

## **Vom Scheitern der kybernetischen Utopie. Die Entwicklung von Überwachung und Informationsverarbeitung im MfS**

**By Christian Booß. Göttingen: Vandenhoeck & Ruprecht, 2021. Pp. 400. Hardback €30.00. ISBN: 978-3525352120.**

## **Mit der Post in die Zukunft. Der Bildschirmtext in der Bundesrepublik Deutschland von 1977 bis 2001**

**By Hagen Schönrich. Leiden and Boston: Brill/Ferdinand Schöningh, 2021. Pp. viii + 348. Hardback €96.00. ISBN: 978-3506760425.**

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In his 2018 monograph on the failed Soviet internet, *How Not to Network a Nation*, media historian Benjamin Peters argues that such histories can “help unsettle, broaden, and deepen our imagination for the possibilities that gave rise to the modern networked media environment” (8). Two recent monographs by German historians on unsuccessful tech ventures in West and East Germany verify Peters’s observation. Christian Booß details the Ministry for State Security’s (MfS) failed effort to achieve a socialist cybernetic utopia in the GDR through increasingly sophisticated data analysis and storage systems, including an electronic information registry. Hagen Schönrich’s study, stemming from his 2019 dissertation at the Technical University in Dresden, centers on the Deutsche Bundespost’s Bildschirmtext, a consumer “teletex” service, charting its inability to attract a widespread usership in the 1980s and 1990s and its eventual demise in 2001. Considering these works together invites a rich comparison between the divergent applications of new digital and media technologies in divided Germany in the waning years of the Cold War and its aftermath. For historians of modern Germany, these works underscore the key debates, tensions, and logistical challenges that accompanied the adoption of networked computers and digital media in the late twentieth century. Both authors also highlight the contemporary debates related to technology and society anticipated in these histories, such as data privacy, net neutrality, telecommunications regulation, content moderation, and surveillance.

Hagen Schönrich’s is the first scholarly monograph devoted to the history of the German Bildschirmtext system (Btx) and an exciting contribution to the burgeoning historiography on the “computerization” of the world (beyond the Silicon Valley). Developed by the Deutsche Bundespost (DBP) and debuted at the International Broadcasting Exhibition in West Berlin in 1977, the Btx was made available for general use in 1983. Based on “videotex” technology (commonly confused with the one-way broadcast-based videotext system that also debuted at the 1977 Broadcasting Exhibition), the Btx originated within the DBP’s in-house research and development team in response to federal efforts in the mid-1970s to bolster the FRG’s telecommunications sector. The result of what historian Völker Schneider dubs the “polygamous marriage between the telephone, computer, and television,”(69) the Btx promised to transform the domestic television set into a two-way media and communication terminal connected to a central computer. The addition of a simple decoder box converted the television’s signal from analog to digital to make it Btx-compatible. Btx users, numbering about 58,000 by 1986, could access sites offering news updates, information on a wide variety of topics, chat and discussion forums, shopping,

tebanking, and, inevitably, erotic content. Despite the range of offerings—and DBP’s sizeable marketing efforts—the Btx never took off as expected, leading commentators in *Computerwoche* magazine to anoint it the “flop of the century” (2). After years of declining usership, the system was abandoned in 2001. Despite its brief lifespan, Schönrich convincingly argues that historians have much to learn about Germany’s “digital turn” and the political debates erupting behind the scenes through this granular study of the Btx’s compact trajectory.

Many of Schönrich’s keenest insights emerge during the lengthy discussion of how the Btx defied existing legal and political frameworks governing the regulation of media and telecommunications in the FRG in the 1970s. The ambiguous nature of the Btx—as a platform for mass media *and* person-to-person communication—prompted uncertainty among state and federal regulators regarding how to administer this novel form of media and telecommunications technology and under whose jurisdiction. (These discussions resemble the contemporary controversy regarding the categorization of U.S.-based internet providers and social media companies as “interactive computer service” providers under Section 230 of the 1996 Communications Decency Act, which shields them from responsibility for third-party content shared on their platforms.) In the FRG, the federal government held a monopoly on the regulation and provision of telecommunications services, while mass media, the press, and cultural matters were consigned to the federal states. Many state officials were eager to establish ground rules for regulating the content on Btx sites as a result of the platform’s media and information-sharing function—particularly since DBP refused to play such a role. From the Btx’s inception, the Bundespost elected to remain neutral regarding the content that appeared on the system, focusing solely on the telecommunications infrastructure. This made state authorities nervous. An eventual compromise left the federal government responsible for administering the Btx as a form of “individual communication” (139). The federal states, in turn, established separate regulatory and oversight frameworks for dealing with Btx sites with “publicly relevant content” (139).

So, what went wrong with the Btx? Schönrich identifies a variety of factors. Some were technical issues related to the DBP’s sole focus on establishing the telecommunications network, leaving the manufacturing of decoder boxes and Btx-compatible televisions to private companies. The lack of availability and affordability of these devices shortly after the 1983 rollout led 1984 to be unofficially dubbed the Year of Waiting. The DBP’s firm stance against any involvement in the regulation of the sites and content on the Btx was another issue. The service was increasingly flooded with personal ads for hook-ups, sex chatrooms, and other adult content that raised concerns about youth protection while making many sites inaccessible to children. As Btx pages proliferated, it also became more difficult to navigate the system. Preceding the 1990s invention of the search engine, the Btx offered users an alphabetized directory of keywords to help them locate their desired content. Soon, however, site builders began adding a series of capital As to the beginning of their page titles in order to appear at the top of the directory. Finally, though access to the Btx eventually moved off the television to the personal computer in the 1990s, the ease of surfing the World Wide Web on free browsers sounded the death knell for paid online services like the Btx as well as AOL and CompuServe in the U.S.

Schönrich’s monograph closely adheres to institutional and governmental sources related to the development, regulation, and marketing of the Btx. For historians of digital media, Schönrich expands our understanding of the early commercial applications of new digital technologies and peer-to-peer communication and the social and political transformations that resulted. The book also draws our attention to a more freewheeling period of digital history that saw the flourishing of a variety of avenues for integrating networked computers into everyday life and democratizing access to information. For non-specialists and general readers, however, this study may feel overly constricted in its framing. Schönrich’s history of the Btx avoids any sustained engagement with the parallel rise of the personal computer market, other online services, and the World Wide Web, or other major flashpoints such

as the end of the Cold War and German reunification. Regardless, Hagen Schönrich's study of the Btx as a "failed innovation" (5) enriches our understanding of this fascinating era of early/proto-internet history.

While Schönrich's study of the rise and fall of the Bildschirmtext resonates with twenty-first-century debates on the regulation of online content and privacy, Christian Booß's book activates a different set of contemporary concerns regarding data collection, surveillance, and the balance between freedom and security. Booß has crafted a meticulous and illuminating study of MfS information collection, storage, and processing systems and their relationship to the Stasi's evolving objectives.

Throughout the book, Booß seeks to draw attention away from the informal collaborators (IMs), the undercover agents, and the notorious catalog of inhumane and often bizarre surveillance and intimidation tactics that pervade the Stasi historiography. (As Booß points out, IMs actually played a minor role within the MfS's much larger information-gathering apparatus.) Instead, Booß suggests we can better understand the Stasi's inner workings by focusing on what they were doing with all the information they collected, and their preoccupation with information "processing" through the labor of data analysts. This makes for a book enmeshed in a dystopian world of paperwork, reports, card directories, punch-card systems, electronic databases, and overworked bureaucrats. Nevertheless, it is a gripping—albeit dense—read.

As the book's title suggests, Booß is also deeply interested in tracking the Stasi's ill-fated embrace of cybernetics as a system for optimizing its information-collection and -processing capacity. Popularized in the U.S. by MIT professor Norbert Wiener in the mid-1940s, cybernetics was initially dismissed in the Soviet Union as a Western pseudoscience. Following Stalin's death, Soviet leaders rapidly warmed to this modern "science of control and communication" (103) and readily identified specific socialist applications for this trademark system of optimization through feedback and control. The East Germans followed suit. In the hands of the MfS, cybernetics offered a scientific process for steering and finetuning party control from top to bottom: harvesting more and better information at the regional level, efficiently organizing information at the central offices in Berlin, and using this information to improve surveillance operations.

While the Stasi's fervent endorsement of cybernetics in the 1960s powered its growing data-collection and -processing capabilities, Booß shows how this was also a major factor behind the rising dysfunction and inefficiency within the MfS in the 1970s. As Booß suggests in the book's title, the effort to cast an ever-expanding surveillance dragnet turned the "cybernetic utopia" into a failed bureaucratic dystopia. Pressures to accelerate information collection and processing buried regional-level MfS personnel under a "flood of paper" (*Papierflut*), including written reports, requests for information, and testimonies from official and unofficial informants. The information glut necessitated the development of increasingly sophisticated methods of storing and searching for personal information with a series of punch-card systems. This required additional human labor, as individual pieces of information gathered in reports needed to be entered on the cards. By the early 1980s, a centralized, electronic information registry was also accessible on some computers. Yet the database's potential relief to the *Papierflut* was offset by Minister for State Security Erich Mielke's distrust of electronic records. He required that all digitized information exist in duplicate form on paper backups.

Among this book's many historiographical interventions is a clear-sighted effort to demonstrate how the MfS's main objectives and information-gathering strategies changed over time. Charting four distinct phases over its forty-year history, Booß reveals a Stasi that shifted from surveillance of outside enemies toward monitoring GDR citizens, performing "preventive" surveillance of larger populations, and prioritizing the scientific management and analysis of ever-increasing amounts of data. Booß is particularly concerned with data collection during the era of "mass investigations" that followed the early 1970s Cold War détente, when more Westerners began to travel to the GDR. The sudden increase of

“Western contacts” inspired an outsized spike in the MfS’s information-collection operations. Simply having a Westerner visit one’s home became sufficient grounds for an individual to be entered into the GDR’s card registry. The rising backlog of data to be processed through the *Zentrale Auswertungs- und Informationsgruppe* (ZAIG), the MfS division responsible for information analysis, hastened the implementation of more sophisticated tools. By the 1980s, individual data points were more differentiated, searchable, and of higher quality, eased by the expanding digitization project and electronic database. As a result, the systematic analysis of data through ZAIG as well as the *Auswertungs- und Kontrollgruppe* (AKG) came to play a dominant role in determining secret police tactics in the 1980s.

Yet the system continued to falter. Why? Booß cites the limited storage capacity on MfS computers, long delays in populating the database with new data, the failure of personnel to integrate information from earlier storage formats and to share data between regional units, as well as a lack of flexibility in establishing new search criteria and characteristics in response to the changing times. Furthermore, the exaggerated fixation on surveillance operations related to Western contacts from the 1970s onwards prevented the Stasi from devoting commensurate resources to other sites of vulnerability, like the nascent political opposition groups that played a significant role in accelerating the GDR’s demise. As a result, Booß concludes: “the history of information processing by the MfS appears to offer a lesson that the collection of ever-increasing information in no way corresponds with the achievement of security goals, in this case the stability of the GDR under the leadership of the SED” (10).

Like Schönrich in his study of the *Bildschirmtext*, Christian Booß is also writing with specialists in mind. The level of detail devoted to the succession of card systems, directories, and information databases stands to greatly illuminate understandings of the inner workings of the MfS and offers fresh insight into the reasons for its surprising level of dysfunction in its final decades. Yet the painstaking detail afforded to the discussion of data storage systems could also be vexing for those looking for the big picture and interested in understanding how the book’s findings fit within the broader history of the Stasi or the history of technology in the GDR. This, perhaps, points toward the need for synthetic histories (particularly English-language works) of Germany’s computerization, to make the knowledge accumulated in works like these two fine monographs more accessible to researchers and readers outside the field of German studies. We can also look forward to future studies exploring points of intersection and divergence between the GDR and the FRG as part of Germany’s idiosyncratic path to digitization, while continuing to attend to the bumps, U-turns, and dead ends along the way.

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## **After Auschwitz: The Difficult Legacies of the GDR**

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One may justly raise an eyebrow when told that questions of memory and commemoration in the German Democratic Republic have been understudied. After all, the period since 1989