



# Educational Perspectives on Mediality and Subjectivation: Introduction

*Patrick Bettinger*

**Abstract** The concept of the subject has long been a central construct of the social sciences, cultural studies and the humanities. While the philosophical roots of the concept go back to antiquity, new discourses have developed in recent years that critically question and further develop concepts such as subject or subjectivation. In addition to theoretical strands of discussion, the focus is increasingly on the empirical possibilities of subjectification research. It is becoming apparent that the constitutive power of digital mediality—also from the perspective of educational science—is playing an increasingly significant role in these contexts. The introductory chapter presents a brief outline of these developments and provides a first insight into the contributions in this volume.

**Keywords** Research • Power • Mediality • Digital culture • Relationality

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P. Bettinger (✉)

Center for Education and Digital Transformation, Zurich University of Teacher Education, Zurich, Switzerland

e-mail: [patrick.bettinger@phzh.ch](mailto:patrick.bettinger@phzh.ch)

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Investigation of ‘the subject’ is an interdisciplinary endeavour which for many years now has constituted an influential component of the fundamental discourse underlying the social and cultural sciences. Rooted in seventeenth- and eighteenth-century philosophy, our attempts to define ‘the subject’ can equally stand as proposed answers to the question of how we arrive at the knowledge we have. The discourses that have unfolded in this context have taken two distinct lines, with rationalism guiding the European debates and empiricism at the heart of the Anglo-American approach, each scaffolded by specific variants of theories of knowledge. Both strands have presented concepts of the subject in the process of acquiring knowledge and of its status in that process. Examining these ideas, we note divergent views on, *inter alia*, the extent of the subject’s involvement in the act of knowing, with rationalism positing an active and empiricism a more passive role (Beer, 2014, p. 215). The term ‘subject’ itself is ambiguous in connotation, referencing both a singled-out status and a condition of subjugation (Reckwitz, 2006, p. 9). The classical conception advanced in continental Europe defines the subject as “a self-determined, self-transparent entity of knowledge and of—moral, interest-led or creative—action” (Reckwitz, 2012, p. 12),<sup>1</sup> with universally valid properties whose attribution to this entity is immutable. Over time, discussion around the subject diversified and made inroads into fields beyond philosophy; in discourses from political science and economics, for example, the concept of the subject is a key locus of divergent perspectives on forms of government, types of state and designs for life. The subject is a concept closely entangled with prototypical notions of citizenship and a citizen class and their shifts as time has passed. We have seen the successive prevailment of the idea that the modern subject is a “product of specific socio-cultural conditions” (Reckwitz, 2006, S. 9) whose definition would be incomplete without consideration of the factors set out here.

In recent times, trendsetting developments in theories of the subject have issued particularly from poststructuralist discourses. A highly influential milestone appears in the work of Michel Foucault, which has foregrounded the historically contextualised process via which a subject comes to be and regards the state of being a subject as secondary hereto. Foucault’s oft-cited dictum of the ‘death of the subject’, alongside its multiple revisions and reinterpretations, marks an important point of reference for poststructuralist thought, notwithstanding the various controversies that have sprung up around it. Foucault’s later work advanced the idea of

specific ‘Technologies of the Self’ (Foucault, 1988), which, in their interaction with societal forms of knowledge and power relations, form the irreducible fundament of any historical analysis of contingent modes of being (Foucault, 2011, p. 9). Against this backdrop, Foucault explored the various cultural forms in which people develop knowledge of themselves and the associated disciplines of study, whose ‘truth-games’, interlinked with particular techniques, represent the point of departure for our self-knowledge (Foucault, 1988, p. 17). In the modern age, Foucault describes this form of *knowledge of self* as having ousted *care of self* from its former primacy: “In Greco-Roman culture knowledge of oneself appeared as the consequence of taking care of yourself. In the modern world, knowledge of oneself constitutes the fundamental principle” (ibid., p. 22).

One of the prominent names engaging with Foucault’s work and elaborating its implications has been Judith Butler, best known for her work on gender theory, whose *The Psychic Life of Power* (Butler, 1997) fuses Foucault’s concept of subjectivation with that of interpellation as proposed by the French philosopher Louis Althusser. Following in Foucault’s footsteps, Butler proceeds from the assumption that people *are* not subjects a priori, but become or, more precisely, are made into them, and that it is these performative processes of subjection/subjectivation, drawing their shape from discourses and normative values, which merit analytical centrality. Becoming a subject appears, in this perspective, as an ambivalent process simultaneously of subjection/subjugation and of action after one’s own mind. A frequently quoted excerpt from Butler’s work refers to an exemplary situation she cites from Althusser, in which a policeman, with the words ‘Hey, you there!’, hails a pedestrian who, turning in response, becomes a subject through and by a combination of this hailing and that response of acknowledging the law and its validity—an acknowledgement encompassing the possibility that the subject might invoke it to empower him- or herself (ibid., p. 106). This point of view conceives of social orders and subjectivities as co-constitutive, not pre-existent, but requiring active production (there is more detailed discussion of this in the chapter by Britta Hoffarth in this volume).

Butler’s work points up an aspect of discourses which is of substantive significance to the concern of this volume: their ubiquity and powerful effects both within and beyond their explicit reference in language: “discourses do not need to be explicitly cited in order to be deployed. Rather, multiple discourses are referenced through the meanings, associations and omissions embedded in the historicity of apparently simple and benign

utterances and bodily practice” (Youdell, 2006, p. 514). Following this reading, we note the multi-faceted workings of discursivity, evident in language, yet also in embodied practices. I will return to this thought below, pursuing it further in light of material-medial manifestations of the discursive.

Numerous other authors have walked and extended the paths laid by Foucault and Butler. One focal point of current debates relates to concepts of distributed subjectivity (Alkemeyer et al., 2018), which read the subject as a collective entity rather than as one limited to a single individual and correspondingly examine not “subjectivation *in*, but *of* collectives” (Alkemeyer & Bröckling, 2018, p. 19). This emphasis on the collective element of subjectivation explores “how human [subjects], in their interplay with non-human entities, present themselves, assuming identity and readability, as this subject or that subject” (ibid., p. 24). This extension of the concept of subjectivation to encompass the co-action and inter-action of distributed entities directs our view both to large-scale social structures and to the significance of non-human entities to collective forms and means by which normative structures emerge, subjects locate themselves in or submit themselves to them, or rise up against hegemonic conditions in a spirit of emancipation. The approach taken by Rammert (2012) fits into this mould; while he does not give focal attention to the subject as such, his proposed concept of ‘distributed agency’ in socio-technical collectives emphasises the central moment of a distributed ability to act, opening up particularly towards human-technical interaction in various forms. All of this points the way towards an approach to subjectivation which leaves aside the familiar, individualistically-focused beaten track and, as I will discuss below, promises productive insights from its centring of collective processes under the assumption of a sociality constituted in and with the digital and media sphere.

## 1 RESEARCH ON SUBJECTIVATION: AN OUTLINE

The increased currency of the subject as a concept in discourse, and the inspirations and variations on existing approaches it has engendered, shine a light on the analytical potential this concept contains, which we have been able only to touch upon briefly here. We note a mounting tendency to conceive of accesses to theories of the subject as proceeding beyond purely abstract, conceptual approaches, linking up with specific societal phenomena and finding a home in empirical methodologies. The

overarching question in this direction of research, with its point of anchor in the theoretical presumption of subjectivation, seeks above all to illuminate the ways in which “actors relate to various different orders that structure an ideal way of being a subject” (Geimer et al., 2019, p. 3). The intent here is to overemphasise neither the power of the ‘social orders that subjectivate’—for to do so would imply the marginalisation of thinking, active subjects—nor the autonomy these subjects enjoy. Instead, current research into subjectivation aims to examine the relationship between the subject positions on offer to subjects and the specific practices undertaken in this context, to the end of identifying whether subjects accept or reject these options for subjectivation, how they do so, the significance the actors involved attach to these acts, and the resistance they may offer instead, or the alternative proposals for subjectivation they may put forward (ibid., p. 4).

The subject, as a concept, has a notable role in various brands of discourse analysis; be they critical (Fairclough, 2010), poststructuralist (Angermuller, 2014), or informed by the sociology of knowledge (Keller et al., 2018), they all share some degree of referentiality to Foucault, and despite all differences they show in particular points, the subject, or perhaps rather subjectivation, is one (among several) of the overarching theoretical anchors of their methodological considerations, of which the reciprocal interaction of knowledge, power and discourse forms the key target. It is pertinent here, in regard to my proposed view of subjectivation research, to note that approaches from discourse analysis frequently stand accused of neglecting the actor’s perspective and concomitantly overrating the significance of discursive structures. When viewed with subjectivation foremost in our minds, we will find it problematically one-sided to posit such a radical autonomy of discourses as effectively free-floating, severed from the daily realities of individuals. We might look, in this context, to build empirical bridges via subject analysis, with an associated, more distinct foregrounding of social practice. In a spirit that advances a notion of “subjectivation within social practices” (Alkemeyer, 2013), this strand of the discourse identifies an expansion of praxeological approaches to embrace theories of subjectivation as holding potential for multi-faceted insights into the complex processes by which sociality is produced and reproduced. The ultimate aim here is to initiate an approach to this research whose eyes are open to the ways in which, “commencing in the modern age, entities perceived as subjects, to whom we can attribute specific capacities to know, understand, act, judge, evaluate and reflect, come

into being in historically mutable sets of social practices” (ibid., p. 36). The creation of a praxeological basis for subjectivation theory opens up to us a broad repertoire of methodological points of reference ranging from ethnographic approaches (Breidenstein et al., 2015) and artefact analysis (Lueger & Froschauer, 2018) to cartographic techniques (Both, 2015).

A related approach, drawing more strongly on discourse analysis in its poststructuralist sense, yet likewise illuminating connections between subjectivation and practices, is observable in the work of Wrana (2012a, b, 2015a) and of Wrana and Langer (2007) around the analysis of discursive practices. The greater centrality of discourse here does not detract from the authors’ evident interest in matters of subjectivation. In a way, analysing discursive practices highlights the performative side of discourses, that is, their productivity via action and the completion of action. Wrana (2015b, p. 121) sets out a vision of discourse in this context thus: “I wish [here] to pursue a perspective that conceives of discourse not as originating and unfolding in the reproduction and stabilisation of the ordering structures of meaning, but as the operative and situated practice of structuring and ordering meaning”. The analysis of discursive practices, then, would centre “contextualised acts of expression” (ibid.), with specific regard to their subjectivating function; rather than examining primarily *what* is spoken or subjectively ‘meant’, it would explore “how ensembles of meanings and objects are constructed” (ibid., p. 135). Alongside this stand numerous further approaches to the empirical study of subjectivation, which I cannot detail here without veering significantly off course. The key point here is that research on subjectivation accesses the entire range of qualitative methodologies and additionally generates highly diverse, theoretically rich analytical approaches in its endeavour to adequately meet its subject’s complexity. It is doubtless the case that this great methodological flexibility is one of the strengths of this field, due in part to its capacity to provide tools distinctly apposite to the task; it is, however, simultaneously a weakness in that the empirical approach calls, as a rule, for extensive methodological modifications and acts of mapping the territory.

The particular appeal of the analysis of subjectivation to education science resides in the awareness it can raise of the configurations of power that rear their heads in all processes of pedagogy, in the form both of supra-individual contexts and of the “micro-physics of power” (Foucault, 1978, p. 26) that, in diverse ways, infiltrate and pre-mutate situations of teaching and learning, educational institutions, and processes of

socialisation. This perspective directs a new light on pedagogical challenges such as the antinomies and ambivalences inherent in the act of educating and the paradoxical relationship of freedom and compulsion that characterises it. Key significance in this regard accrues to the matter of whether we conceive of a subject as ‘weak’ or ‘strong’—the response here determines whether, where, and how we deem pedagogical interventions as appropriate or necessary; the extent to which such interventions empower or disempower; and the workings of the production and reproduction of normativity they occasion. This approach thus entails an interrogation of the role of education itself—as an academic discipline and a sphere of practical action—and the values it carries, implicit and otherwise (Färber, 2019). This investigation also uncovers governmental aspects of education and pedagogy (Weber & Mauer, 2006) and opens up a field for critique of practices within education due to its laying bare of configurations of power and knowledge and their implications for directive interaction with people of whom one is ‘in charge’. The associated analysis of the relationship between technologies of power and technologies of the self directs our awareness sharply towards the difficult matter of laying down normative propositions in pedagogical practice. Butler’s work on gender (Butler, 1990) is of particular relevance here, having resonated vigorously in education science and providing an outline for a continuous and ongoing engagement with the issues raised in theories of recognition and performativity (Jergus, 2012). Studies of the ordering structures at work in pedagogy likewise borrow from research on subjectivation, as is evident in areas such as the analysis of cultures of learning (Kolbe et al., 2008; Fritzsche et al., 2011). Focal exploration of the autonomy and heteronomy of acts of addressing and interpellation makes the normativity (or otherwise) of pedagogical processes amenable to description. In this way, working on an empirical basis, we gain access to a form of non-reductionist didactic decision-making which takes account of the multi-layered nature of the processes and practices at work in the school setting.

## 2 THE MEDIAL AND MATERIAL SIDE OF SUBJECTIVATION: MAPPING THE LACUNAE IN EDUCATION SCIENCE

Faced with such research potential, we might be forgiven for a degree of puzzlement at the rather hesitant response made by the discipline of education science to the debates around the changing concept of the subject

which we have seen arise in the recent past. It is of use in this context to explore this conceptual shift more closely. Two of its main drivers, themselves reciprocally linked, are of significance here. One appears in the form of the material-cultural turn, whose challenge to existing positions in theories of the subject—via, for example, ‘new materialism’ (Dolphijn & van der Tuin, 2012; Gamble et al., 2019; Kissmann & van Loon, 2019)—consists in its radical conception of anthropocentrically defined categories such as thought and action as situated phenomena whose capacity to materialise in the first place is contingent upon specific configurations of human and non-human variables. Accordingly, the associated conceptualisation of the subject diverges from more classical variants which often equate ‘the subject’ with the human individual, relegate materiality to the status of a subsidiary contextual factor, and emphasise the subject/object dichotomy—a demarcation line which new materialism calls into question, taking the poststructuralist notion of the decentred subject to a new level and adding an “emphasis on the specific eventness and potentiality of material” (Folkers, 2013, p. 17) that rejects existing theories of the subject for, above all, their anthropocentrism. These approaches regard subjectivity per se as a hybrid, processual phenomenon involving various human and non-human factors.

The other catalyst of the reconceptualisations currently in process around the subject is related to the observation, in our recent past, of caesuras and changes in media cultures associated with the high importance of digital technologies in social interaction (Cheney-Lippold, 2019; Seyfert & Roberge, 2017; Stalder, 2018). Commentators on this phenomenon have repeatedly cited the overarching property of digital media, as manifest in their specific intertwinement of hardware and software, their networked data infrastructure and their underlying algorithmic processes, as a constitutive anthropological dimension of our age (Jörissen, 2014). The concept of (digital) ‘mediality’ has emerged in this context as a response to various developments. One of them is the socio-cultural shift, empirically in evidence over recent years, as a concomitant to the ubiquity of digital technologies. We do not need to look far to note the explosion in ways and means of access to media in the typical household, be it via mobile end devices, networks connecting them, time spent on digital media and platforms right across the socio-demographic spectrum; these unquestionable indicators of the transformation in our media use underline the need for a response from the academic disciplines of social sciences, cultural studies and, indeed, education science. Mediality, as a



concept, frames attempts to note the changes these developments have wrought on aspects of our daily lives, or, put differently, to uncover the links between changes in mediality and changes in lifeworlds. It also signals a redirection of the view taken by theories of media, a more markedly operative perspective seeking to find out ‘what media do when they are doing’, how they co-produce worlds—and increasingly autonomously so, in the case of algorithm-based digital systems—and what changes specific forms of mediality engender in processes that bring meaning into being (Bettinger, 2020; Jäger, 2015).

In line with the generativist approach (Krämer, 2004) which holds that the medium is the message (McLuhan & Fiore, 1967), mediality, in our current world, means that media transcend the neutral, transmissive role the term suggests, and instead “create sense by transferring it. The transferring activity does not leave the transferred elements unchanged since it is carrying out a specific operation of embodiment by giving it a form or by creating a phenomenon” (Balke & Scholz, 2010, p. 40). Taking this view entails the assumption that forms of subjectivation, in our current world, take place through and by media, alongside their more analogue manifestations, and that this type of mediatedness, in the case of digitally networked technologies, is significantly different from other types. Krotz and Hepp (Hepp, 2013; Hepp & Krotz, 2014), for instance, posit the proliferation of mediality observable in our times and referenced in the umbrella term of ‘digitality’ as not amenable to explanation via a logic possessed of universal validity, but rather as rooted in multi-faceted influencing forces that, acting in various arenas of life and emerging via specific entanglements with the diverse socio-cultural conditions they meet, give birth to distinct mediated worlds. We here face the difficulty posed by the fact that these media-shaped forces largely operate in the background. People’s practices with media are mostly routine, habituated acts firmly embedded in our daily lives, acts upon which we do not consciously reflect, which, so to speak, ‘disappear’ even as we execute them (Krämer, 2008, p. 28) and, especially where they engage with digitally networked media, effectively mask their specific workings. Digital mediality, as an interaction of hardware, software and runtime (Passoth, 2017), takes place as an internally coordinated, background process on the basis of thoroughly enacted design choices aiming in many instances to generate a specific user experience and offering a menu of options for relationing. It is in this light that Jörissen (2015, p. 216) observes that, “in the context of the practices of daily life, things and thing-environments represent offers to engage in

subjectivation and specifically offers to become user-subjects (consumers, prosumers, audiences, etc.) in particular ways”. In many cases, it is the occurrence of malfunctions or failures that casts us into conscious awareness of this type of mediatedness; our disrupted experience may hold in our faces the agency of media’s configurations in socio-medial structures, give us a brief glance at their power-shaped quality and lift the veil on the invitation to subjectivation at their core. It is not far from here to the notion of anthropomediality (Engell et al., 2013; Voss, 2010; Voss et al., 2019), which implies a concept of the subject that departs from the existentialism of Sartre, the transcendental philosophy of Kant and the dualistic subject/object distinction of Descartes—all of which posit the subject as an entity with the capacity for reflection on itself—and instead define it as primarily produced by the socio-cultural conditions around it, which in the context of this argumentation means digital mediality. The parallels to new materialism as outlined above are evident, and we accordingly note the existence of research that links mediality to materiality (van den Boomen et al., 2009; Thielmann & Schüttpelz, 2013; Spöhrer & Ochsner, 2017).

One of the current empirical challenges facing any analysis of subjectivation which strives to take appropriate account of mediality—in education science and beyond—is the matter of including digital data in analysis. While connections to artefact analysis readily reveal themselves at this juncture, we would do well not to lose sight of the necessarily selective nature of such a process, which can only ever cover a segment of the terrain. If, for example, we regard datafication as a central feature of digital mediality, we will indeed find ourselves prompted to incorporate large and diverse corpora of existing data, and then to wonder whether and, if so, how the quantitative approach this implies can fit with the primarily qualitative basis of subjectivation research to date. I see great potential merit in a productive dialogue between work on subjectivation and data science as to how each field might support and enrich the other. Further potential leads may stem from innovative work in cultural analysis which, to name an example, uses a variety of methods of visualisation (Manovic, 2020). In addition to this, a synthesis between the analysis of subjectivation and the discipline of critical software studies would appear promising (Jörissen & Verständig, 2017). Taking existing research approaches forward in the spirit outlined here would expand our horizon for comprehending the complexity and the power dynamics underlying processes of the

generation of meaning as entanglements between the social and the digital/medial spaces.

I return now to my observation, made at the beginning of this section, that attempts in the discipline of education science to examine the phenomena of learning, education or socialisation have shown distinct reticence towards engaging theoretically or empirically with current innovations at the point of intersection between subjectivation and media research. A classical, dualistic conception of the subject, drawing on Enlightenment tradition, persists within the discipline. Work that does reference new developments in theories of the subject frequently fails to take account of mediality; discussions of mediality will often omit examination of the subject. An exemplary survey of discourses around theories of learning—very much education science’s home turf—shows them as often markedly psychological in tendency, led, for example, by cognitivist approaches and lacking any reflection on the assumptions undergirding their theories of the subject (Künkler, 2011). There have been moves towards giving greater room to contextual factors, in work, for instance, on situated learning (Lave & Wenger, 1991); this said, the strong push in the last few years towards a focus on ‘competencies’ emphatically suggests an idea of learning as targeted towards the attainment of a specific output and/or the acquisition of ‘skills’ by and pertaining to the individual, with little attention to matters that would be the key concern of a subjectivation-oriented analysis. Theories of learning frequently reduce media to their instrumental capacity, and acknowledgement of their full socio-cultural implications may fall victim to a research preoccupation with what can be measured and quantified. Research into socialisation has also engaged very little with recent work on subjectivation (Grusec & Hastings, 2014; Hurrelmann et al., 2015). This is a field which traditionally pays less regard to the subject than to the individual as a socialised entity, the emergence of a personality and the acquisition of the capacity to take part in societal processes; theories of socialisation tend to assume that such processes of identity formation and personality development are finite, or at least pretty much so, concluding with the attainment of specific stages of development, with active and—in principle—self-determined involvement on the part of the subject (Färber, 2019, p. 81). The increasing awareness in this field of media as variables with relevance to and influence on socialisation has yet, in part, to progress beyond isolationist conceptions of ‘the media’ as distinct socialisation factors alongside with others.

Having identified and mapped these lacunae, I present this book as an attempt to fill in the gaps and cast new light on the complex, multi-layered interrelationships between subjectivation and digital mediality from an education studies perspective. Each chapter approaches a distinct facet of this area of interaction. I hope both to inspire new theoretical innovations in education science and to raise awareness of unbeaten methodological tracks towards research into subjectivation in medial-material configurations.

### 3 OVERVIEW OF CHAPTERS

The chapter by *Sabrina Schenk* explores the nature of the change in subjectivity in the digital context. It begins with analysis of work by Felix Stalder and Karin Knorr Cetina, informed by the social sciences and cultural studies, with the economy of knowledge (Stalder) and the postsocial (Knorr Cetina) as key points of reference. It is on this basis that Schenk identifies the necessity of conceptualising subjectivity in terms of network logics, and proceeds to attempt this endeavour via a comparative survey of three theoretical perspectives that share a critical positioning and an acknowledgement of practices mediated via technical or, put differently, material means. Schenk concludes her chapter by noting the paradoxes and the potential of such conceptualisations for education studies' engagement with ideas of 'networked subjectivity'.

*Valentin Dander and Felicitas Macgilchrist* present an examination of the field of intersection between datafication and civic education, with an emphasis on the analysis of the political subjectivities that emerge in the context of 'digital citizenship' and 'open data'. Working in alignment with critical discourse analysis and taking theories of political subjectivation as their starting point, the authors study various materials associated with 'School of Data', an initiative running workshops, aimed primarily at NGOs, on data, technologies and their status and impact in civil society. Their analysis identifies various forms of political subjectivity and leads them to an assessment of the role of data literacy in project-based educational practices; concluding, Dander and Macgilchrist pinpoint the need for a more explicit turn towards specific data-related practices if the concept of data literacy is to gain more appropriate and comprehensive foundations than have been in place to date.

The approach taken by *Britta Hoffarth* in her chapter draws on theories of media and *Bildung* in its analysis of subjectivation in the exemplary

context of sexist hate speech. Referencing theoretical propositions by Foucault, Butler, Althusser and Adorno, Hoffarth turns a spotlight on the political dimension of performative conceptions of subjectivation. Following the theory of media advanced by Dieter Mersch, she defines mediality as “a fundamental moment of thinking and speaking”, then proceeding to make visible “the specific conditions of becoming a subject—in relation to gender orders—[...] by empirically operationalising the dialectical relationship between self-techniques, invocations/addresses and figurations of knowledge via the concept of addressing”. The conclusions for media education which she draws from her observations on internet violence with sexist motives point to the necessity of including an awareness of power relations in pedagogical thought.

*Viktoria Flasche*’s contribution to the volume illuminates the interrelationship between the software architecture underlying social media platforms and young people’s contemporary media practices. Working from a transactional perspective and drawing on Facebook, Instagram and TikTok as examples, Flasche uncovers the long-term processes of subjectivation in evidence in the entanglement between “the socio-technical structure of the social media platform in question and the individual’s relationship with itself as reflected in multimedia representations of that self”. In so doing, she demonstrates the resistance young people offer to the orders of visibility pushed by social media platforms, noting how they disrupt habitual structures of response via “aesthetic-tentative” practices, and highlights the potential for educative moments that emerges from these disruptions.

In my own chapter, I investigate possibilities for forging methodological links between discourse analysis and biographical research as a foundational basis for examining processes of *Bildung* in a context of digital mediality. Having noted and formulated the reciprocal productivity of these two research directions, and its particular manifestation in relation to the concept of the subject, I propose a methodological framework for analysing processes of *Bildung* as transformations in socio-medial configurations. My intent in so doing is to support a research perspective which seeks to release research on *Bildung* from a sole dependency on verbal biographical articulations and offer instead a conception of *Bildung*’s explicitly hybrid constitution, which in turn suggests the inclusion of digital artefacts in the methodology thus formulated. In this context, I conclude by drawing on extant research considerations around the analysis of

material-discursive practices and exploring the potential for biographical research inherent in this approach.

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## NOTES

1. German quotes translated by Katherine Ebisch-Burton and Patrick Bettinger.

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