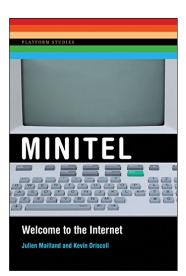Julien Mailland and Kevin Driscoll, **Minitel: Welcome to the Internet**, Cambridge, MA: MIT Press, 2017, 240 pp., $32.45 (hardcover), $28.00 (paperback).

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In ***Minitel: Welcome to the Internet,*** authors Julien Mailland and Kevin Driscoll introduce the Minitel platform to an English-speaking, scholarly audience. The authors provide a wide-ranging overview of the development and use of the platform, adding to the small but diverse body of literature that examines *Le Minitel*, the videotex system developed by French state edict in 1978. The edict aimed to update the nation's defunct telecommunications system and provide a cutting-edge computational, economic, and cultural platform to its citizens. Minitel would remain active for more than 30 years, until, with little ongoing use but much nostalgic fanfare, it was finally powered off in 2012.

Minitel offers a powerful case study through which to think about the ways nationalized governance and national identity may impact the evolution of technology, as Minitel was highly centralized within the French state. Mailland and Driscoll explore the ways that Minitel gained traction through unique partnerships between the state and the private sector, as well as the ways that its implementation and use were influenced by cultural contexts. Juxtaposed against the comparatively well-known evolution and "success" of the Internet in the United States, *Minitel* questions the dominant historical legacy of Minitel as a technological failure, arguing instead that its 30-year existence and subsequent shut-down was instead an example of the cyclical nature of technology "in the ongoing process of media change" (p. 153).

Minitel: Welcome to the Internet offers a comprehensive look at the system, providing a foundation for scholars to formally engage with this early and important digital system and a starting point for those who want to investigate the technical, political, economic, and cultural aspects of the platform in greater depth. The broad nature of the analysis, however, may come at the expense of deeper inquiries into specific social, cultural, political and technical questions that are briefly introduced. To this end, we touch on two avenues for expansion—digital historiography and gender—in this review.

Book Summary

The book, as a whole, is well-suited for those studying the emergence of different media technologies. Sections can also stand alone and can be used to engage a variety of audiences, from those looking to learn more about media policy (chapters 3 and 4), to those interested in the technical evolution of the Minitel platform (chapter 2), to those interested in the persistence of bygone technologies in collective memory (chapters 4 and 5).

In the first chapter, "A Tale of Two Parties," Mailland and Driscoll sketch their main arguments and methodological approach to studying Minitel. They introduce the overarching contribution of the book as "offering a unique model for thinking about the design and regulation of platforms, and their resulting place in society" (p. 7), situating it in conversation with other publications in MIT Press's *Platform Studies* series. On a more granular level, the authors position their reading of Minitel against dominant, international narratives that depict the platform as failing under strict state control (p. 14).

In chapter 2, "Disaggregating the Minitel Platform," Mailland and Driscoll examine the three main components of the Minitel platform: terminals, servers, and network infrastructure. Outlining the components of the Minitel, the reader is introduced to the variety of physical and digital structures that comprised the system beyond the original description of "a keyboard + a screen + a modem" (p. 30). Overall, the authors argue that the Télétel project, alongside the PAVI (*Point d'Accès Vidéotexte*), were the technical drivers though which the goal of modernizing French telecommunications could be realized.

In chapter 3 ("Embedding Culture in Architecture") and chapter 4 ("Not End to End, but Open"), the authors highlight the role of French political ideology in centralizing the management of the Minitel network. While there was interplay between civil society, economic, and technical actors, "the State remained at the center as a micromanager of social relations" (p. 68). This led to successes and pitfalls in the deployment and development of Minitel.

The authors go on to contest the characterization of Minitel as a centralized state initiative, differentiating it from other projects, such as the Internet, that arose in the United States. They also argue that the public-private partnerships underlying Minitel's development were similar to the partnerships that drove the development of the United States' Internet. What set Minitel apart was its "hybrid architecture." This allowed for the simultaneous centralization of power in state operators alongside users and service providers' ability to experiment with the network, enabling its growth and development beyond the original ideas of the state.

Chapter 5 ("The Booming Minitel Private Enterprise") and chapter 6 ("On the Fringe") address the economic, cultural, and social histories of the platform. Chapter 5 outlines the economies built out by third parties in the private sector, drawing on the business of *messageries* of Minitel rose, the widely-advertised titillating chat rooms. It is here that the authors draw linkages between Minitel features, like Minitel Artificial Intelligence and Billetel, and third-party businesses and services that one might otherwise assume emerged for the first time on the Web, like Ask Jeeves or Ticketmaster. Chapter 6 makes an argument for Minitel's interpretive flexibility. In other words, the engineers, designers, bureaucrats, and even private enterprises did not themselves envision the full range of uses that the platform eventually supported. Rather, limited "fringe" uses also arose, as Minitel, for instance, was used in French protest movements.

Historiography in the Digital Age

Among the infrastructural, cultural, and economic analyses in *Minitel*, a historiographical question also emerges: how should historians work with a technological object that offers little record of its own past? As the authors note, the Minitel system offered no data storage mechanism of its own; the primary way that

minitelistes saved information from the network was by printing it out (p. 39). And unlike the Web, whose shifting online records have been partially saved by organizations like the Internet Archive, Minitel has had no comprehensive historical steward. Mailland and Driscoll note that challenges like these are common to media historians, whose records may be both technologically ephemeral and undervalued as cultural objects at the time of their creation (p. 18). The authors work through these social and technical limitations by drawing on a variety of paratextual and interview-based sources, including advertisements, directories, oral histories (primarily with engineers), newspapers, and system documentation, along with the hardware of Minitel itself (pp. 17–21).

All historical narratives have silences, and *Minitel* offers a way to think through the silences that are constructed when media history turns its attention to interactive digital platforms, especially ones that have closed down. Because of Minitel's lack of storage infrastructure, there is scant documentation of the on-screen user experience. Perhaps because of this, there are few images of active Minitel screens in the book; and despite Minitel's seemingly wide-reach into the French populace, there is comparatively little discussion of the user experience of the Minitel system outside of the *messageries* rose, which were the subject of more widespread media attention. *Minitel* thus offers a case study for critical historians and archival scholars to think further about the ways that digital media history's silences are themselves sociotechnical in nature.

Gender and Labor on the Platform

Questions of gender and gendered labor also lurk underneath the primarily technopolitical analyses that comprise *Minitel*. The role of sex work, both virtual, on the *messageries*, and physically, in the use of Minitel rose by sex workers to solicit clients, is a central part of Mailland and Driscoll's discussion of the emergence of private enterprises on the platform. For instance, the authors describe the mixed feelings *animatrices* had about their work in the *messageries*; note the increasingly hostile environment in which these workers toiled as the demand for their services increased with the proliferation of Minitel connections; and show how it was young men who often worked as animatrices*,* though these workers were typically marketed as being young women. Despite the inclusion of these descriptive elements, the section may have been richer with theoretical or historical analysis of gender and gendered labor on the platform.

Indeed, emerging work in the history of technology demonstrates the vitality of incorporating bigger questions about gender from the outset (Abbate, 2012; Hicks, 2017). These theoretical inclusions may be especially important when sex work is a major aspect of a platform's cultural legacy, as it is with Minitel. *Minitel* thus could be used as a foundational text from which research focused on gender and gendered labor can emerge. One might look, for instance, to the recent research of Jeffrey Nagy (2018), who is writing specifically on gender and Minitel rose. To this end, Mailland and Driscoll's *Minitel* allows for the emergence of new avenues of research, giving greater depth to the histories of recent technology.

References

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