... In the case of media environments (e.g., books, radio, film, television, etc.), the specifications are more often implicit and informal, half concealed by our assumption that what we are dealing with is not an environment but merely a machine. Media ecology tries to make these specifications explicit. (Postman 1970, p. 161; see also Fuller 2005; Tabbi and Wutz 1997)





Media ecology, in other words, is about the "total media system" as it is constituted by a gradually changing constellation of mediatic forms, from books and radio through television and the internet.

By way of contrast, the term *mediatization* refers not to a continuous process evolving over history, but to developments that are emphatically contemporary. Broadly speaking, it refers to the processes of the (inter)penetration, integration, saturation, or "colonization" of the sociocultural lifeworld by media of various sorts. Krotz (2007), for example, describes mediatization as one of a number of "meta-processes," which he defines as closely interrelated, overarching "constructs which describe and explain theoretically specific economic, social, and cultural dimensions and levels of actual change" (p. 257). These include general transformative processes such as globalization, individualization, and commercialization; but among these, Krotz says, the one that is likely most important

...is that of *mediatization*. By this we mean the historical developments that took and take place as a change of (communication) media and its consequences, not only with the rise of new forms of media but also with changes in the meaning of media in general. (emphasis in original; p. 258)

Although they have been manifest in the past, processes like mediatization (or globalization, commercialization, etc.) are prominent in the present as elements of relentless change. Medialization, finally, can be explained as a derivative designation for this transformative meta-process. The preferred designation for this development would translate in German most directly as "medialization," hence the occasional appearance of this term in English as well.

(MEDIA) EDUCATION AND THE MEDIATIC TURN

Given its general significance in philosophical theory and in everyday life, it is not surprising that the *mediatic turn* has implications for pedagogy that are both broad and urgent. This section explores these implications but will begin first by considering the current significance of media in both English- and German-language educational research and practice. Discourse in both linguistically defined traditions has generally approached the question of media in two particular ways: first and primarily, media is studied and addressed in education in terms of popular, youth, and mass media as they are encountered every day. In English-language contexts, this educational approach to media is associated with the term "media literacy," which has been defined as

The process of understanding and using the mass media in an assertive and nonpassive way. This includes an informed and critical understanding of the nature of the media, the techniques used by them and the impact of these techniques. (Boles 2008)

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Needless to say, the implication is that the mass media are principally deleterious in their effects on students, adult learners, and educational efforts generally. As the above definition makes clear, the typical response of educational research and practice is to aim at equipping students with skills and abilities for resisting the otherwise prevailing influence of media. This response, furthermore, sometimes extends to include the political and pedagogical implications of "media socialization," the notion that the effects of media extend to the way that entire generations are brought up to think and act.

Secondarily, media are also defined in education specifically in terms of instructional media, instructional *multimedia* (and also as "multimedia learning," "instructional materials," or "message design," all of which are generally classified as subdomains of instructional design and development). These terms refer to the intentional and systematic use of computer, broadcast, and other technologies for instructional purposes, and generally in instructional settings. "Multimedia learning," for example, is described as

...focus[ing]...on how people learn from words and pictures in computer-based environments. [These] environments include online instructional presentations, interactive lessons, e-courses, simulation games, virtual reality and computer-supported in-class presentations. (Mayer 2005, p. ix)

The issue driving research and practice in this subdiscipline is the efficient use of media for instructional ends. Efficiency, moreover, tends to be defined in terms of fixed, physical and logical characteristics of media and their correlation with curricular content and individualized cognitive functions (e.g., Mayer 2005).

In educational discourse, media are also thus subsumed firstly as a cultural element *outside* of the institution, and secondly as a technical element instrumentalized *within* educational contexts. The twofold significance of media in educational discourses and systems is indicated in Figure 1, a diagram of the "student academic learning model" by Michael Molenda.

The term "media" appears twice in this schematization. First, it appears in the form of mass media, directly connected with culture, and located as an element outside of the sphere of influence of the school and classroom environments. Second, "media" appears closer to the center of the diagram, unambiguously within the institutional environments of the school and classroom, contiguous with instructional methods, directly connected with the teacher characteristics, and feeding directly into student instruction and motivation (or "effort").

This duality is defined in surprisingly similar terms in both English- and German-language discourses. The one difference separating these discourses in this regard, though, is that both conceptions of media are subsumed in German under the term *Medienpädagogik* (media pedagogy), whereas they appear separately







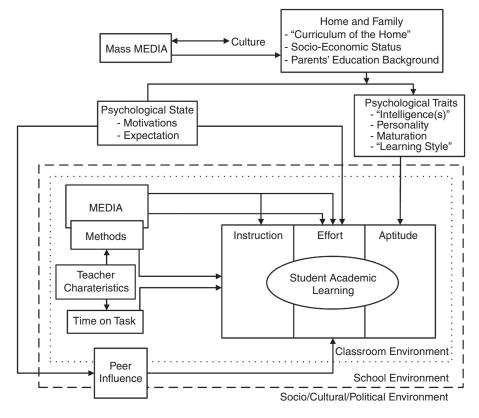


Figure 1: Student academic learning model. © M. Molenda, 2005. Used with permission.

in English. Media pedagogy is defined in the most inclusive terms, for example as "the treatment of pedagogical questions of a theoretical and practical nature, raised in connection with media" (1997, p. 1057). As a field of this breadth, it is not surprising that *Medienpädagogik* encompasses a range of wide emphases for both research and teaching, including:

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- a focus for both research and teaching on the academic, ideological, and theoretical implications of the production, distribution, and transmission of knowledge in society;
- the treatment of media and media related questions specifically as subjects in school curricula; and
- a practical field of media pedagogical activity or praxis for and in kindergartens, schools, parent-teacher associations and various areas of youth work, and adult and continuing education.





Thus designating research, teaching, and social action related to media in the broadest sense, *Medienpädagogik* also encompasses a number of subdisciplines or subspecializations. These include media didactics (*Mediendidaktik*), media education (*Medienerziehung*), ICT competency (*informationtechnische Bildung*), as well as the tellingly named tradition of the pedagogy of protection (*Bewahrpädagogik*). This protective pedagogy, together with "media education" and corresponding ICT competencies, can be said to correspond broadly to English-language "media literacy" as defined above. Media didactics, for its part, provides a counterpart to the English-language subdomain of "instructional media." Media didactics has been defined as focusing on "the functions, effects, and implementation of media in teaching and learning contexts," specifically for the purpose of "the optimization of teaching and learning processes"

As indicated in the diagram above, in both ways of defining media in education—in terms of media literacy or education, and in terms of instructional media or media didactics—mediatic technologies and forms are relegated to two relatively minor subcomponents or subsystems in a much larger system of learning or education. These components are firmly contained and suspended within the encompassing environment of the classroom, school and social, cultural, and political systems. In other words, media are generally *not* seen in educational theory in such a way that they would constitute the "water" in which teachers and students would figuratively "swim."

(Hug 2002, p. 195).

Needless to say, in the light of the mediatic turn, this bifurcated and limited educational definition of media appears inadequate. To understand media as a "mass" phenomenon external to educational purposes (on the one hand) and as an instrument entirely defined by these purposes (on the other) is problematic for education on both empirical and theoretical grounds. Empirically speaking, these ways of conceptualizing media are rendered insufficient by the increased penetration of media generally, and also by the increasing importance of more personal or participatory (rather than "mass") media. Theoretically speaking, these traditional roles of media in education are put into question in terms of the mediatic a priori: the contention that media play an important role in defining the epistemological preconditions or characteristics of cognition, such as the perception of time, space, and the shaping of attention and communication. Understood in this way means that media themselves can be aligned with educational purposes in a number of ways rather than simply being regarded as a problem for education or as a mere conduit for instructional content.

What changes to the traditional bipartite educational definition of media would be adequate to the mediatic turn? Some would answer this question in quite







ambitious terms, envisioning the emergence of a vast "media research program" for a range of disciplines:

As soon as we realize that there are no contents outside the media, we have to accept that research in media has to invest deliberately in all possibilities of observation and description offered by all media. In the times to come, new concepts of science and aesthetics, of rationality and creativity should and will...be developed in order to serve the needs of a media research programme we can only imagine today. (Schmidt 2008, p. 103)

Certainly, some of these new disciplinary concepts would relate to matters educational as well as scientific and aesthetic; but at the same time, such grandiose visions for the future shed little light on present or short-term possibilities. Speaking perhaps more practically, and focusing again on Figure 1, recognition of the mediatic turn would first mean that media would be freed from their schematic containment, as either mass phenomena or instructional tools. Whether one is thinking along the lines of the recent proliferation of internet-based communication media (e.g., chats, blogs, wikis, and social software generally) or of the possibility of mediatically conditioned cognitive characteristics, "media" as a term would be more accurately depicted as interpenetrating all elements in the "learning model." Media, in other words, would need to be redefined diagrammatically as being ubiquitous, as encompassing the school and classroom environments, as having a scope that is contiguous with the socio/cultural/political environment as a whole.

This further implies that the practices and institutions of education need to be understood in a frame of reference that is *mediatic*; in terms of what has been referred to above as mediality, as a part of a media-ecological configuration of technologies specific to a particular age or era. Of course, in this context as well, institutional education cannot be defined through a series of boxes and arrows, in which media is are given discrete and tightly circumscribed roles. Education as a whole instead appears as deeply interconnected with the gradually changing configuration of mediatic forms that surround and saturate it. As has been widely noted in North American writing in media ecology, this configuration is one in which *print* has been dominant. McLuhan, for example, has described the role of the school specifically as the "custodian of print culture" (1962, p. 215). It provides, he says, a socially sanctioned "civil defense against media fallout" (1964, p. 305)—against threatening changes in the mediatic environs. Neil Postman expresses this in slightly less figurative terms, saying that "school was an invention of the printing press and must stand or fall on the issue of how much importance the printed word will have in the future" (1982, p. 42). Postman further describes this typographically centered mediatic constellation as being one that crystallized during the seventeenth century.





He points out that it was during this century of enlightenment that particular meanings of school and childhood developed that remain familiar today:

Since the school curriculum was entirely designed to accommodate the demands of literacy, it is astonishing that educationists have not widely commented on the relationship between the "nature of childhood" and the biases of print. For example, a child evolves towards adulthood by acquiring the sort of intellect we expect of a good reader: a vigorous sense of individuality, the capacity to think logically and sequentially...[as well as] the capacity to manipulate high orders of abstraction...Infancy ended at the point at which a command of speech was achieved. Childhood began with the task of learning how to read...childhood became a description of a level of symbolic achievement. (1982, pp. 42, 46)

Childhood can be thus defined in terms of mediatic competency, as a transitional state that begins with mastery of spoken communication and ends with much more laborious accomplishments in written communication. These characteristics of literacy listed by Postman have become so familiar that they are generally understood as part of the natural processes of human development—registered in Piaget's concrete and operational stages, for example. Schooling and education, by extension, appear as the formal setting that is the necessary institutional correlative to this conception of development. As the "custodian of print culture," it is the task of education to provide students with a structured, controlled environment that is conducive to the quiet repose that print media demand of their audiences. This further positions the school as a kind of separate, reflective, critical pedagogical "space," isolated from the multiple sources of informational "noise" in an otherwise media-saturated lifeworld.

Sustained discussions of the effect of mediality and the design and evolution of educational forms seem to be as rare in German-language discourse as they are in Anglo-American scholarship. A conspicuous if unusual exception appears in pedagogical literature in German-speaking Europe in the work of Klaus Mollenhauer, who observes in his book, *Forgotten Connections* (1983), that in the seventeenth century

...the ground rules through which reality is constructed for children [were] not simply transformed; but a whole new system of rules emerge[d]. The culture [was] no longer presented to the child in its entirety, but only in part: namely, via [a kind of] pedagogical rehearsal or practice, as it would be for someone from a foreign land. This makes certain institutions necessary [such as] schools...orphanages...[and] kindergartens... (p. 50)

Instead of only and simply learning directly from what adults around them said and did, an emphasis on print literacy meant that children learned of the world indirectly,





through books—almost as someone would read about a far-away place. And such learning by proxy requires the forms and functions of the school. Intervening changes in media and their interrelationships have, of course, challenged the centrality of this print-based "pedagogical rehearsal or practice" that Mollenhauer describes. These changes, occurring through the introduction first of radio, then of television, and finally of newer media technologies, have been described by Postman and others as constructing a reality for children that in many ways undermines the one arising via print and literacy. In this way, mediatic changes have challenged the raison d'etre of the school, making its disposition or posture increasingly "custodial" or defensive. McLuhan describes this from the perspective of the student, socialized to audiovisual media, who is suddenly confronted with "baffling" customs and values shaped by rather different mediatic circumstances:

The youngster today, stepping out of his...TV environment, goes to school and enters a world where the information is scarce but is ordered and structured by fragmented, classified patterns, subjects, schedules. He is utterly bewildered because he comes out of this intricate and complex integral world of electric information and goes into this nineteenth-century world of classified information that still characterizes the educational establishment...The young today are baffled because of this extraordinary gap between the two worlds. (McLuhan 1995, p. 222)

These media, in McLuhan's view, would ultimately lead to students' liberation from schooling and thus to the end of the school as an institution (Lynch 2002). Following in McLuhan's footsteps, Neil Postman interprets the end result of this clash of media cultures in more baleful terms:

In the long run, television may bring an end to the careers of school teachers, since school was an invention of the printing press... There is no chance, of course, that television will go away, but schoolteachers who are enthusiastic about its presence always call to my mind an image of some turn-of-the-century blacksmith who not only is singing the praises of the automobile but who also believes that his business will be enhanced by it. (Postman 1997)

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In the light of the mediatic turn, the defensive position of the school in the era of proliferating electronic media is evident in the way it has responded to media as form and culture, summed up in the term "media literacy": the terminology and the critical arsenal of a previous era of mediality ("literacy") is directed against what is interpreted as a forces in need of active and vigorous critique and deconstruction ("media"). Given the position of the school in the current configuration of mediality, it is no surprise that they are at the center of the school's efforts to work against subsequent changes in the medial constellation. It is therefore not surprising that both *Medienpädagogik* and media literacy have in common a





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central affirmation of the school as a place of quiet reflection, insulated from the sounds and images of the external mediatic environment.

But at the same time, and as has been indicated earlier, McLuhan, and Postman's descriptions of the mediatic environment as an "electronic," televisual environment sounds dated. Postman's claim that "there is no chance, of course, that television will go away," for example, carries and inappropriately finality in an age in which viewership (especially among the young) is declining. The intervening mutation and combination of mediatic forms, including text, image, video, and audio present a significant challenge McLuhan's and Postman's divergent prognoses. Any simple binary opposition between logical, hierarchical print culture on the one hand, and the visceral visual and audio flows on the other, has seriously undermined by the eclectic mix of media available via the internet, Web, and mobile communications. This is illustrated with special clarity in the case of textual forms of communication that have been collectively labeled "Web 2.0" or "the read-write Web." These include chat and texting, Wikis and Wikipedia, blogging (including audio podcasting and video blogging), and "social software" generally. Especially in the case of chat, texting, blogging, and social software like Facebook, these forms have brought with them new kinds of writing and written expression: The abbreviated, telegraphic textuality of synchronous chat and texting has attracted the attention of linguists and communications scholars, and the varied combinations of text and other visual media common on blogs and other social software have been widely studied in terms of identity construction and self-expression.

In upsetting the binary opposition between textual and audio/visual cultures posited by McLuhan, Postman, and others, these new forms and combinations present radically new opportunities for media pedagogies in particular and education in general. Simply put, these new additions to the mediatic environment relieve education of its unambiguously defensive role as "the custodian of print culture" against an audio/visual mediatic onslaught. Education, fighting on the side of literacy, no longer needs to fend off the attacks of "mass media" on the one hand while wielding instructional media from its curricular arsenal on the other. Instead of working against media and insulating its use of media against the mass mediatic environment, education now has the opportunity of working with media, in greater consonance with the larger mediatic ecology.

(MEDIA) EDUCATION AFTER THE MEDIATIC TURN

The question then becomes, "How can pedagogy work with media, in concord with the mediatic environment, in the wake of the mediatic turn?" Answering this





question requires a flexible understanding of pedagogy, its forms and functions, and, of course, of its relationship medial environment in which it is immersed. This concluding section of the chapter explores a number of possible pedagogical responses and considers possibilities developed in recent scholarship as well as those implied by the preceding discussions of mediality and mediatization.

One prominent response has been presented by Henry Jenkins under the rubric of "participatory technologies" and "cultures." In a report entitled Confronting the Challenges of the Participatory Culture: Media Education for the 21st Century, Jenkins and a number of coauthors describe a number of applications characteristic of Web 2.0 in terms that can also be seen as reflective of the mediatic turn:

Rather than dealing with each technology in isolation, we would do better to take an ecological approach, thinking about the interrelationship among all of these different communication technologies, the cultural communities that grow up around them, and the activities they support. Media systems consist of communication technologies and the social, cultural, legal, political, and economic institutions, practices, and protocols that shape and surround them. (Jenkins et al. 2006, p. 8)

In keeping with the nondeterministic emphasis discussed earlier in this chapter, Jenkins and his coauthors see media as related to a variety of different factors outside of themselves, including institutions, cultures, and practices that appear quite heteronymous in nature. In this context, it is not simply a question of the material and functional character of the technologies that is important (or their correlation to curricular or cognitive characteristics). Instead, Jenkins and his collaborators emphasize a much wider set of elements, which they see as all having contributing to a new "participatory culture." They define such a culture as one

... with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices... Participatory culture is emerging as the culture absorbs and responds to the explosion of new media technologies that make it possible for average consumers to archive, annotate, appropriate, and recirculate media content in powerful new ways. (pp. 3, 8)

The specific skills that Jenkins and his coauthors describe as arising through involvement of "average consumers" in this "participatory culture" include ludic forms of problem solving, identity construction, multitasking, "distributed cognition," and "transmedial navigation" (p. 8). Specific sites and programs that Jenkins and his coauthors see as illustrative of such a culture include popular commercial offerings such as "Neopets," "The Sims Online," and "My Pop Studio."





However, it is precisely this emphasis on commercial media and "average consumers"—and the concomitant centrality of leisure and entertainment—that have given rise to misgivings concerning Jenkins' and his coauthors' vision of the educational potential of participatory media cultures. The emphatically commercial nature of some of the sites and communities mentioned as examples by Jenkins and his coauthors compound the problem. In opposition to this emphasis on consumption and commercial culture, schooling and education not only present a critical print-cultural bias, they also retain a clear (albeit contested) noncommercial character. The space that education provides for critical reflective practices must remain in some significant ways distinctive from the commercially culture and methods of advertising and consumption. The point is not that there is nothing to be learned from practices for maximizing profit; the point is that the circumscribed cultural and technical parameters of the communities and activities—ultimately designed to mobilize profit and circulate consumer and advertising data—must not simultaneously circumscribe learning and education.

In urging education to work with rather than against the positive potential of the surrounding mediatic environment, we have a somewhat different set of possibilities in mind. These combine the reflective, critical reflexivity or self-awareness characteristic of literacy with a number of new mediatic forms and implications. The first of these possibilities is to develop critical and self-aware participation in commercial and especially noncommercial Web 2.0 technologies; the second is to develop a similarly reflexive appreciation of the role of media in pedagogical research; the third and most important is to develop a particular emphasis on framing, to cultivate an awareness of the role of the mediatic a priori, epistemological character of media.

The increasing expansion and penetration of mediatic forms and technologies (as a part of meta-process of mediatization) is generally accompanied by increased commercialization (as a parallel meta-process). In this context, a significant function of schooling and education is to foster noncommercial or even countercommercial mediatic forms and engagement. Of necessity, these forms will involve different tools and different types of use from what "average consumers" would be typically be accustomed to. For example, Wikis and blogs (even if these may be hosted on commercial sites) can be adapted for critical, reflective writing—rather than, say, passive browsing. Instead of remixing existing clips from television or top-forty radio, as another example, children should be encouraged to generate and recombine audio and/or video elements from their own contexts and situations. In this way, participation can be encouraged to break through patterns of inscribed by the circulation of data, commodities, and monetary value that can otherwise limit the use of these media.





In terms of pedagogical research, the mediatic turn calls for a reconsideration of the value and position of media in the way in which educational theories and practice are developed and researched. In research work, just as in the activities of learners described above, a self-aware engagement with mediatic representation in both creation and dissemination of data needs to be exercised. This includes investigative processes such as in software-supported methods of data analysis and also extends to the ways in which objects of investigation are defined through mediatic representation (e.g., in the case of the emergence and passing of internet subcultures). These questions need to be seen as relevant not only to empirically oriented approaches of educational research but also to educational philosophy and its discursive and representational modalities.

Finally, understanding media as presenting the a priori or the epistemological preconditions for both specialized and everyday knowledge can be seen to entail an emphasis on epistemological orientation or framing. This arises as follows: If the acquisition, refinement and circulation of knowledge all occur as mediated processes, it only makes sense that an awareness of the current and potential role of media in forming knowledge should follow. Student and teacher competencies need to be reconsidered along the lines of this awareness, with the capability to effectively select, utilize and thus frame media and mediatic contents being the most important. In understanding this kind of "framing," Hans Blumenberg's notion of the fundamental "readability of the world" (Lesbarkeit der Welt) can be helpful: It refers to the foundationally hermeneutic nature of the human condition, the fact that our orientation in the world around us—whether it is presented to us as text, image, sound, or a multimedial mixture—carries meanings that call out to be actively interpreted (Blumenberg 1981). In responding to this often-mediated call to interpretation, familiarity with the way these meanings are shaped, distorted, or even sometimes erased through this mediation is indispensible. Of course, the curriculum requisite to such "framing competencies"—like the new rationalities and aesthetics invoked by Schmidt—is something that "we can only" begin to "imagine today."

CONCLUSION

Of course, education does not become obsolete simply because rapid and multiple developments in media and its cultures and technologies have increased uncertainty about the creation, acquisition, and circulation of knowledge. Instead, the need for education becomes more urgent: the importance of differentiated understandings of media-induced forms of knowledge and accounts of underlying







mediatic structures is instead heighted. As certainties become fewer, the importance of education becomes greater:

When only particular—and only dimly perceivable—structures come to visibility, then humans need more than qualifications and certification, more than even learning that is lifelong. People must be given the ability to deal with significantly weaker forms of knowledge and consciousness; for that purpose, people need technological skills, capacities for self-construction in front of screens. They still need some small degree of metaphysical comfort. They must be capable of enduring an existence in flickering and distributed networks and competencies for cooperation with emotional beings under the conditions of unleashed communication. Education after the mediatic turn is nothing less than this. (Schönherr-Mann 2008, pp. 206–207)

The precise ways in which digital media might eventually contribute to the "readability of the world"—and not only to the processes of commercialization, globalization, and trivialization of life—have yet to be fathomed.

NOTE

1. Although this quote is frequently attributed to McLuhan (e.g., see McLuhan in Wikiquotes, 2008), it is clear that its ultimate origins lie elsewhere. The question, "What does a fish know about the water in which it swims all its life?" has been attributed to Albert Einstein (see http://www.knowprose.com/node/11678). And a similar fish-water analogy is clearly evident in an undated Zen Koan; see http://www.zenki.com/GenjoKoan.htm.

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