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Textbook Production in a Hybrid Age: Contemporary and Historical Perspectives on Producing Textbooks and Digital Educational Media

GEOЯG ECKERT
INSTITUT
Leibniz-Institut für internationale
Schulbuchforschung

EDU|MERES

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There is no education without media. But what do we know about how educational media are made? Or how they shape the knowledge constructed in schools? These questions have been approached from various disciplines, using a range of methods. Individual researchers have, however, rarely looked across to see how other disciplines are engaging with these questions. Also, they have mainly focused on the 'constraints' limiting textbook publishing or ed-tech design. In this paper, we take an explicitly interdisciplinary approach, and suggest a shift in perspective: By exploring the practices of publishers, authors and editors, as well as material-semiotic practices, research can shed new light on the contingencies of how 'what counts as worth knowing' is selected. This position paper thus provides an overview of current scholarship on four aspects of production practices (1. Authors and Authorship, 2. State and Interest Groups, 3. Political Economy and Business Models, 4. Technological and Media Change). We suggest two directions for future scholarship: First, we highlight the need for more international, comparative and praxis-orientated empirical research on textbook production and ed-tech design. Second, we propose that the debates on economic models be placed in their historical contexts and subjected to critical scrutiny. In order to use our research object itself (ed-tech) to open a dialogue across disciplines, we encourage readers to open the article in their browsers and comment on the paper using the non-profit hypothes.is annotation tool (https://hypothes.is/).

There is no teaching without media. This insight has inspired recent research on how educational media are used in schools. How educational media are produced, however, and how they shape the knowledge constructed in schools, has been the subject of only sporadic studies thus far, and with rather disparate methodological approaches. Researchers addressing the production of textbooks and other educational media for schools have mostly published their findings within discipline-specific channels, rendering them elusive to the rest of the academy and thus hindering interdisciplinary exchange. Given the current upsurge of interest in educational media, under the flag of 'edtech' (educational technology), alongside the heated debates over digital media in to-

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day's hybrid schools, it seems pressing to generate and sustain a broad dialogue over how these media are – and have been – produced.

In December 2015, the authors of this dossier took the first step towards initiating such a dialogue. A conference, *Knowledge Production in a Hybrid Age. Contemporary and Historical Perspectives on Producing Textbooks and Digital Media,* funded by the German Research Foundation (DFG), brought together researchers from Europe, the USA, Latin America and Asia from the disciplines of history, geography, education, media studies and religious studies, to discuss how textbook production is engaging with new challenges and dynamics in the digital world. The geographically diverse makeup of the group enabled us to discuss a broad range of factors which play a role in producing textbooks and other educational media beyond specific national, societal or cultural 'settings'. It also provided us with the opportunity to explore different conceptual and methodological approaches; in other words, to inquire as to whether and how researchers' approaches to textbook production might be entangled with specific cultural traditions of knowledge production. With this dossier, we invite the broader community of scholars and practitioners to continue the debate with us.

A wealth of studies is available that primarily examine external factors of textbook production such as: What requirements are laid down by the state? What is the structure of the textbook market? How is textbook production affected by technical constraints? Here, we suggest shifting the perspective towards publishers, authors, editors and material-semiotic practices. This kind of micro-perspective on production processes can shed new light on the contingencies of decision-making and of selecting what counts as worth knowing. On the theoretical and methodological level, this perspective opens up a variety of approaches. With discourse analysis, for instance, publishing houses can be conceptualised as organisations of discourse production, allowing research to focus on how human and non-human actors are implicated in selecting and prioritising certain forms of knowledge.[1] Approaches from the history of knowledge focus primarily on the circulation of knowledge: they explore how production practices draw on actors and entities beyond, yet connected to, the specific writing and editing processes. In particular,

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[1] Felicitas Macgilchrist, "Schulbuchverlage als Organisationen der Diskursproduktion: Eine ethnographische Perspektive" [Educational publishers as organisations of discourse production: An ethnographic perspective], in: *Zeitschrift für Soziologie der Erziehung und Sozialisation* 31, 3 (2011), 248–263.

micro-historical approaches seek to go beyond surface-level case studies in order to analyse the phenomena that link historical actors and networks, and the interdependent processes of selection and decision-making as textbooks and textbook knowledge are produced. Since these approaches focus on production *practices*, they can be categorised as broadly praxeological in nature.

This dossier addresses four aspects of production practice: 1. Authors and Authorship, 2. State and Interest Groups, 3. Political Economy and Business Models and 4. Technological and Media Change. Although these dimensions are closely intertwined, both historically as well as in current practice, this four-fold analytical distinction serves, we hope, to guide the reader through this paper. In view of the current 'digital turn' inherent in a multi- and transmedial 'hybrid age', the paper systematically explores how media/technological change has unfolded since the nineteenth century, and how this change has played out in situated production practices. Our perspective covers not only the classic medium of the printed textbook but also other educational media for schools (e.g. educational film, teaching machines, online worksheets, internet-based hypertexts, digital games, tablets and apps, and interactive, multimedia electronic textbooks). We are interested in the various historical and contemporary forms of these media.

1 Author and Authorship

With his question, 'What is an author?', Foucault asks how (modern) society discursively constitutes this culturally prominent character, and how the discursive 'author function' connected with it – yet which also moves beyond it – is fulfilled:

> Beckett nicely formulates (…) "What does it matter who is speaking", someone said, "what does it matter who is speaking." In this indifference appears one of the fundamental ethical principles of contemporary writing (*écriture*). I say "ethical" because this indifference is really not a trait characterizing the manner in which one speaks and writes but, rather, a kind of immanent rule, taken up over and over again, never fully applied, not designating writing as something completed, but dominating it as a practice. (…) First, we need to clarify briefly the problems arising from the use of the author's name. What is an author's name? How does it function? (…) The author's name manifests the appearance of a certain discursive set and indicates the status of this discourse within a society and a culture (…) As a result, we could say that in a civilization like our own there are a certain number of

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discourses endowed with the "author function" while others are deprived of it. (…) The author function is therefore characteristic of certain discourses within a society.[2]

Our working hypothesis is that for the authors of textbooks and other educational media, the 'author function' differs as a rule from that of other authorial figures within a society and from the role of the author as based on the European model since the eighteenth century. While a society's writers of *belles lettres* generally understand authorship in the legal sense of 'intellectual property' and the idea of original work that it implies, for authors of textbooks this aspect tends to take a back seat, for textbooks and their contents are considered not so much the original intellectual product of their author(s), but rather as the portrayal and presentation of knowledge deemed consolidated and relevant by society as a whole. Textbooks give a voice not so much to their author(s) as to the owner of the intellectual property they contain; the textbook's discourse is spoken by an unknown entity, sometimes an institution, which is more-or-less authorised by society. Issues of originality are not entirely suspended but priority shifts to pedagogical issues, to the presentation style, and how the book might appeal to readers. This 'empty-voicedness' might also explain the lack of research interest in the role played by textbook authors in creating textbooks. Their role in the production of a societal discourse emerging from an interplay of diverse networks, however, remains open to debate.

An overarching empirical question can thus be formulated: How – precisely – does the authorship of textbooks differ from that of other authorial figures within a society? With regard to authors, authorship and the author function, we could examine the specific constitution of the author function in the production of textbook discourses and corresponding contexts as opposed to the societal figure of the author. While the author function is intertwined in the discursive web of intertextuality, textbook authors also operate within diverse and far-reaching networks of production and regulation as well as within the framework of specific discourse traditions that crystallise, for instance, as textbook series or in multiple editions. Much previous research has addressed the different (external) constraints or boundaries to which the unfolding of (individual) authorship may be subject, while emerging studies have attended to the networks within which the author function unfolds.

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[2] Foucault, Michel. "What is an Author", in: idem, Aesthetics, Method, and Epistemology. Essential Works of Foucault 1954-1984, Volume Two, James D. Faubion (Ed.), New York: Penguin Press, 1998, 206–222.

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Recent research has examined, for instance, the economic dependencies and constraints to which authors are subject within the process of textbook production alongside the predominantly political, ideological and institutionalised influence of the state,[3] taking, inter alia, a neo-institutionalist perspective on the political and economic conditions.[4] De Baets considers textbook authors on a rather abstract level to be 'mediators' between academia, i.e. historiography, and society.[5]

Other studies have focused on the relationship between the authors and the publishing houses[6] and, more recently, editors and layouters.[7] Baquès describes, with implicit reference to Bourdieu's theoretical approach of different forms of economical, cultural, social and symbolic capital, the structural relationship between publishers (economic capital) and authors (cultural capital), and how they evolved or were subject to historical change in France in the second half of the twentieth century. The results of the study show that the author function (and how it is actually practised) has increasingly shifted from the authors to the publishers, editors and layouters.[8]

The relationship between authors and publishers, in particular, has been the subject of diverse historical case studies. Keiderling, for example, explores the historical turn in the publisher-author relationship in the nineteenth century, pointing to processes of professionalisation and specialisation on the part of textbook authors.[9] Müller analyses textbook authors and their political attitudes in their negotiations with publishing houses. He demonstrates, for example, the extent to which authors and their networks, as capable actors of textbook production, make use of their own discursive resources and room for manoever.[10] More recently, first ethnographic studies have described the inter-

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[3] See for example Teruhisa Horio, *Educational Thought and Ideology in Modern Japan: State Authority and Intellectual Freedom*, Tokyo: University of Tokyo Press, 1988; Joachim Rohlfes, "Wie abhängig sind Schulbuchautoren?", in: *Geschichte in Wissenschaft und Unterricht* 43 (1992), 235–237.

[4] Ryota Nishino, "The Political Economy of the Textbook in Japan, with Particular Focus on Middle-School History Textbooks, ca. 1945-1995", in: *Internationale Schulbuchforschung* 30 (2008), 487–514.

[5] Antoon De Baets, "Profile of the History Textbook Author as a Mediator between Historiography and Society", in: *Internationale Schulbuchforschung* 16 (1994), 514–534.

[6] Elisabeth Rothmund, "Manuels, auteurs et éditeurs dans le premières décennies de l'enseignement scolaire de l'allemand", in: *Histoire de l'Education* 106 (2005), 15–40.

[7] Marie-Christine Baquès, "L'évolution des manuels d'histoire du lycée: Des années 1960 aux manuels actuels", in: *Histoire de l'Education* 114 (2007), 121–149.

[8] Ibid.

[9] Thomas Keiderling, "Der Schulbuchverleger und sein Autor: Zu Spezialisierungs- und Professionalisierungstendenzen im 19. und frühen 20. Jahrhundert", in: Heinz Werner Wollersheim, Hans-Martin Moderow and Cathrin Friedrich (Eds.), *Die Rolle von Schulbüchern für Identifikationsprozesse in historischer Perspektive*, Leipzig: Leipziger Universitätsverlag, 2002, 87–95.

[10] Lars Müller, "Schulbücher zwischen Verlagsarchiv und Erinnerungsort: Potentiale der Archivarbeit für die Schulbuchforschung", in: Sascha Trültzsch-Wijen, Alessandro Barberi and Thomas Ballhausen (Eds.), *Geschichte(n),*

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play among authors, editors and layouters during the process of textbook production. These studies unveil from a praxological perspective the complexity and the contingent relationships between processes of decision-making and selection. Macgilchrist employs an ethnographic discourse analysis to explore the diverse and complex processes via which textbook knowledge is negotiated in the textbook publishers as the 'organisation of discourse production'. In doing so, she places – as does Binnenkade – the praxeological focus on the interdependencies and effects within the processes of negotiation and production of textbook knowledge. These practice-theoretical studies thus untangle how authors are neither independent from other actors nor predetermined by other societal or institutional constraints within the processes of textbook, knowledge and discourse production. Rather, they carry out a function at the interplay of diverse networks.[11]

Other studies concentrate on a fundamental stock-taking, on the academic and disciplinary orientation of and influence on textbook authors as well as – from a prosopographical approach – their social and geographical origins.[12] While Adick connects, for instance, a basic stock-taking, based on content analysis, of textbooks for the subject of education science with a focus on the authors, thus detailing the discursive author function of both prominent and less prominent authors,[13] more recent studies investigate textbook authors' self-image for instance through qualitative biographical interviews[14] as well as the strategic and discursive configurations which are involved in textbook au-

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Repräsentationen, Fiktionen: Medienarchive als Gedächtnis- und Erinnerungsorte, Köln: Herbert von Halem Verlag 2016, 176–188.

[11] Alexandra Binnenkade, *Frictions in the nexus: Economics of textbook production*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 3rd 2015; Ibid., "Doing memory: Teaching as a discursive node", in: *Journal of Educational Media, Memory, and Society* 7, 2 (2015), 29–43; Macgilchrist, *Schulbuchverlage als Organisationen der Diskursproduktion*; Ibid., *Textbook Production: The entangled practices of developing curricular materials for schools*, Habilitationsschrift, Braunschweig: Technische Universität Braunschweig, 2014.

[12] Christian Amalvi, *Répertoire des auteurs des manuels scolaires et de livres de vulgarisation historique de langue française. De 1660 à 1960*, Paris: La Boutique de l'histoire, 2001.

[13] Christel Adick, "Schulbuchautoren für den Pädagogikunterricht und ihre Werke", in: *Der Pädagogikunterricht* 4 (1994), 23–46.

[14] Rūta Kazlauskaitė-Gürbüz, *The role of textbook authors in the production of school historical knowledge in Lithuania*, paper given at the GEI conference "Knowledge production in a hybrid age", Braunschweig, December 3rd 2015.

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thors' agency.[15] Perlmutter also draws on qualitative studies and author interviews to analyse how textbook author's perspectives and visions find their way into textbooks.[16]

Against this background, this dossier proposes a new direction and tentative shift of perspective. The networks, structures and institutions surrounding textbook production can be seen as (negative) constraints on, or conditioning of, authors, i.e. restraining their individual freedom and their autonomy. Instead, we wish to highlight those recent studies which see the networks, connections, and contexts as productive and constitutive opportunities for a specific emergence of authorship in relation to textbooks. The key challenge we now see lies in embracing this shift of perspective. Future research could – we suggest – attend more to the *practices* of enacting authorship, asking how the author function unfolds under the complex conditions of textbook production. This also involves a study of possible shifts between the figure of conventional authorship and the discursive author function in relation to textbook knowledge. And in order to examine the specific conditions of the discursive constitution and practice of the author function within the process of textbook production, the following sections take a closer look at further specific actors, societal agents, economies and media involved in the process.

2 State and Interest Groups

As described above, research has identified a variety of actors involved in the negotiation of textbook knowledge. The question as to 'Who defines relevant knowledge?'[17] points to key players who directly or indirectly influence the process of textbook writing and educational media design, as do the parallel questions 'What knowledge is of most worth?' and 'Whose knowledge is of most worth?'[18] Education and textbook knowledge are seen as particularly controversial. Spring argues that politics of education 'is driven by a complex interrelationship between politicians, private foundations and think tanks, teachers' unions, special-interest groups, educational politicians, school administrators,

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[15] Christine Ott, *Scopes of innovation in German textbook production*, paper given at the GEI conference "Knowledge production in a hybrid age", Braunschweig, December 3rd 2015.

[16] David D. Perlmutter, "Manufacturing Visions of Society and History in Textbooks", in: *Journal of Communication* 47, 3 (1997), 68–81.

[17] Simone Lässig, "Wer definiert relevantes Wissen? Schulbücher und ihr gesellschaftlicher Kontext", in: Eckhardt Fuchs, Joachim Kahlert and Uwe Sandfuchs (Eds.), *Schulbuch konkret: Kontexte - Produktion – Unterricht*, Bad Heilbrunn: Klinkhardt, 2010, 199–215.

[18] Michael W. Apple and Linda K. Christina-Smith, "The Politics of the Textbook", in: Ibid. (Eds.), *The Politics of the Textbook*, London: Routedge, 1991, 1–21.

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boards of education, courts, and the knowledge industry.'[19] Drawing on this, new research questions can evolve from the textbook production perspective: What is the role played by actors who participate – to a certain extent, in the public eye – in debates on educational contents and how are they connected to publishers, editors and authors? Have these actors held significance in the eyes of those producing textbooks? Does this perspective shed light on new actors emerging with digital technologies? This path of inquiry can inspire new research on practices and persons in the negotiation of relevant knowledge.

The state is traditionally considered a significant player. The claim that 'the state' dictates the framework for the writing of textbooks tends to conjure up something of a 'black box' image. Depending on the country and era in question, the state organises the school system, releases memos and curricula, or may even carry responsibility for the production and purchasing of textbooks. The textbook production perspective can break up this 'black box', unveiling a variety of influential actors and practices: Federal governments approving broad guidelines; regional governments issuing more detailed instructions; and local educational authorities, who organise educational matters at the local level; curricula and authorisation committees whose members and power are legally regulated; ministries of education (bearing in mind that other ministries are also involved in the education sector)[20] and also institutes or organisations funded directly by the state, or at least with public monies, such as the Institute of National Remembrance in Poland.[21] The state thus needs to be placed in proportion with other interest groups, rather than being hypostatised as a superior authority with the power to regulate and dictate.[22] This perspective points to various, sometimes contradictory, aspects of 'state' involvement in the education sector and its relevance for publishing houses. It also allows us to imagine the 'state' and the 'publisher' not as opposites but with multiple connections, such as the work of textbook authors in curriculum development committees.[23]

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[19] Joel H. Spring, *Conflicts of Interest: The Politics of American Education*, New York: Longman 1993.

[20] In England, for example, the Colonial Office attempted to interfere in the writing of textbooks, and in many other countries, such as in Germany, the Federal Ministry for Economic Cooperation and Development (BMZ) has played an active role within the education sector.

[21] Sylvia Bobryk, *Dominant actors within history textbook development in post-communist Poland*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 3rd 2015.

[22] Kishorkumar G. Darak, *Vanishing boundaries: Regulation to dictate by state textbook production*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 3rd 2015.

[23] Lars Müller, *Latitude for Textbook Authors 1950-1990: A German – UK comparative perspective*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 3rd 2015.

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Alongside the state, several bodies exert influence on educational contents, such as researchers, teachers' unions or trade unions, which comment on developments and engage in lobbying. Depending on the country in question and the time available, these actors are sometimes also formally included in the negotiation of relevant knowledge. Religious communities also play a significant role; in some German federal states, the latter even have a deciding voice for religious education, for instance in matters of textbook approval and teacher appointments, or they participate in writing the textbook itself.[24]

A variety of actors work on an international level to advance topics such as Holocaust education, human rights education or the environmental movement, and these subject areas are becoming more standardised across the world.[25] How this has been possible given the framework of textbook production remains an open research question. The question can, however, be broken down in reference to specific actors, such as Oxfam, which as a lobbyist has sought direct contact with publishing houses and textbook authors.[26] Other actors have been recognised by publishing houses as reliable sources of information.[27] National minorities have often also attempted to increase their influence via work on textbooks.[28]

Transnational actors are also active: UNESCO is involved in textbook work on a worldwide scale.[29] While UNESCO *Recommendations* are most instructive for research,[30] from the point of view of textbook production, the key question is their signif-

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[24] Christina Woestemeyer, *Production of religion-related textbooks in Germany: Players – politics – perspectives*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 3rd 2015.

[25] Patricia Bromley, John W. Meyer and Francisco O. Ramirez, "The Worldwide Spread of Environmental Discourse in Social Studies, History, and Civics Textbooks, 1970–2008", in: *Comparative Education Review* 55, 4 (2011), 517–545; Ibid., "Human Rights in Social Science Textbooks: Cross-national Analyses, 1970–2008", in: *Sociology of Education* 83, 2 (2010), 111–134; Felicitas Macgilchrist and Barbara Christophe, "Translating globalization theories into educational research: Thoughts on recent shifts in Holocaust education", in: *Discourse: Studies in the Cultural Politics of Education* 32, 1 (2011), 145–158.

[26] Donald Geoffrey Harrison, *Oxfam and the Rise of Development Education in England from 1959 to 1979*, London: Institute of Education, 2008.

[27] The Imperial Institute in London, for example, did so in matters pertaining to the ,Empire', cf. John M. MacKenzie, "The Imperial Institute", in: *The Round Table: The Commonwealth Journal of international Affairs* 302 (1987), 246–253.

[28] In England, for instance, the League of Coloured People or the Black and Asian Studies Association have been actively involved. Marika Sherwood, "Miseducation and Racism", in: *Ethnicity and Race in a Changing World. A Review Journal*, 1, 1 (2009), 40–47. In Germany, the Central Council of Jews in Germany (*Zentralrat der Juden*) has initiated contact with publishers of education media. Further examples: Macgilchrist, *Schulbuchverlage als Organisationen der Diskursproduktion*, 253.

[29] Romain Faure, *Netzwerke der Kulturdiplomatie. Die international Schulbuchrevision in Europa, 1945-1989*, Berlin: De Gruyter, 2015.

[30] Kaisa Savolainen, *Education as a Means to World Peace. The Case of the 1974 UNESCO Recommendation*, Jyäsklä, 2010.

icance for authors, given that UNESCO does not actually have any direct influence on the education systems of its member countries. Similar questions arise with regard to bi- and multinational textbook commissions or textbook negotiations. It is clear that these have constituted forums for discussion and communication for politicians, academics and educationists; however, it is unclear whether and how these actors have also been involved in writing textbooks.[31] Textbooks or other teaching materials that have evolved from such forums and which have affected the relevant textbook markets in the form of knowledge transfer (either on learning theories or subject-specific content) or in the form of political or economic interference in a free market, constitute special cases here.[32]

NGOs have also become active in the aftermath of political change. Western NGOs, for instance, have supported the transition from a state textbook system to a free textbook market in Eastern Europe since the 1990s. In Bosnia and Herzegovina both national and international entities have developed guidelines for textbook production.[33] Equally, textbook markets of the 'Third World' or 'developing countries' have been the targets of interventions by NGOs. The question as to how these external intervention processes have affected national publishing houses and authors can be relevant for a number of different regions and eras. Historical projects can provide insights into such cross-boundary processes. Roldán Vera has demonstrated in the context of various countries of nineteenth-century Latin America that multiple entities were involved in transforming and adapting English books, and that this was not a case of simple knowledge transfer. These books can therefore not be considered the result of one author or editor, but rather the product of numerous interests of the many individuals and organisations involved in the production process.[34]

Textbook research has also focused on inter-state conflicts over textbooks. In 2014, for instance, the Turkish foreign office criticised a caricature in a German textbook that

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[31] For an overview of the various Joint Textbook Projects see Karina V. Korostelina and Simone Lässig, *History Education and Post-Conflict Reconciliation*, London: Routledge, 2013.

[32] Particularly interesting examples include the Franco-German textbook or the planned German-Polish History Textbook. Funding OER with public money can also be seen as (political) interference in a free, commercial textbook market, warranting a response by textbook publishers.

[33] Heike Karge and Katarina Batarilo, "Guidelines Guiding History Textbook Production? Norms and Practices of History Textbook Policy in Bosnia and Hercegovina", in: Augusta Dimou (Ed.), *Transition' and the Politics of History Education in Southeastern Europe*, Göttingen: V&R unipress, 2009, 307–356.

[34] Eugenia Roldán Vera, "Useful Knowledge for Export", in: Marina Frasca-Spada and Nicholas Jardine (Eds.), *Books and the sciences in History*, Cambridge: Cambridge Univ. Press, 2000, 338–358.

was seen as insulting to President Tayyip Erdogan and to people of Turkish origin living in Germany. The Turkish Foreign Office demanded that the caricature be removed and even discussed the matter with the German ambassador.[35] Usually, such disputes are subject to intensive debate for a short period of time and are then quickly forgotten by the news media, so they may no longer be of relevance to the publisher when it comes to preparing the next edition of the book. It is equally unclear whether such issues are pursued in the long term by lobbyists or those directly involved in the conflict. While a textbook analysis provides insights as to which publicly criticised topics have been ultimately included in the book, the production perspective can shed light on how the activities of textbook authors and publishers are perceived (or on those who do not publicly seek influence). This brings us to the question of practices and how actors are involved. Are changes made because critique is seen as valid, because discussion in the public sphere is best avoided due to the negative effect it might have on sales figures, or from a pragmatic point of view insofar as the changes demanded appear relatively insignificant in comparison to the time and effort involved in opposing the demands?[36] Which stage of textbook production is subject to interference by external actors? Do they interfere from an external position or are they invited to participate by the publishers? Which roles are attributed to the various parties? To date there is very little systematic research on these questions. Ravitch has argued that an insider's perspective can be very instructive, e.g. on how publishing houses deal with pressure from social groups. She shows how publishers in the USA established a system of censorship which aimed at first to rid textbooks of racist or sexist language, but which has been vastly expanded over the years. Self-censorship plays an important role in enforcing the guidelines.[37] Simple explanations such as the control function of the state can thus be placed in proportion or indeed dissolved, shifting the focus to the complexity and contingency of textbook production processes.

Comparative perspectives provide instructive approaches to analysing production practices and the connections between the publisher and interest groups. In Germany,

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[35] http://www.faz.net/aktuell/politik/tuerkei-kritisiert-erdogan-karikatur-in-deutschem-schulbuch-13247171.html#/elections, accessed 17 December 2012.

[36] For details of such a case see Macgilchrist, *Schulbuchverlage als Organisatoren der Diskursproduktion*, 253.

[37] Diane Ravitch, *The Language Police: How Pressure Groups Restrict What Students Learn*, New York: Knopf, 2003.

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textbook approval has been located between the poles of censorship and quality control, with the role of the state being increasingly rolled back, as an increasing number of states relinquish their right/duty to officially approve textbooks.[38] Beyond these extreme positions, however, questions arise: How do approval systems differ from country to country; how do they differ in different periods of time; how do they differ between various types of educational media – and what has this meant in each case for the production of textbook knowledge?[39] Similarly, an analysis of German curricula and English examination boards, for instance, can inquire as to whether different actors and instruments have had a structural or canonising effect on textbook production or the content of new digital media.

3 Political economy and business models

As Swiss education historian Pierre Caspard has put it, education 'always incurs costs; the question is who ultimately pays them as a result of which re-allocation of said costs and who thus – as money is always also a matter of power – controls school education'.[40] Studies on the economics of educational media production must therefore focus on the economically quantifiable societal costs as well as on the debates pertaining to various economic models connected to textbook production and reflect on their effects on school education, also in terms of the objectives laid down by the actors involved. In this context, research on the economic dimension of textbook production has inquired into the macroeconomic (politico-economic) and the microeconomic processes of intellectual and material production as well as sales figures and the availability of the materials to teachers and pupils. Here, the macro-level decision as to whether textbook production costs should be communised or privatised constitutes a key factor in debates

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[38] For an overview see: Georg Stöber, "Schulbuchzulassung in Deutschland: Grundlagen, Verfahrensweisen und Diskussionen", in: *Eckert.Beiträge* 3 (2010); Felicitas Macgilchrist, "Bildungsmedienverlage: Zur Ökonomisierung in der Schulbuchproduktion", in: *Die Deutsche Schule* 1 (2015), 49–61.

[39] Stanislaw Roszak, *Between dominance and democracy in the selection and content of textbooks in Poland*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 3rd 2015.

[40] Quotation translated from German: Pierre Caspard, "Reflektierende Spiegel? Bausteine zu einer vergleichenden Betrachtung der unentgeltlichen und entkonfessionalisierten Pflichtschule in Frankreich und der Schweiz", in: Lucien Criblez and Carlo Jenzer, (Eds.), *Eine Schule für die Demokratie: Zur Entwicklung der Volksschule in der Schweiz im 19. Jahrhundert*, Bern: Peter Lang, 1999, 434–435.

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surrounding the self-image of textbook production and the organisation processes that arise from it.[41]

At the microeconomic level, studies focus on the costs of work and materials as incurred by authors, evaluators, editors, marketing and sales, as well as expenditure for copyright permissions, graphic design and printing. These costs depend on the duration of the production cycle, particularly the print run and the textbook lifetime. For publishing houses on the free market, and generally private companies or publishers specialising in textbook production, possible risks include competition from state organisations.[42]

Since the early modern period, in Europe the economic organisation of textbook production has been essentially based on the awarding of privileges, which determined production in several states until the mid-nineteenth century. Institutions which had defined the organisation of education since the Middle Ages (primarily religious communities) held a stable economic and intellectual monopoly over the sector. During the 'saddle period' between 1750 and 1850, these privileges were heavily criticised in many countries and abolished in favour of a liberalisation of the textbook market. At the same time there were demands for new knowledge about the economic potential of liberal societies, which in the eyes of political and economic protagonists within such societies could only be produced on the basis of intellectual and economic competition, and as a critique of a monopoly that would unnecessarily raise the price of textbooks.[43] In the course of the nineteenth century, an increasingly sophisticated system of publishing houses evolved, transferring specialist knowledge to the textbook section of the business or setting up as publishers solely of textbooks. Different types of enterprise and areas of specialisation pursued diverse integration strategies. New findings within academic research repeatedly inspired new publishing companies, which in several coun-

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[41] Michael W. Apple, "The political economy of textbook publishing", in: Suzanne de Castells (Ed.), *Language, authority and criticism: readings in the school textbook*, London: Falmer Press, 1989, 155–169; Thomas Höhne, "Technologisierung von Bildungsmedien", in: *Die Deutsche Schule. Zeitschrift für Erziehungswissenschaft, Bildungspolitik und pädagogische Praxis* 1, 107 (2015), 8–19; Thomas Höhne "Educational media, reproduction and technologisation", in: Eckhardt Fuchs and Annekatrin Bock (Eds.), *Palgrave Handbook of Textbook Studies,* Basingstoke: Palgrave forthcoming; Christoph Bläsi, "Educational Publishers and Educational Publishing", in: Eckhardt Fuchs and Annekatrin Bock (Eds.), *Palgrave Handbook of Textbook Studies,* Basingstoke: Palgrave forthcoming.

[42] Christoph Bläsi, *The know-how of schoolbook publishers to leverage Open Educational Resources*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 3rd 2015.

[43] Reinhard Wittmann, *Wissen für die Zukunft. 150 Jahre Oldenbourg, Verlag*, München: Oldenbourg 2008.

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tries employed particularly committed teachers in key positions. As noted above, the individuals and institutions involved in academic, methodological, artistic and technical advances within textbook production, as well as their motives, should be at the forefront of future research. Here, we would add that future research could also consider these individuals and institutions in their guise as economic players.

In market societies, textbook publishers held a dual function as producers of educational commodities in line with the Enlightenment tradition and as entrepreneurs; this latter role, however, required them to work profitably. This self-image shaped some family businesses, yet also – increasingly over the course of the twentieth century – was adopted by managers of textbook publishers. The latter repeatedly protested against their public image as primarily 'producers', 'capitalists' and profit-seeking entrepreneurs, who secured profits via the acquisition of public commissions.[44] Managing the conflicting priorities of cutting costs and, at the same time, searching for and introducing scholarly advances and new media technologies constituted the main prerequisite for the economic success of a publishing company. This aspect too should therefore be at the focus of future studies, with a view to the continuities and changes in aspects such as qualifications and the pedagogical, legal and managerial power relations between the executives of textbook publishers.[45]

Publishers specialising in textbooks were primarily faced with the challenge of a *broken market*, i.e. not being able to sell their products directly to their clients in the form of schoolchildren or parents, but rather required to conform to the demands of policy and teachers. The most important task was to convince teachers of the quality and reasonable price of the textbooks[46] or to incorporate survey results into textbook production. Above all, the political governance of textbook production through formal approval procedures was repeatedly criticised by textbook publishers as hindering their ability to predict potential economic profitability, an aspect that could be dramatically improved by including state actors in planning processes from an early stage.

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[44] Carl-August Schröder, "Schulbuchverleger und Bildungsreform", in: *Blickpunkt Schulbuch. Zeitschrift für moderne Unterrichtsmedien* 14 (1972), 48.

[45] Bläsi, *The know-how of schoolbook publishers.*

[46] Michael G. Watt, "Research on the Textbook Publishing Industry in the United States of America", in: *IARTEM e-Journal* 1, 1 (2007).

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Since the nineteenth century, textbook publishers have sought to minimise the risks associated with the broken market. They have achieved client loyalty and a successful transfer of know-how by associating other lines of business with textbook production, such as children's books or specialist academic publishers. They have also sought to anchor academic journals within their own product ranges and to thus access useful information and academic authority for teachers. Since the beginning of the twentieth century, the most successful publishing houses have been those which were able to establish academically and pedagogically qualified specialist editors and thus to organise the manuscript development independently, rather than leaving the process to teachers with a penchant for publishing.[47]

The diverse developments within publishing companies, both in a vertical and horizontal direction, have played a key part in this regard and, since the 1970s, have taken on new dimensions. In particular, thanks to the mergers of traditional textbook publishers with global media enterprises, global players have been formed in the field of educational media production.[48]

As components of publishing houses with wider product ranges or as specialist producers of teaching materials, textbook publishing houses generally evolved in the eighteenth century as companies that combined the intellectual aspects of book production with material concerns. Both aspects were merged within one company, and could foster mutual stability. Studies on 'developing countries' have demonstrated that material production (printing) established the economic conditions to produce the company's own textbooks and thus the opportunity to operate free of the dominant colonial powers' textbook publishers.[49]

The production of intellectual content and of material products was combined for a long time, as publishing house and printers worked in union. This was of advantage on many levels. By the 'second' globalisation since the 1970s, however, most companies

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[47] Keiderling, *Der Schulbuchverleger und sein Autor.*

[48] Bläsi, *The know-how of schoolbook publishers*; Myriam Bahuaud, "Les éditeurs scolaires traditionnels à la recherche d'un modele économique", in: Éric Bruillard (Ed.), *Manuels scolaires, regards croisés*, Caen: CRDP de Basse Normandie, 2005, 55–77; Gilbert T. Sewell, "Textbook Publishing", in: *The Phi Delta Kappan* 86 (2005), 498–502; Watt, *Research on the Textbook Publishing Industry*; Nishino, *The political economy of the textbook*; Macgilchrist, *Bildungsmedienverlage.*

[49] Savaranan Gopinathan, "And Shall the Twain Meet? Public and Private Textboook Publishing in the Developing World", in: Joseph P. Farrell and Stephen P. Heymann (Eds.), *Textbooks in the Developing World: Economic and Educational Choices*, Washington: World Bank, 1989, 61–71.

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specialising in textbooks separated from their printing departments (manufacturers), which marked the beginning of a process of economic disintegration and a reversion to the specialised core business of *organising* textbook production. This went hand-in-hand with a restructuring of editorial and design departments, which were no longer legally required to be part of the company itself; editing and graphic design were increasingly outsourced to freelancers. At the same time, numerous specialist textbook publishers in Europe and North America were taken over by international media corporations.[50] These developments have spurred research on the reaction of the education sector to changes within academia and media technology. As Nishino has emphasised, one research question asks whether current educational media are more strongly implicated than they were in the past by economic constraints and technological change rather than being led by new findings within academic research and new learning theories or teaching methods.[51]

As private companies, textbook publishers saw the long-winded and opaque state approval procedures, together with the influence exerted by the state on textbook pricing, as primary institutional barriers for their economic development. They present significant obstacles to economic calculation.[52] The principle of free access to educational materials (*Lehrmittelfreiheit*) in Germany constituted a further state-induced barrier for the economic development of textbook publishers: In certain federal states, pupils did not own their textbooks but were given the possibility to borrow them, a situation considered particularly dramatic in a federal state system with highly fragmented markets. The ambivalence of this argument against state influences, however, becomes particularly salient whenever there is a call for a state-organised framework with the objective of eliminating competition and providing a safe cost calculation within established publishers, thus regulating the market by blocking newcomers.[53]

In times of intense societal change, such as in the aftermath of the First World War or 1945, traditional German publishing houses of educational media were accused of being incapable of providing the necessary knowledge for a democratic, socially and

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[50] Glenn Rollans and Michel De la Chenelière, *Study of the Canadian K 1 to 12 Educational Bok Publishing Sector*, Ottawa: Government of Canada Publications, 2010.
[51] Nishino, *The Political Economy of the Textbook.*
[52] Rollans and De la Chenelière, *Study of the Canadian K 1 to 12.*
[53] Nishino, *The Political Economy of the Textbook.*

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culturally open society in an efficient manner. Additionally, costs had been a key issue in the founding of state publishing houses since the nineteenth century. This discussion was rekindled when the principle of free educational media (*Lehrmittelfreiheit*) was introduced. The education policy-makers responsible argued that complete cost control on the part of the state, achieved via state-owned educational media institutions and publishers, would be in the interests of taxpayers. Representatives of private publishing houses contradicted this claim with the same arguments used in the nineteenth century to protest against the textbook monopoly of religious communities or on the part of the state: Modern knowledge societies require pluralism in education, something which only an open textbook market can provide. The latter is even better placed than a state-based organisation to produce teaching materials at low costs. Ultimately, this – along with a shift towards club goods available only to the companies involved – was also a response to the challenges posed by Open Education Resources (OER).

As early as the nineteenth century, private textbook publishers, unlike national education policy-makers, had been compelled to develop forms of cooperation with publishers abroad regarding copyrights, adoptions and translations.[54] At the same time, they made part of the knowledge necessary for production available in the form of club goods. To this end they formed national or international interest groups to support lobbying, research with private and state research facilities, and joint ventures with publishers from states with either no or only state-based textbook publishers. This comparative perspective on transnational knowledge production and internationalisation strategies of European, American and Asian textbook publishers opens up promising avenues for future research.[55]

At the same time, this overarching perspective raises the question as to whether educational media of the future should be produced solely in the form of OER, a key challenge for the shaping of future economies within the production of school-related educational media. How do economic actors react to the challenges presented by current media change? What part is played by the state in the financing of OER? How do publish-

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[54] Peter H. Neumann, "Publishing for Schools in France, the Federal Republic of Germany, the United Kingdom, and the United States", in: Joseph Farrrell and Stephen P. Heymann (Eds.), *Textbooks in the Developing World: Economic and Educational Choices*, Washington: World Bank, 1989, 115–129.

[55] Xiaohai Wang, *Production of textbooks in Chinese higher education*, paper given at the GEI conference "Knowledge production in a hybrid age", Braunschweig, 3rd December 2015; Philip G. Altbach, Amado A. Arboleda and Savaranan Gopinathan (Eds.), *Publishing in the Third World*, Portsmouth: Heinemann, 1985.

ers deal with the wealth of free material available? How does the current media change destabilise norms of textbook production when, for instance, an OER textbook is financed by 'crowdfunding'? To what extent are such 'alternative' economies a project of the global elite and can they become established in the long term? These and similar questions have led to a broad international discussion, which will be the subject of the next section of this paper.[56]

4 Technological and Media Change

We have argued thus far that digital media are having a major impact on educational media production today. But does today's media 'revolution' really constitute such a radical break with the past? 'Books,' declared Thomas Edison in 1913, 'will soon be obsolete in the public schools. Scholars will be instructed through the eye. It is possible to teach every branch of human knowledge with the motion picture. Our school system will be completely changed inside of ten years.'[57] In the 1960s, prophecies were made that 'teaching machines' would revolutionize education within a few years.[58] At the time of writing, a quick Google search for 'textbooks' and 'obsolete' runs up approx. 461,000 hits. The biggest contenders for rendering the textbook obsolete are digital media and mobile devices. Very many of the top hits, however, a perceptive reader will notice, are headlines which end with a question mark. Associated with the question of whether textbooks are becoming obsolete in the face of whichever 'new' medium is currently being discussed, are often euphoric or dystopian visions of where education is heading with these new media.

On the one hand are visions of digital technology 'disrupting' traditional educational practices and bringing innovative forms of engagement and learning, preparing young people for life in the 21st century.[59] From this perspective, today's formal schooling is

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[56] Bahuaud, *Les éditeurs scolaires traditionnels*.

[57] Thomas A. Edison, "Interview with Thomas A. Edison: The Evolution of the Motion Picture. Looking into the Future with Thomas A. Edison", in: *The New York Dramatic Mirror*, 9 July 1913.

[58] C.P. Gilmore, "Teaching Machines: Do they or don't they?", in: *Popular Science* 181 (1962), 57–62 and 166.

[59] Dimitri Sidorov, *Visualization in geography textbooks,* paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 4th 2015; Eugenia Roldán Vera, *From textbooks to netbooks: Changes in the production of educational media in Latin America*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 4th 2015; Eugenia Roldán Vera and Darrell M. West*, Digital Schools: How Technology can Transform Education*, Washington, DC: Brookings Institution Press, 2012; Jörg Dräger and Ralph Müller-Eiselt, *Die digitale Bildungsrevolution*, München: Deutsche Verlags-Anstalt, 2015; Henry Jenkins, Ravi Purushotma, Katie Clinton Margaret Weigel and Alice J. Robison (Eds.), *Confronting the*

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seen as out of step with young people's lives, and as unable to motivate them to engage with learning, unwilling to pick up new insights from the learning sciences, and/or incapable of dealing with the reproduction of inequality in which opportunity structures and exclusions are repeated generation after generation. Digital technologies can resolve these issues by motivating and engaging students, by enabling them to create and remix their own knowledge through media, and by broadening access to educational media by making it more widely and more freely available.[60]

On the other hand, concerns are raised about the ways in which digital media produced for schools are thoroughly entangled with consumerist values, encouraging ever increasing competitiveness and individualism.[61] This refers not only to the values and knowledge systems implicitly embedded in the affordances of digital educational media, but also to the more explicit orientation of these media, which are often produced by large corporations. Of the 20 most profitable companies in Germany, for instance, 15 produce free professional materials for use in schools, e.g. Deutsche Post, RWE and e.on.[62] Further concerns have been raised about the potential of digital tools to hinder young people from learning important life skills such as impulse control and concentration, or the ways in which the rewards offered through gamification destroy intrinsic motivation.[63]

Often missing from such debates are empirical observations of what is actually happening in the publishing field, or more broadly, the field of educational technology production. As the previous sections have suggested, a series of questions can shed light on how technological and media changes unfold, and how these changes tie in with broader changes in education and in society:

Which new actors are beginning to operate as authors when a new technology emerges in schools? For instance, when information technology startups, buoyed by large venture capital investments begin to make apps or design games, materials and

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Challenges of Participatory Culture: Media Education for the 21st Century, Cambridge, MA: MIT Press 2009; William B. Russell III (Ed.), *Digital Social Studies*, Charlotte, NC: Information Age Publishing, 2013.

[60] Salman Khan, *The One World Schoolhouse: Education Reimagined*, London: Hodder, 2012.

[61] Neil Selwyn, *Distrusting Educational Technology: Critical Questions for Changing Times*, New York: Routledge, 2013.

[62] Eva Matthes, *Kostenlose Unterrichtsmaterialien im Internet*, https://www.youtube.com/watch?v=U544Cbc9wv8, accessed 25 November 2012.

[63] Gerald Lembke and Ingo Leipner, *Die Lüge der digitalen Bildung: Warum unsere Kinder das Lernen verlernen*, München: Redline-Verlag, 2015; Manfred Spitzer, *Digitale Demenz: Wie wir uns und unsere Kinder um den Verstand bringen,* München: Droemer Knaur, 2012.

tasks for learners, what does this mean for the role of pedagogical knowledge? Traditional educational publishers' experience of designing educational materials is then no longer being drawn upon. This has led some observers to critique the quality of materials.[64] At the same time, in-depth ethnographic studies show that some start-ups work closely with user groups (teachers, school managers, students) to ensure that pedagogical concerns are at the heart of the technology design.[65]

Which new interest groups emerge as powerful players, shaping the kinds of knowledge with which students engage? As noted above, many large corporations produce educational materials, as do many non-profit NGOs, such as Attack or Greenpeace. Which of these actors has the material resources to produce professional, attractive, motivating materials? With whom do interest groups work to design materials? How national, regional or global are these materials in design and scope? Which kinds of expertise, and which kinds of values, knowledges and visions of the future do these groups aim to materialize?

How does the role of the state change? In Germany, the single most apparent change is the lack of official state approval for digital educational materials. For textbooks, there has long been a formal process of submitting each textbook to the federal state ministry of education for approval. This approval process traditionally includes an extended blind peer review. New media, available online, can be used in schools without any formal approval. However, as recent observations have shown, the status of this 'procedural authorization' for print textbooks in Germany has been substantially eroded over recent years:[66] The majority of textbooks are no longer sent out to peer reviewers. Instead, textbooks publishers submit the textbooks with a cover letter indicating that the textbook conforms to the curriculum. In this sense, what seems to be a substantial change for new technology is perhaps less radical than it appears. In other contexts, such as Japan, where the approval process of printed textbooks has become more stringent in recent years,[67] the divergence for freely available digital materials may prove

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[64] Eva Matthes, "Das Laientum wird überbewertet", in: *buchreport.magazin*, Februar 2014, 86.

[65] Tobias Röhl, *Co-designing education: Distributed production of digital educational media*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 4th 2015.

[66] Macgilchrist, *Textbook Production*.

[67] Peter Cave, "Japanese Colonialism and the Asia-Pacific War in Japan's History Textbooks: Changing Representations and their Causes", in: *Modern Asian Studies* 47, 2 (2013), 542–580.

much larger. Mapping broad international trends in how the role of the state is being enforced (or not) with regard to digital technologies remains an open task.

Which new business models or new forms of economy are emerging? One core issue in the burgeoning field of open educational resources (OER) is the institutionalization of a sharing economy across society.[68] The predominant model in the debate around OER is no longer profit-oriented, whether in the direct sense of ensuring a profit margin from the sale of materials, nor in the indirect sense of providing marketing opportunities for large companies. Instead, the reuse-remix-recreate ethos foregrounds sharing and community. This ethos, it should be noted, has long been enacted in schools as colleagues shared printed copies, etc., but when it migrates to online communities, it arguably takes on a new dimension. However, as has also been observed,[69] most OER practice involves reusing PDFs with little remixing and recreation. Also, there remain open questions about the role of the state and activists in the field of OER: What kind of economy is being enacted when the state officially promotes OER, including funding OER jobs, institutions and activities (European Commission 2013)? Further economic questions arise regarding the ways in which traditional educational publishers react to the increasing number of private, state or non-profit bodies which are producing digital materials. Similarly, there is a need for empirical observations of how private companies produce materials.[70]

Which new concepts are emerging to understand the production of new media in the digital world? Can phenomena such as Uber help to understand change in the educational field, i.e. is the "Uberisation" of education emerging from community-based and user-driven digital practices being harnessed to revolutionise schools?[71] Do video-embedded author reflexions on the constructedness and selectivity of history significantly impact on students' understanding of history?[72] How can Big Data help to under-

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[68] Jöran Muuß-Merholz and Felix Schaumburg, "Open Educational Resources (OER) für Schulen in Deutschland: Whitepaper zu Grundlagen, Akteuren und Entwicklungen", in: Wikimedia Deutschland e.V. (Ed.), *Praxisrahmen für Open Educational Resources (OER) in Deutschland*, 2014, retrieved from http://www.collaboratory.de/w/OER-Whitepaper.

[69] Audrey Watters, *The Monsters of Education Technology*, 2014, retrieved from http://hackeducation.com/2014/12/01/the-monsters-of-education-technology/.

[70] Helga Holtkamp, *Comment from the European Educational Publishers Group*, invited response given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 4th 2015.

[71] Sidorov, *Visualization in geography textbooks*.

[72] Florian Sochatzy, *The multimedia history textbook (mbook)*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 4th 2015.

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stand what is happening to educational and personal data, and also to forms of subjectivation, as students are addressed by the technology as individual learners, and their data are aggregated for future use?[73]

Exploring these empirical questions provides grounded observations to the changes underway, and is moving the conversation towards a more balanced assessment of how transformations in the production of educational media for schools is entangled with societal change more broadly.

Textbooks, in particular, as one of the 'classic technologies', offer a unique way into an analysis of the broader field of educational technology as it is changing today. They can be seen, firstly, as a *relatively stable entity* in the context of other media. As the 'other' of 'other media' has changed, from moving pictures to teaching machines to digital media, and prophecies of the death of the textbook are repeated, the printed textbook has remained a constant companion in schools, albeit in a changing constellations, e.g. with audio cassettes, video, CDs, DVDs or hyperlinks. Thus, intermedial relations can be investigated. The textbook can also be seen, secondly, as an *entity undergoing constant transformations*[74] as it has become modular, multimodal and now, most recently, multimedial (with hyperlinks or QR codes printed in textbooks taking readers directly to apps),[75] or as the textbook itself goes online (in proprietary form e.g. m-book, or as OER, e.g. Schulbuch-O-Mat).

Concluding Thoughts

Our goal at this stage is by no means to provide a final conclusion, but to open up the conversation for further exchange. In this sense, we have endeavoured in this dossier to suggest some directions for future research which pick up on contemporary debates on author and authorship, on state and interest groups, on political economy and business models, and on technological and media change. It should be clear from this paper that our interest lies in untangling the complex and contingent processes, practices, actors, events, economies, politics and networks involved in producing textbooks and other ed-

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[73] Jose Ferreira, *Knewton - Education Datapalooza*, https://www.youtube.com/watch?v=Lr7Z7ysDluQ, accessed 9 February 2015.

[74] Norm Friesen, "The Past and Likely Future of an Educational Form: A Textbook Case", in: *Educational Researcher* 42 (2013), 498–508.

[75] Péter Bagoly-Simo and Yvonne Behnke, *The electronic geography textbook*, paper given at the GEI conference "Knowledge Production in a Hybrid Age", Braunschweig, December 4th 2015.

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ucational media. Thus, although our aim is most certainly to initiate and sustain a dialogue across disciplines with a range of research perspectives, we will allow ourselves here to highlight two aspects of contemporary educational media publishing and the directions in which scholarship could now move.

First, broadly, we suggest more empirical research on textbook production conducted from an international, comparative and praxis-orientated perspective. This kind of research would analyse the practices in depth and in context, in order to better understand the societal complexities and diverse contingent relationships within the processes of textbook production. It may aim to explore the specifics of enacting the author function in today's complex hybrid field of print and digital production; it may offer rich historical analyses of past practices – which were perhaps always already hybrid.

Secondly, and more specifically, we suggest that the debates surrounding the economic models of textbook production, some of which contain a decidedly ideological note, as well as innovations within media technology and the introduction of new media formats (digital media, OER) be placed in their historical contexts and subjected to critical scrutiny. Analysing contemporary and historical educational media production is – from this perspective – an important part of understanding the politics of education and media.

References

Adick, Christel. "Schulbuchautoren für den Pädagogikunterricht und ihre Werke", in: *Der Pädagogikunterricht* 4, 1994, 23–46.

Altbach, Philip G., Amado A. Arboleda and Savaranan Gopinathan (eds.). *Publishing in the Third World*, Portsmouth: Heinemann, 1985.

Amalvi, Christian. *Répertoire des auteurs des manuels scolaires et de livres de vulgarisation historique de langue française: De 1660 à 1960,* Paris: La Boutique de l'histoire, 2001.

Apple, Michael W. "The political economy of textbook publishing", in: *Language, authority and criticism: readings in the school textbook*, Suzanne de Castells (ed.), London: Falmer Press, 1989, 155–169.

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Textbook Production in a Hybrid Age: Contemporary and Historical Perspectives on Producing Textbooks and Digital Educational Media

Apple, Michael W. and Linda K. Christina-Smith. "The Politics of the Textbook", in: *The Politics of the Textbook*, Michael W. Apple and Linda K. Christina-Smith (eds.), London: Routedge, 1–21.

Bahuaud, Myriam. "Les éditeurs scolaires traditionnels à la recherche d'un modèle économique", in: *Manuels scolaires, regards croisés*, Éric Bruillard (ed.), Caen: CRDP de Basse Normandie, 2005, 55–77.

Baquès, Marie-Christine. „L'évolution des manuels d'histoire du lycée: Des années 1960 aux manuels actuels", in: *Histoire de l'Education* 114, 2007, 121–149.

Binnenkade, Alexandra. "Doing memory: Teaching as a discursive node", in: *Journal of Educational Media, Memory, and Society* 7 (2), 2015, 29–43.

Bläsi, Christoph. "Educational Publishers and Educational Publishing", in: *Palgrave Handbook of Textbook Studies*, Eckhardt Fuchs, Annekatrin Bock (eds.), Basingstoke: Palgrave forthcoming.

Bromley, Patricia, John W. Meyer, and Francisco O. Ramirez. "The Worldwide Spread of Environmental Discourse in Social Studies, History, and Civics Textbooks, 1970–2008", in: *Comparative Education Review* 55, 2011, 517–545.

Caspard, Pierre. "Reflektierende Spiegel? Bausteine zu einer vergleichenden Betrachtung der unentgeldlichen und entkonfessionalisierten Pflichtschule in Frankreich und der Schweiz", in: *Eine Schule für die Demokratie: Zur Entwicklung der Volksschule in der Schweiz im 19. Jahrhundert*, Lucien Criblez and Carlo Jenzer (eds.), Bern: Peter Lang, 1999, 434–435.

Cave, Peter. "Japanese Colonialism and the Asia-Pacific War in Japan's History Textbooks: Changing Representations and their Causes", in: *Modern Asian Studies* 47 (2), 2013, 542–580.

De Baets, Antoon. "Profile of the History Textbook Author as a Mediator between Historiography and Society", in: *Internationale Schulbuchforschung* 16, 1994, 514–534.

Dräger, Jörg and Ralph Müller-Eiselt. *Die digitale Bildungsrevolution*, München: DVA, 2015.

Edison, Thomas A. "Interview with Thomas A. Edison: The Evolution of the Motion Picture. Looking into the Future with Thomas A. Edison", in: *The New York Dramatic Mirror*, 9 July 1913.

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Textbook Production in a Hybrid Age: Contemporary and Historical Perspectives on Producing Textbooks and Digital Educational Media

Faure, Romain. *Netzwerke der Kulturdiplomatie. Die international Schulbuchrevision in Europa, 1945-1989*, Berlin: De Gruyter, 2015.

Ferreira, Jose. *Knewton - Education Datapalooza*, 3 November 2012, https://www.youtube.com/watch?v=Lr7Z7ysDluQ?, accessed 9 February 2015.

Foucault, Michel. "What is an Author", in: idem, *Aesthetics, Method, and Epistemology. Essential Works of Foucault 1954-1984, Volume Two*, James D. Faubion (ed.), New York: Penguin Press, 1998, 206–222.

Friesen, Norm. "The Past and Likely Future of an Educational Form: A Textbook Case", in: *Educational Researcher* 42, 2013, 498–508.

Gilmore, C.P. "Teaching Machines: Do they or don't they?", in: *Popular Science* 181, 1962, 57–62 and 166.

Gopinathan, Savaranan. "And Shall the Twain Meet? Public and Private Textboook Publishing in the Developing World", in: *Textbooks in the Developing World: Economic and Educational Choices*, Joseph P. Farrell and Stephen P. Heymann (eds.), Washington: World Bank, 1989, 61–71.

Harrison, Donald Geoffrey. *Oxfam and the Rise of Development Education in England from 1959 to 1979*, London: Institute of Education, 2008.

Höhne, Thomas. "Educational media, reproduction and technologisation", in: *Palgrave Handbook of Textbook Studies*, Eckhardt Fuchs and Annekatrin Bock (eds.), Basingstoke: Palgrave forthcoming.

Höhne, Thomas. "Technologisierung von Bildungsmedien", in: *Die Deutsche Schule. Zeitschrift für Erziehungswissenschaft, Bildungspolitik und pädagogische Praxis* 1 (107), 2015, 8–19.

Horio, Teruhisa. *Educational Thought and Ideology in Modern Japan: State Authority and Intellectual Freedom*, Tokyo: University of Tokyo Press, 1988.

Jenkins, Henry, Ravi Purushotma, Margaret Weigel, Katie Clinton, and Alice J. Robison (eds.). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*, Cambridge, Mass.: The MIT Press, 2009.

Karge, Heike and Katarina Batarilo. "Guidelines Guiding History Textbook Production? Norms and Practices of History Textbook Policy in Bosnia and Hercegovina", in: *Transition and the Politics of History Education in Southeastern Europe*, Augusta Dimou (ed.), Göttingen: V&R unipress, 2009, 307–356.

Steffen Sammler, Felicitas Macgilchrist, Lars Müller and Marcus Otto   28

Textbook Production in a Hybrid Age: Contemporary and Historical Perspectives on Producing Textbooks and Digital Educational Media

Keiderling, Thomas. "Der Schulbuchverleger und sein Autor. Zu Spezialisierungs- und Professionalisierungstendenzen im 19. und frühen 20. Jahrhundert", in: *Die Rolle von Schulbüchern für Identifikationsprozesse in historischer Perspektive*, Heinz Werner Wollersheim, Hans-Martin Moderow and Cathrin Friedrich (eds.), Leipzig: Leipziger Universitätsverlag, 2002, 87–95.

Khan, Salman. *The One World Schoolhouse: Education Reimagined,* London: Hodder, 2012.

Korostelina, Karina V. and Simone Lässig. *History Education and Post-Conflict Reconciliation*, London: Routledge, 2013.

Lässig, Simone. "Wer definiert relevantes Wissen? Schulbücher und ihr gesellschaftlicher Kontext", in: *Schulbuch konkret*, Eckhardt Fuchs, Joachim Kahlert and Uwe Sandfuchs (eds.), Bad Heilbrunn: Klinkhardt, 2010, 199–215.

Lembke, Gerald and Ingo Leipner. *Die Lüge der digitalen Bildung: Warum unsere Kinder das Lernen verlernen*, München: Redline-Verlag, 2015.

Macgilchrist, Felicitas and Barbara Christophe. "Translating globalization theories into educational research: Thoughts on recent shifts in Holocaust education", in: *Discourse: Studies in the Cultural Politics of Education* 32 (1), 2011, 145–158.

Macgilchrist, Felicitas. "Bildungsmedienverlage: Zur Ökonomisierung in der Schulbuchproduktion", in: *Die Deutsche Schule* 1, 2015, 49–61.

Macgilchrist, Felicitas. "Schulbuchverlage als Organisationen der Diskursproduktion: Eine ethnographische Perspektive" [Educational publishers as organisations of discourse production: An ethnographic perspective], in: *Zeitschrift für Soziologie der Erziehung und Sozialisation* 31, 2011, 248–263.

Macgilchrist, Felicitas. *Textbook Production: The entangled practices of developing curricular materials for schools*, Habilitationsschrift, Braunschweig: Technische Universität Braunschweig, 2014. Forthcoming auf edumeres.org.

MacKenzie, John M. "The Imperial Institute", in: *The Round Table: The Commonwealth Journal of international Affairs* 302, 1987, 246–253.

Matthes, Eva. "Das Laientum wird überbewertet", in: *buchreport.magazin*, Februar 2014, 86.

Matthes, Eva. *Kostenlose Unterrichtsmaterialien im Internet*, 22 October 2012, https://www.youtube.com/watch?v=U544Cbc9wv8, accessed 25 November 2015.

Steffen Sammler, Felicitas Macgilchrist, Lars Müller and Marcus Otto 29

Textbook Production in a Hybrid Age: Contemporary and Historical Perspectives on Producing Textbooks and Digital Educational Media

Meyer, John W., Patricia Bromley and Francisco O. Ramirez. "Human Rights in Social Science Textbooks: Cross-national Analyses, 1970–2008", in: *Sociology of Education* 83 (2), 2010, 111–134.

Müller, Lars. "Schulbücher zwischen Verlagsarchiv und Erinnerungsort. Potenziale der Archivarbeit für die Schulbuchforschung", in: *Geschichte(n), Repräsentationen, Fiktionen. Medienarchive als Gedächtnis und Erinnerungsorte*, Sascha Trültzsch-Wijnen, Alessandro Barberi and Thomas Ballhausen (eds.), Köln: Herbert von Halem Verlag, 2016, 176–188.

Muuß-Merholz, Jöran and Felix Schaumburg. "Open Educational Resources (OER) für Schulen in Deutschland: Whitepaper zu Grundlagen, Akteuren und Entwicklungen", in: *Praxisrahmen für Open Educational Resources (OER) in Deutschland*, Wikimedia Deutschland e.V. (ed.), 2014, retrieved from http://www.collaboratory.de/w/OER-Whitepaper.

Neumann, Peter H. "Publishing for Schools in France, the Federal Republic of Germany, the United Kingdom, and the United States", in: *Textbooks in the Developing World: Economic and Educational Choices*, Joseph Farrrell and Stephen P. Heyman (sds.), Washington: World Bank, 1989, 115–129.

Nishino, Ryota. "The Political Economy of the Textbook in Japan, with Particular Focus on Middle-School History Textbooks, ca. 1945-1995", in: *Internationale Schulbuchforschung* 30, 2008, 487–514.

Perlmutter, David D. "Manufacturing Visions of Society and History in Textbooks", in: *Journal of Communication* 47, 1997, 68–81.

Ravitch, Diane. *The Language Police: How Pressure Groups Restrict What Students Learn*, New York: Knopf, 2003.

Rohlfes, Joachim. "Wie abhängig sind Schulbuchautoren?", in: *Geschichte in Wissenschaft und Unterricht* 43, 1992, 235–237.

Roldán Vera, Eugenia. "Useful Knowledge for Export", in: *Books and the sciences in History*, Marina Frasca-Spada, Nicholas Jardine (eds), Cambridge: Cambridge University Press, 2000, 338-358.

Rollans, Glenn and Michel de la Chenelière. *Study of the Canadian K to 12 Educational Book Publishing Sector*, Ottawa: Government of Canada Publications 2010.

Steffen Sammler, Felicitas Macgilchrist, Lars Müller and Marcus Otto 30

Textbook Production in a Hybrid Age: Contemporary and Historical Perspectives on Producing Textbooks and Digital Educational Media

Rothmund, Elisabeth. "Manuels, auteurs et éditeurs dans le premières décennies de l'enseignement scolaire de l'allemand", in: *Histoire de l'Education* 106, 2005, 15–40.

Russell, William B. III (ed.). *Digital Social Studies*, Charlotte, NC: Information Age Publishing, 2013.

Savolainen, Kaisa. *Education as a Means to World Peace: The Case of the 1974 UNESCO Recommendation*, Jyväsklä: University Jyväsklä, 2010.

Schröder, Carl August. "Schulbuchverleger und Bildungsreform", in: *Blickpunkt Schulbuch: Zeitschrift für moderne Unterrichtsmedien* 14, 1972, 48.

Selwyn, Neil. *Distrusting Educational Technology: Critical Questions for Changing Times,* New York: Routledge, 2013.

Sewall, Gilbert T. "Textbook Publishing*"*, in: *The Phi Delta Kappan* 86, 2005, 498–502.

Sherwood, Marika. "Miseducation and Racism", in: *Ethnicity and Race in a Changing World. A Review Journal* 1 (1), 2009, 40–47.

Spitzer, Manfred. *Digitale Demenz: Wie wir uns und unsere Kinder um den Verstand bringen,* München: Droemer Knaur, 2012.

Spring, Joel H. *Conflicts of Interest: The Politics of American Education*, New York: Longman, 1993.

Stöber, Georg. "Schulbuchzulassung in Deutschland: Grundlagen, Verfahrensweisen und Diskussionen", in: *Eckert.Beiträge* 3, 2010.

Watt, Michael G. "Research on the Publishing Industry in the United States of America", in: *IARTEM e-journal* 1 (1), 2007, 1–10.

Watters, Audrey. *The Monsters of Education Technology*, 2014, retrieved from http://hackeducation.com/2014/12/01/the-monsters-of-education-technology/.

West, Darrell M. *Digital Schools: How Technology can Transform Education*, Washington, DC: Brookings Institution Press, 2012.

Wittmann, Reinhard. *Wissen für die Zukunft: 150 Jahre Oldenbourg Verlag,* München: Oldenbourg, 2008.

Papers given at the Georg Eckert Institute (GEI) conference 'Knowledge Production in a Hybrid Age'

Bagoly-Simo, Péter and Yvonne Behnke. *The electronic geography textbook*, Braunschweig, December 4th 2015.

Binnenkade, Alexandra. *Frictions in the nexus: Economics of textbook production*, Braunschweig, December 3rd 2015.

Bläsi, Christoph. *The know-how of schoolbook publishers to leverage Open Educational Resources*, Braunschweig, December 3rd 2015.

Bobryk, Sylvia. *Dominant actors within history textbook development in post-communist Poland*, Braunschweig, December 3rd 2015.

Darak, Kishorkumar G. *Vanishing boundaries: Regulation to dictate by state textbook production*, Braunschweig, December 3rd 2015

Holtkamp, Helga. *Comment from the European Educational Publishers Group* [invited response], Braunschweig, December 4th 2015.

Kazlauskaitė-Gürbüz, Rūta. *The role of textbook authors in the production of school historical knowledge in Lithuania*, Braunschweig, December 3rd 2015.

Müller, Lars. *Latitude for Textbook Authors 1950-1990: A German – UK comparative perspective*, Braunschweig, December 3rd 2015.

Ott, Christine. *Scopes of innovation in German textbook production*, Braunschweig, December 3rd 2015.

Roldán Vera, Eugenia. *From textbooks to netbooks: Changes in the production of educational media in Latin America*, Braunschweig, December 4th 2015.

Roszak, Stanislaw. *Between dominance and democracy in the selection and content of textbooks in Poland*, Braunschweig, December 3rd 2015.

Röhl, Tobias. *Co-designing education: Distributed production of digital educational media*, Braunschweig, December 4th 2015.

Sidorov, Dimitri. *Visualization in geography textbooks*, Braunschweig, December 4th 2015.

Sochatzy, Florian. *The multimedia history textbook (mbook)*, Braunschweig, December 4th 2015.

Wang, Xiaohai. *Production of textbooks in Chinese higher education*, Braunschweig, 3rd December 2015.

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Producing Textbooks and Digital Educational Media

Woestemeyer, Christina. *Production of religion-related textbooks in Germany:*
Players – politics – perspectives, Braunschweig, December 3rd 2015.