

## INTRODUCTION

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### German Television: Culture, Technology, or Cultural Technology?

Theorizing television has proven an elusive matter. After decades of being incorporated into mass communication studies, television was largely bypassed by the first wave of poststructuralist German *Medientheorie* in the 1980s and 1990s. The reasons for this are multiple. On the one hand, the medium itself, and not only in Germany, “remains more comfortably pathologized as a cultural symptom than explored as a cultural form,” as William Uricchio (1998a) has it.<sup>1</sup> As no other medium, television embodies the tension between technology and culture, a tension many have seen as antagonistic, with television playing the historical role of chief villain, as it did in Neil Postman’s widely read *Amusing Ourselves to Death* (1985). Ambitious attempts in English to give television a philosophical dimension, like Richard Dienst’s *Still Life in Real Time* (1994), or Paddy Scannell’s recent *Television and the Meaning of ‘Live’* (2014), which both (like *Medientheorie*) draw on Heidegger, have thus been the exception rather than the rule. On the other hand, *Medientheorie* defined itself through a polemical opposition not only to Frankfurt School concerns with the (mediated) public sphere, but also to traditional mass media studies’ culturalist perspective. “The objects of research that defined communication studies (press, film, television, radio—that is, primarily mass media) were never of great interest” to *Medientheorie* (Siegert 2013: 49; see also Siegert 1996). We are thus faced with the paradox that although all manner of techniques and technologies may be and have been seen as “media,” one of the schoolbook examples of a medium still awaits the sophisticated treatment recently given to spinning wheels, servants, or bureaucratic paper trails. Since traditional television studies were historically tied to an older sociological concept of media, whether indebted to Frankfurt or Birmingham, that newer *Medientheorie* wanted to avoid at all costs, television as object

of study has suffered from its association with a certain methodological perspective. The opposition of a certain kind of theory to television has also a particularly German stamp about it, however.

This book seeks to correct this split between television and theory, although it does not attempt to do so in monolithic fashion, which would do violence to the field of television studies. There exists no unified field theory for television, any more than there does for physics. Television studies are characterized by a wide range of approaches, some empirical, others more speculative (and indebted to poststructuralism), and the present volume seeks to give a sense of that variety. Although the contributors to this volume do not all subscribe to one methodology, there are nonetheless recurring themes and conceptual tensions within the field. One hint as to how we might conceptualize television as medium in a way different from traditional mass media studies is given by the recent post-Kittlerian turn in Germany to what is known as *Kulturtechniken* or cultural techniques.<sup>2</sup> This is more than a mere shotgun wedding between two influential concepts in the humanities, and offers an important corrective to or expansion of earlier *Medientheorie*. Whereas Kittler's own programmatic antihumanism, transposing the medium of Foucault's disappearance of Man from sand to silicone (Winthrop-Young 2000: 402), insisted that "there is no software," so that computer programming would eventually eliminate "so-called Man," other media theoreticians since Kittler have become increasingly interested in media technology's cultural embedding. This has not meant a return to familiar ideas of subject or "agency," however, for the technical a priori—the priority of technology to any human instance—remains in force; it is techniques like ploughing, writing, or even the use of doors and gates that first produce the actor who then seems instrumentally to use them. Scholars of *Kulturtechnik* therefore operate with a model of "culture" somewhat distinct from the familiar one of Raymond Williams (1981). In a nutshell: Williams' "technology and cultural form" becomes "technology as cultural form." *Kulturtechnik* as a method is also different from the cultural studies model used by Heather Gumbert (2014) in her recent book on East German television. Gumbert's book, while informative and important in its analyses, nonetheless remains within the social-science-defined context of American communication studies. The present book seeks to widen that context, without, however, indulging in the anathemas hurled against communications by Kittler and his followers. The notion of *Kulturtechnik* may help this process of broadening. If Sybille Krämer has argued for seeing computer usage as cultural, why not that of television? So Geoffrey

Winthrop-Young notes in his introduction to a recent issue of *Theory, Culture and Society* dedicated to *Kulturtechnik*:

Watching television, for instance, requires specific technological know-how (identifying the on/off button, mastering the remote, programming the VCR) as well as equally medium-specific mental and conceptual skills such as understanding audiovisual referentiality structures, assessing the fictionality status of different programs, interacting with media-specific narrative formats, or the ability to distinguish between intended and unintended messages. All these skills, aptitudes and abilities are part of the *Kulturtechniken des Fernsehens*, the cultural techniques of television. (Winthrop-Young 2013: 5–6)

In other words: to see television as a cultural technique means including its effects (its specific form of medial subjectivity) together with its technical and social dispositive. It also means recognizing that the development of television is incomprehensible without consideration of its embedding in cultural techniques, including “nets and networks” (the subject of several recent German publications). According to Sebastian Giessmann (2005: 424), the blind spot of German media theory has lain less in the storage function of media than in their embedding in networks of transmission, which can be seen as cultural techniques.<sup>3</sup> This is, it should be noted, a different model of “television culture” than that proposed by older scholars in the 1980s, which was still bound up with a “traditional middle-class understanding of culture that links culture to humanist educational imperatives” (Siegert 2015: 57).<sup>4</sup> An interesting question brought up by current discussions of *Kulturtechnik* is how to define the latter: what makes a technique “cultural?” Culture, according to Kittler’s media-informed view of it, is defined by its recursivity: that is, culture is self-referential and builds up its own world of meaning via this feedback loop. Opinions differ, however, on precisely where techniques become cultural; if Thomas Macho believes “cultural techniques” must be recursive and symbolic, Bernhard Siegert (2013: 59) disagrees. Wolfgang Hagen’s argument in his chapter for this book suggests that TV’s “third image” might be an instance of an internal, technical recursivity, contradicting the usual notion of the medium as mere transparent window on the world. One need only add that these “cultural techniques” are, like all culture, historical to arrive at the third coordinate of this book. Germany has been not only a country with a specific culture of science and technology (one with at times serious political consequences), but it has also a very particular culture of television, one born of the peculiar historical circumstances of empire, National Socialism, and the Cold War. As Richard Dienst put it, the “tech-

niques” for implementing TV “were borrowed from the existing discourses of state and cultural authority that immediately informed the creation of broadcasting institutions,” (1994: 7)<sup>5</sup> and we will find these political and cultural discourses again and again in German television.

The Ariadne’s thread running through this volume is thus a shared concern with the specific historical manifestations of these German circumstances, whether in the overall evolution of television in Germany or in specific cases of productions for TV. The first part of the book offers a look at some current German theoretical and historiographical views of television. For Wolfgang Hagen, the “cultural techniques” in question are that of knowledge and science as specific discursive formations,<sup>6</sup> tied to the medium of book printing. Hagen’s chapter is thus very much in the Foucauldian tradition of a historiography of ruptures (*Zäsuren*), or what in German is known as *Medienarchäologie*. It may thus seem “jumpy” or speculative to readers accustomed to more traditional histories of technology. A comparison with English-language histories of television’s development can highlight Hagen’s subtle differences: where R. W. Burns (1998: 76) lists three periods of television prehistory, beginning roughly with Bell’s telephone in the 1870s,<sup>7</sup> Hagen begins earlier on. He thus goes even further than generalizations about the genesis of science in early modernity, to situate the origins of televisual thinking in the context of German Romantic *Naturphilosophie*. This might contradict Kittler’s apodictic assertion in *Optical Media* (2010: 207) that “there were no dreams of television before its development” — although what interests Hagen is not the old dream of “seeing at a distance” so much as Romantic ideas about electrical transmission. Another difference from Kittler is the larger role given to book printing in Hagen’s historical model. For Hagen, scientific culture serves, following Niklas Luhmann, as a storage function to preserve improbable technical inventions. His chapter well illustrates the difference between media history written from a perspective kin to that of *Kulturtechnik* and that of traditional historiography, for it stresses the discontinuities and divergences between different social instances — science, culture, economics — rather than subsuming them under any hermeneutical totality. As Hagen puts it: “culture as the memory of society would not exist without the contingency of the medial.” In the terms of the influential historian of science Hans-Jörg Rheinberger (2010), scientific culture serves to frame what are at first only poorly understood “epistemic objects” as matters that have discursive consequences. Until the mid-twentieth century, television remained only an epistemic object, not fully realized and thus partly latent in the history of media. The

historical reasons for this latency are not solely technological. But Hagen's chapter also has even larger consequences for media and cultural history, for his account of the delay between the preconditions of television's invention circa 1900 and the final stabilizing of the medium in 1939 implies also that television may be seen as culturally regulating and controlling a potentially destructive "rupture in epistemology" as Hagen puts it in his chapter. The larger cultural shift from an alienated and protesting avant-garde before World War II and a "cooler," more distanced media culture after 1945 may be directly linked to television.

Larson Powell's chapter seeks to give an overview of several currents within contemporary German television theory. Thus German theory about television must be itself as historicized as the medium. Powell begins by examining the reasons why earlier variants of German media theory tended to marginalize television. With its seeming transparency, television did not suit the urge of media theorists like Kittler to give technological invention more weight than its social embedding in driving media history, nor did it tally with Kittler's emphasis on the constructivist and antimimetic dimension of media. TV's tendency to center its representations on individual persons also does not fit Kittler's antihumanism. In Kittler's view of media history (as also in that of Siegfried Zielinski), television is doomed to vanish into the black hole of the digital. However, as Hagen's previous chapter already showed, television's "third image" might be seen as an instance of recursivity within televisual technology, thus as a moment of *Kulturtechnik*. Powell's chapter concludes by considering the television theory of Lorenz Engell—the most important theoretician of TV in Germany today, but still little known to English readers—as an alternative mode of approaching TV technology, one indebted to Niklas Luhmann's sociological systems theory, but which also makes room for specific program analysis. Both Powell's and Hagen's chapters thus propose ways in which the transatlantic divide between older sociological theories of television and more recent *Medientheorie* might be bridged. If this does not yet mean a single unified Theory of Television, it does at least seek to mediate between differing theoretical approaches.

The next two chapters are concerned with GDR television and the tension between political demands made by the state and the imperative to develop a popular entertainment culture that could compete with that of West Germany and its television. (They also broach the topic of film and television, to be taken up both by Torner's chapter on GDR made-for-TV film and in Part III.) Thomas Beutelschmidt shows how the relations of television to film in the GDR were determined by

political oppositions at the height of the Cold War in the 1950s; the relatively conservative and controlled function of television as mouthpiece of the Socialist Unity Party may be seen as the medium-specific manifestation of the GDR's hardline position relative to other, more liberal Eastern Bloc states like Poland or Hungary. Yet his chapter shows how the internal logic of the medium as dispositive nonetheless succeeded in establishing itself by the early 1960s, thanks to dramatic and literary adaptations, detective series, and increased live coverage of sports and other events. (In this, Beutelschmidt's conclusions are close to those of Heather Gumbrecht.) Early GDR television remained in tension between the "high cultural" claims of the first socialist German state to be the heir of its great bourgeois and Enlightenment ancestors on the one hand, and the need for popular acceptance on the other. If television remained "the medium of the fathers" (Henning Wrage) in the GDR, it had still to provide entertainment for the workers' and peasants' state and provide some degree of coverage of the everyday. In this tension, specific technical limitations—such as the inability of early TV to record and store its performances—worked together with a specifically German high cultural "heritage." Beutelschmidt's chapter ends circa 1960, at the time when TV became a mass medium in the GDR. Beutelschmidt's ideas could also be extended further into comparative Eastern Bloc television studies. For instance: was the comparatively liberal situation in Poland linked to specific TV policies?<sup>8</sup>

Evan Torner's contribution moves from a panoramic perspective to a close up on one particular production seen as emblematic of a moment in GDR TV history: Gottfried Kolditz's unfiled project of 1984, *Zimtpiraten*, a swashbuckler adventure to have been made in collaboration between the FRG and the GDR. As does Beutelschmidt's chapter, Torner's also places GDR TV in the historical context of German-German relations and the pressures of the international market. Torner discusses the global and local forces affecting GDR film at the beginning of the 1980s, a time of "crisis" via confrontation with television. In the early 1980s, commercial television was introduced in the FRG and American blockbusters and series appeared on West German stations. In the end, cinema and television had to support each other on either side of the Wall with "safe" genre entertainment. Again we see here a tension between statist political imperatives and those of economic profitability within a larger Cold War nexus. Torner's chapter shows that the event TV discussed in Paul Cooke's chapter was already on the horizon by the 1980s, and that new entertainment and sports formats in television put considerable pressure on the politicized concept of East German

broadcasting. The historical break of the *Wende* in 1989–90 thus needs to be understood as linked to changes in the media landscape occurring earlier in the decade. Torner's characterization of the relations between television and film in the GDR contrasts sharply with Brad Prager's discussion of those relations in the West.

In the third part of the book, we move to West German television and its relation to auteurist filmmaking, zooming in from broad panoramas to a closer focus on individual directors and their television projects. The example of Fassbinder and Kluge proves that—contrary to many commentators who have written off TV as a “zero degree style”—the medium does not forbid more politically and formally reflective approaches. Brad Prager's piece considers the early television work of Rainer Werner Fassbinder, whose 1972–73 television melodrama, *Eight Hours Are Not a Day*, was intended to influence working-class consciousness. Fassbinder then employed television as a medium to “engage dominant voices such as Hitchcock and Chabrol, and to bring out what was unspoken in their work.” Scholars have long been aware of the crucial role played by television in New German Cinema, but Prager's intervention reveals both Fassbinder's engagement with expanding the possibilities of what television programming could mean and do as well as the filmmaker's own leftist political commitments. The chapter provides a detailed formal reading of *Martha's* (and Fassbinder's) critique of marriage that doubles as a critique of the constraints of the medium.

In the next chapter Stefanie Harris turns to Alexander Kluge's television and, more recent, Internet projects. In *Public Sphere and Experience* (1993), Oskar Negt and Kluge already argued that television participates in the bourgeois public sphere in its contradictory attempt both to representatively reflect the entire world and to eliminate any information that disturbs this image of completeness. What forms of critique, they asked, might then serve to confront the apparatus of the television industry if the critique of television cannot be formulated in the predominant medium of the bourgeois public sphere (literature or journalism)? Kluge's own foray into alternative television productions in the 1980s (with the introduction of private television broadcasting) functions as a performative television criticism, constructed both to reveal latent forms of the industrial organization of consciousness and to interrupt them, and this within and alongside familiar broadcast material and programming. Through an analysis of individual television broadcasts and the dctp.tv Internet site, Harris examines how Kluge's work takes up the technological, industrial/economic, and political

forces that shape the material conditions of production and distribution; the links between television and larger symbolic orders of social and political lives (or the public sphere); and the construction of meaning in traditional (and now Internet-based) television programming and production. With its theoretical dimensions, Harris's chapter also links back with the two chapters of the book's first part.

The final part of the book looks at German television after 1989, with an emphasis on the global and economic forces that have intensified since then, and the consequences these have had in terms of change in content and format exports. Rüdiger Steinmetz, too, treats of German cultural particularities in television usage, among them the strong tradition of communitarian ethics (something common to both East and West Germany during the Cold War) and the public role of churches in regulating media. One of peculiar features of television in divided Germany was the claim made by both sides to be representative of German *Kultur* as an undivided whole; this representative claim, despite its irreality in the face of actual political division and opposition, played a constitutive role in the self-understanding of the respective broadcasting systems (as it did with the BBC). The concept of culture had, in the German context, a strong ethical stamp, like the concept of *Bildung*; its practical realization was legally underpinned by crucial court decisions mentioned in Steinmetz's survey. The evolution of TV might be correlated to legal developments such as the new GDR constitution of 1968. The component of state and public regulation shared by both Germanies had thus a moral foundation in the country's cultural past. Again, in Steinmetz's chapter we can see how technical developments like the introduction of cable in the late 1970s changed the cultural conditions of TV programming. The conflicts Steinmetz delineates between cultural and business-driven models of television will seem familiar to the English-speaking reader who knows the similar opposition from the history of the BBC. What becomes clear from Steinmetz is that the commercial and not cultural model taken for granted by Americans was, in Germany, only a later development, and one that continues to meet with considerable bourgeois resistance.

Lothar Mikos's piece analyzes how German television imports were modeled on Great Britain and the United States. Major broadcasters ARD and ZDF acquired new stock from Great Britain and the United States, such as *Dallas* and *Dynasty*. ARD's *Lindenstrasse* and ZDF's *Die Schwarzwaldklinik* were modeled on these hit imports, establishing a new programming trend. In 1999, the popularity of *Who Wants to Be a Millionaire?* led to more quiz shows on all major networks. In 2000,



*Big Brother* marked the beginning of the trend towards “reality” shows. Thus the German television market developed a momentum driven mainly by licensing and imitating standardized international formats. Mikos contextualizes this import structure via the globalization of the TV market and media politics in Germany. If Hagen’s chapter could be called technically hard-wired in its close attention to the evolution of inventions, Mikos’s is the chapter most aware of economic factors and of television’s function as global entertainment. The conclusions reached in this chapter are similar to those of recent work done on global television in English by Joseph Straubhaar (2007, especially chapters 7 and 8 on international genre markets) and Tim Havens (2006). The new series and shows Mikos discusses may have become popular through their specifically German themes or topics, yet their debt to US or UK models betrays an international fingerprint.

Paul Cooke’s contribution moves beyond readings of recent German “historical event television” in terms of authentic German history. Instead he situates television productions by the successful studio *teamWorx* such as *Dresden* (2006) or *Die Flucht* (2007) in terms of Daniel Dayan und Elihu Katz’s work on “media events.” In this analysis, historical veracity gives way to a producing a sense of community and identity in a transnational context. The reenacted spectacle of the firebombing of Dresden allows Germans to identify with a sense of victimhood, whether of catastrophes or war. Television thus has an important part in the refashioning of Germans’ self-understanding as a nation after unification. The shift in German memory often registered with some concern by professional historians—from the critical self-examinations of the 1970s to a normalized reconciliation with the past via empathy since the 1980s (Jarausch and Geyer 2003: 10–11)—thus has its specific medial coefficient.

Bärbel Stolz’s concluding chapter on *Tatort* contextualizes this most famous of all German television series, which involved cooperation between regional broadcasters to give individual episodes local specificity, right from its inception in 1971. Thus the federal structure of German broadcasting left its mark on the way the entire series has been conceived. Detective series played an important role in establishing television as a popular mass medium in both Germanies, and *Tatort* has survived the media upheavals of unification to remain an emblematic show for the entire nation, including former DEFA stars like Manfred Krug. Due to its longevity, *Tatort* has created a visual archive of German society, making it an ideal case study for how German public television has represented politics, gender norms, and societal evolution

over time, thus proving itself a culturally adaptable medium. Recent episodes illustrate *Tatort's* relevance to the politics of tolerance in Germany, while revealing the series' audience-driven censoring process.

Although the present volume covers many different aspects of German television, it cannot hope to be exhaustive. The field of television research in Germany continues to evolve: while more sociological studies of programming are published, practitioners of *Medientheorie* are beginning to overcome their long aversion to the medium (Grisko and Munker 2009), and the changes in the medium itself effected by digitalization and pay TV are being analyzed (Kretzschmar and Mundhenkel 2012). Readers with knowledge of German will want to complement the historical chapters here with Knut Hackethler's encyclopedic *Geschichte des Fernsehens in Deutschland*; the extensive German literature on television also includes books dedicated to specific televisual genres, such as news broadcasting (with its specifically German subgenre of the *Magazin*) or situation comedies, which we have not had space to discuss in detail here. Another important topic is the role of national (and transnational) television within the European Union, and its function in defining a public sphere for the latter. Thanks to their shared German language, Germany's ZDF (Second Channel), Austria's ORF (Austrian Broadcasting), and Swiss SRG SSR (Swiss Broadcasting) were able to team up as 3sat in 1984, joined in 1990 by former East German broadcaster DFF. The resulting public TV network, with its focus on advertising-free cultural programming, is unique in Europe as a forum reaching across national boundaries.

## Future Perspectives

The literature on television in German is already hard to grasp in its entirety and thus difficult to sum up in generalizations. (Larson Powell's chapter suggests some of the larger tendencies within the field.) Theoretically speculative approaches coexist with more empirical and sociological research. Specific genres, from the characteristic political *Magazin* to comedy and advertisement, have received detailed treatment, as has the overall generic system.<sup>9</sup> Many publications have been concerned with audience research, political fallout, or other social effects of television; others deal with legal or economic questions. If one includes industry publications and the metadiscourse of TV guides (like *Hör zu*), the field expands even further. From a North American

Germanist or media historical perspective, there are, however, certain possibilities that immediately come to mind.

Firstly, more studies of the interdependence of film and television, following the example of Jane Shattuc's 1990s work on Fassbinder, could be done.<sup>10</sup> Our view of East German cultural figures such as Jurek Becker and Frank Beyer might be changed by greater attention to the work both of them did for GDR TV. Literature, too, could be freshly illuminated by putting it in intermedial context: Henning Wrage's *Die Zeit der Kunst* offers an example of how one might link the study of literature and film to that of television. Frank Kelleter's recent anthology *Populäre Serialität* (2012) also traces the origins of TV's serial formats back to nineteenth-century literature. What effects did the broadcasting of *Das literarische Quartett* (1988–2001) have on West German literary production, and how did its functions as arbiter of taste differ from those of older print literary magazines?<sup>11</sup> Secondly, as Heather Gumbert has noted, cultural history in general has not often included television, either. Could one imagine work on television and music or literature that would make the connections Kittler did among the gramophone, film, radio, and the written word? Is there something televisual about the aesthetic of the postwar *nouveau roman*? How did television aid in disseminating the work of the Frankfurt School, whose members (despite their skepticism about the medium) were more present on TV than Heidegger or Jaspers? What role did TV play in May '68?<sup>12</sup>

Including television would, at very least, mean a different marking of epochal boundaries in German postwar cultural history. Thus the television theorist Lorenz Engell (Engell et al. 2004) has argued that 1950 marks a decisive caesura in the history of the twentieth century. Finally, the inclusion of television in media theory and history requires that one revise some of the assumptions of the best-known German *Medientheorien*, including that of Friedrich Kittler (as Larson Powell argues in this volume). Part of the difficulty with television studies has been its disciplinary location in communication studies departments (where knowledge of German is not always common, and where older cultural-studies models of media studies from the 1970s still dominate); the project Germans call *Medienkulturwissenschaft* would thus have no self-evident *Sitz im Leben* in North American universities. That literary and cultural theories in US humanities have become increasingly anti-sociological—while American sociology departments are ever more quantitative and antitheoretical—is another obstacle to the cross-disciplinary work needed for television. But the popular word

“culture” in US Germanist scholarship will remain blindly attached to traditional notions of culture as long as television is not included. Paradoxically, the inclusion of television (as a *Kulturtechnik*) might imply an expansion of “culture” without Kittler’s polemical “expulsion of the spirit from humanities.”<sup>13</sup> In many ways, Kittler’s work can be seen as a last-ditch attempt of High Theory to defend itself against the disseminatory effects of television;<sup>14</sup> such a view would make his later turn to Greece and Homer less surprising than it first seemed. Whether the future of German television studies will lie with speculative syntheses such as Fahle and Engell’s *Philosophie des Fernsehens*, or with an incorporation of television into overarching historical analyses of cultural techniques,<sup>15</sup> remains to be seen. An English-language perspective on German television theory may, however, be able to bridge over, or at least reflect on, some of the divisions within this theory more easily than an inner-German one. Since this is the first volume in English covering so many different aspects of German television, and since the chapters cover not only technical or media-specific features of television, but also its larger cultural context, it is hoped that the book may be useful both for media historians and also those interested in German cultural and social history. Television, arguably one of the driving forces of post-1945 modernization, indeed offers an inclusive lens or prism through which to view twentieth- and twenty-first-century Germany.

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**Robert Shandley** is Professor of German and Head of the Department of International Studies at Texas A&M University. His work includes *Hogan’s Heroes* (Detroit: Wayne State University Press, 2011 TV Milestone Series), *Runaway Romances: Hollywood’s Postwar European Tour* (Philadelphia: Temple University Press, 2009) and *Rubble Films: German Cinema in the Shadow of the Third Reich* (Philadelphia: Temple University Press, 2001).

## Notes

1. Stanley Cavell made the same diagnosis (1982).
2. For discussion, see the first issue of the periodical *Kulturtechnik: Zeitschrift für Medien- und Kulturforschung* (2010), especially 101–220. This journal is associated with the Bauhaus University in Weimar and edited by Lorenz Engell and Bernhard Siegert.
3. See also Giessmann 2006 and Barkoff, Böhme, and Riou 2004.
4. An instance of this transitional use of the term “culture” would be Doelker 1989.
5. A similar statement is made by Fahle and Engell (2006: 9).
6. English readers might compare Hagen’s essay to the work of Bruno Latour and Steve Woolgar on scientific cultures (1986), although Hagen does not share the politicized perspective of many practitioners of STS (Science and Technology Studies).
7. Burns’s three distinct periods are: the era of “speculation (1877 to c. 1922),” low definition television (1926–1935), and high definition television (1936 onward). Hagen’s choice of historical landmarks for television’s development—Alexander Bain, the discovery of selenium, Nipkow’s rotating disc, the cathode ray tube—can however all be (empirically) correlated with Burns’s history. See also Abramson 1987.
8. See Haltof 2002, which discusses the TV work of Wajda (120) and Zanussi (128); in Polish, among other works, Trzynadlowski 1992.
9. For a cognitive-psychological look at how audiences identify genres (as opposed to traditional textual genre studies), see Gehrau 2001.
10. On Wenders and television: Beier 1996 and Deeken 2004. On recent film and television, see Halle 2008, esp. chapter 6; Cooke 2012, esp. chapter 1, discussing television’s role in film financing; also Elsaesser 2005.
11. On the representation of TV journalism in German fiction, see Nitsch 2011.
12. See Klimke and Scharloth 2007.
13. As John Durham Peters’s wittily titled “Die Zurücktreibung der Medien in die Geisteswissenschaften” (2010) implies: Kittler’s antihumanism could paradoxically only have had the shock value it did in the German context, where *Medientheorie* had much less contact with the social sciences than in the United States, and where “Geisteswissenschaften” were traditionally more media-blind.
14. The link between television and dissemination (in Derrida’s sense) is a central topic of Dienst’s book, which—like Lorenz Engell’s work—seeks to show how television is “theoretical” without making its theory explicit. This is the reason why Alexander Kluge has asserted that television cannot be “criticized” outside its own form.
15. An interesting possibility would be to see television as one among modern “cultural techniques of synchronization,” as a recent German book has it (Kassung and Macho 2013; Michael Wedel’s chapter, “Risse im ‘Erlebnis-System,’ Tonfilm, Synchronisation, Audiovision um 1930” (309–38) is particularly relevant to TV). This is another way of viewing James Beniger’s “control revolution” (1986), but it also links up with Luhmann’s central notion of the simultaneity of systems.

