

Divided by Politics, United by Play: Computing in East and West Germany during the 1980s

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EXTENDED ABSTRACT

When Germany was divided in 1949, the two parts of the country were set to develop in distinct ways, both economically and culturally. While the West saw steep economic growth resulting in greater individual spending power and widespread access to leisure electronics, the East was more restricted in these aspects due to its link to Soviet command economy and CoCom sanctions (Schmitt et al. 2016; Bösch 2018). To the world, the two countries were placed at a crossroads that would ultimately lead to significant differences in the pathways they would take up to the fall of the Iron Curtain in 1989. This difference strongly manifested itself in the 1980s, marking a pivotal era for computing technology, notably in the advancement of hardware and software, resulting in a government-controlled “technology transfer during the Cold War” (Schmitt 2019, 140), and in the cultural integration of these technologies into everyday life. Despite sharing a common cultural heritage, East and West Germany diverged significantly in their approaches to leisure and creative computing, influenced by their respective political ideologies and economic systems, and even 35 years after the fall of the Iron Curtain, this history has mostly been approached without taking economic structures as defined by political systems into consideration. This paper seeks to provide an understanding of how these differences and similarities shaped the landscape of computing in both states, particularly but not exclusively at the grassroots level. Methodologically, it does so by drawing on recent studies by scholars in the field (e.g. Erdogan 2018; Flury 2023; 2025) combined with archival research and media historiography (especially the Stasi Mediathek and artefacts such as gaming magazines), thus working within a framework of comparative cultural analysis to explore how computing and play functioned as convergent and resistant practices as well as socio-economic markers on either side of the Berlin Wall. In this sense, it complicates Cold War binaries by illustrating how technology and gaming cultures were not simply dictated by top-down policies, but shaped through everyday

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practices, informal economies, and shared desires for digital participation across political divides. It thereby contributes to the broader discourse on technology in divided societies by looking at the political contexts, legal frameworks, hardware, software, and people's engagement with computing in both Germanies in the decade before their reunification.

In the 1980s, West Germany saw rapid growth in the computing sector, spurred by a market-driven economy and a liberal political environment that fostered innovation and entrepreneurship (Bösch 2018; Schmitt 2022, 103–115), yet the country mainly relied on imports. With the advent of leisure electronics in the late 1970s, computers and consoles became a staple in many Western schools and households during the 1980s (Lovejoy and Pajala 2022; Flury 2023), making it easier for people to engage in creative computing practices (e.g. hacking, cracking, demoscene, etc.). In contrast to this, East Germany was shaped by a centrally planned economy and strict government control (Collier 1989; Stahnke 1989; Schmitt 2022, 87–103), further restricted by CoCom sanctions which prohibited Western countries from exporting computing technology to Eastern Bloc countries. The GDR's political context, characterised by surveillance and censorship, significantly influenced the development, production, and private use of computing technology (Jarmoszko, Geipel, and Goodman 1989; Flury 2025), having effects on people's engagement with computers long after the fall of the Iron Curtain. These developments resulted in individuals, communities, and cultures of creative computing, yet due to contrasting economic and technological frameworks, practices differed between both countries. The aim of this paper is to look at computing in East and West Germany from a diachronic and a synchronic perspective by considering various associated aspects: (1) the politics and (economic) policies of computing in both countries (Gießler 2018; Bergien 2019); (2) computing hardware used, produced or obtained, and what it meant in terms of spending power (Jarmoszko, Geipel, and Goodman 1989; Bösch 2018); (3) software used, accessed, created, and shared; and (4) the social aspects of computing, e.g. collaborative playing, teaching, and learning in computer clubs and schools as well as the social signalling of hacker and cracker cultures (Alberts and Oldenziel 2014; Albert 2016a; 2016b; 2020; Erdogan 2018, 61–94; 2021; Webb 2020, 1–4, 13–21; Uhl 2022, 189–206).

This chapter therefore wants to provide a nuanced understanding of how two ideologically opposed yet strongly related states navigated the digital revolution individually, socially, politically, and technologically. The comparison highlights the resilience and creativity of individuals in both regions, emphasising the importance of considering local contexts when examining the history of computing (Swallwell 2021), as global trends often manifest differently across distinct political and cultural landscapes.

REFERENCES

- Albert, G. J. 2016a. "Computerkids als mimetische Unternehmer: Die Cracker-Szene zwischen Subkultur und Ökonomie (1985–1995)." *Werkstatt Geschichte* 74: 49–66.
- Albert, G. J. 2016b. "'Mikro-Clochards' im Kaufhaus: Die Entdeckung der Computerkids in der Bundesrepublik." *Nach Feierabend* 12: 63–78.

- Albert, G. J. 2020. "New Scenes, New Markets: The Global Expansion of the Cracking Scene, Late 1980s to Early 1990s." *WiderScreen* 2/3, June 18. Available at <http://widerscreen.fi/numerot/2020-2-3/new-scenes-new-markets-the-global-expansion-of-the-cracking-scene-late-1980s-to-early-1990s/>, accessed 14 January 2025.
- Albert, G. J., and Erdogan, J. G. 2022. "Zwischen Staat und Markt: Computer-Subkulturen in Ost und West." *Bundeszentrale für politische Bildung*, March 17. Available at <https://www.bpb.de/themen/deutschlandarchiv/506278/zwischen-staat-und-markt/#footnote-target-19>, accessed September 25, 2024.
- Alberts, G., and Oldenziel, R. 2014. *Hacking Europe: From Computer Culture to Demoscenes*. New York, US: Springer.
- Bergien, R. 2019. "Programmieren mit dem Klassenfeind: Die Stasi, Siemens und der Transfer von EDV-Wissen im Kalten Krieg." *Vierteljahreshefte für Zeitgeschichte*. 67 (1): 1–30. <https://doi.org/10.1515/vfzg-2019-0001>
- Bösch, F., ed. 2018. *Wege in die digitale Gesellschaft: Computernutzung in der Bundesrepublik 1955–1990*. Göttingen, Germany: Wallstein Verlag.
- Collier, I. L. 1989. "Cost-Cutting and Macroeconomic Adjustment: The GDR in the 1980's." *Pressures for Reform in the Eastern European Economies*. 2: 256–290. Study Papers Submitted to the Joint Economic Committee Congress of the United States, October 27, 1989. Washington, USA: U.S. Government Printing Office.
- Erdogan, J. G. 2018. "Computerkids, Freaks, Hacker: Deutsche Hackerkulturen in internationaler Perspektive." In *Let's Historize it! Jugendmedien im 19. und 20. Jahrhundert*, edited by C. Zimmermann and A. Maldener, 61–94. Köln, Germany: Böhlau.
- Erdogan, J. G. 2021. *Avantgarde der Computernutzung: Hackerkulturen der Bundesrepublik und der DDR*. Göttingen, Germany: Wallstein Verlag.
- Flury, C. 2023. "Joining Forces: The Promotion of Public-Private Partnerships to Bring Computers into West German Schools in the 1980s." In *How Computers Entered the Classroom, 1960–2000*, edited by C. Flury and M. Geiss, 123–146. Berlin, Germany: de Gruyter Oldenbourg.
- Flury, C. 2025. *Counting on Computers: New Information Technologies and Curricular Change in East Germany, 1960s to 1990*. Berlin, Germany: De Gruyter Oldenbourg.
- Gießler, D. 2018. "The Stasi Played Along: Video Games in East Germany." *Zeit Online*, November 21. Available at <https://www.zeit.de/digital/games/2018-11/computer-games-gdr-stasi-surveillance-gamer-crowd>, accessed August 7, 2024.
- Jarmoszko, A. T., Geipel, G. L., and Goodman, S. E. 1989. "Computing Technologies in Eastern Europe: The Impact of Reform." *Pressures for Reform in the Eastern European Economies*, vol. 2, 576–600. Study Papers Submitted to the Joint Economic Committee Congress of the United States, October 27, 1989. Washington, USA: U.S. Government Printing Office.
- Lovejoy, A., and Pajala, M., eds. 2022. *Remapping Cold War Media: Institutions, Infrastructure, Translations*. Bloomington, USA: Indiana University Press.

- Schmitt, M. 2019. "Socialist Life of a U.S. Army Computer in the GDR's Financial Sector: Import of Western Information Technology into Eastern Europe." *Histories of Computing in Eastern Europe*, edited by C. Leslie and M. Schmitt, 139–164. Proceedings of the IFIP World Computer Congress, Poznań, Poland, September 19–21, 2018. Cham, Switzerland: Springer.
- Schmitt, M. 2022. "Banking the Future of Banking: Savings and the Digital Age in East and West Germany." In *Prophets of Computing: Visions of Society Transformed by Computing*, edited by D. van Lente, 87–116. Association for Computing Machinery.
- Schmitt, M., Erdogan, J., Kasper, T., and Funke, J. 2016. "Digitalgeschichte Deutschlands: Ein Forschungsbericht." *Technikgeschichte*. 83 (1): 33–70.
- Stahnke, A. A. 1989. "The GDR Economy and the Question of Reform." *Pressures for Reform in the Eastern European Economies*, vol. 2, 242–255. Study Papers Submitted to the Joint Economic Committee Congress of the United States, October 27, 1989. Washington, USA: U.S. Government Printing Office.
- Swallwell, M. 2021. "Heterodoxy in Game History: Towards More 'Connected Histories.'" In *Game History and the Local*, edited by M. Swallwell, 221–233. Cham, Switzerland: Springer.
- Uhl, K. 2022. *Technology in Modern German History: 1800 to the Present*. London, UK: Bloomsbury.
- Webb, M. 2020. *Coding Democracy: How Hackers are Disrupting Power, Surveillance, and Authoritarianism*. Cambridge (MA), USA: MIT Press.