4 The Licit and Illicit Nature of Mass Digitization

Introduction: Lurking in the Shadows

A friend has just recommended an academic book to you, and now you are dying to read it. But you know that it is both expensive and hard to get your hands on. You head down to your library to request the book, but you soon realize that the wait list is enormous and that you will not be able to get your hands on the book for a couple of weeks. Desperate, you turn to your friend for help. She asks, "Why don't you just go to a pirate library?" and provides you with a link. A new world opens up. Twenty minutes later you have downloaded 30 books that you felt were indispensable to your bookshelf. You didn't pay a thing. You know what you did was illegal. Yet you also felt strangely justified in your actions, not least spurred on by the enthusiastic words on the shadow library's front page, which sets forth a comforting moral compass. You begin thinking to yourself: "Why are pirate libraries deemed more illegal than Google's controversial scanning project?" and "What are the moral implications of my actions vis-à-vis the colonial framework that currently dictates Europeana's copyright policies?"

The existence of what this book terms shadow libraries raises difficult questions, not only to your own moral compass but also to the field of mass digitization. Political and popular discourses often reduce the complexity of these questions to "right" and "wrong" and Hollywood narratives of pirates and avengers. Yet, this chapter wishes to explore the deeper infrapolitical implications of shadow libraries, setting out the argument that shadow libraries offer us a productive framework for examining the highly complex legal landscape of mass digitization. Rather than writing a chapter that either supports or counters shadow libraries, the chapter seeks

to chart the complexity of the phenomenon and tease out its relevance for mass digitization by framing it within what we might call an infrapolitics of parasitism.

In *The Parasite*, a strange and fabulating book that brings together information theory and cybernetics, physics, philosophy, economy, biology, politics, and folk tales, French philosopher Michel Serres constructs an argument about the conceptual figure of the parasite to explore the parasitic nature of social relations. In a dizzying array of images and thought-constructs, Serres argues against the idea of a balanced exchange of energy, suggesting instead that our world is characterized by one parasite stealing energy by feeding on another organism. For this purpose he reminds us of the three meanings of parasite in the French language. In French, the term parasite has three distinct, but related meanings. The first relates to one organism feeding off another and giving nothing in return. Second, it refers to the social concept of the freeloader, who lives off society without giving anything in return. Both of these meanings are fairly familiar to most, and lay the groundwork for our annoyance with both bugs and spongers. The third meaning, however, is less known in most languages except French: here the parasite is static noise or interference in a channel, interrupting the seemingly balanced flow of things, mediating and thus transforming relations. Indeed, for Serres, the parasite is itself a disruptive relation (rather than entity). The parasite can also change positions of sender, receiver, and noise, making it exceedingly difficult to discern parasite from nonparasite; indeed, to such an extent that Serres himself exclaims "I no longer really know how to say it: the parasite parasites the parasites."[1] Serres thus uses his parasitic model to make a claim about the nature of cybernetic technologies and the flow of information, arguing that "cybernetics gets more and more complicated, makes a chain, then a network. Yet it is founded on the theft of information, quite a simple thing."[2] The logic of the parasite, Serres argues, is the logic of the interrupter, the "excluded third" or "uninvited guest" who intercepts and confuses relations in a process of theft that has a value both of destruction and a value of construction. The parasite is thus a generative force, inventing, affecting, and transforming relations. Hence, parasitism refers not only to an act of interference but also to an interruption that "invents something new."[3]

Michel Serres's then-radical philosophy of the parasite is today echoed by a broader recognition of the parasite as not only a dangerous entity, but

also a necessary mediator. Indeed, as Jeanette Samyn notes, we are today witnessing a "pro-parasitic" movement in science in which "scientists have begun to consider parasites and other pathogens not simply as problems but as integral components of ecosystems."[4] In this new view, "… the parasite takes from its host without ever taking its place; it creates new room, feeding off excess, sometimes killing, but often strengthening its milieu." In the following sections, the lens of the parasite will help us explore the murky waters of shadow libraries, not (only) as entities, but also as relational phenomena. The point is to show how shadow libraries belong to the same infrapolitical ecosystem as Google Books and Europeana, sometimes threatening them, but often also strengthening them. Moreover, it seeks to show how visitors' interactions with shadow libraries are also marked by parasitical relations with Google, which often mediates literature searches, thus entangling Google and shadow libraries in a parasitical relationship where one feeds off the other and vice versa.

Despite these entangled relations, the mass digitization strategies of shadow libraries, Europeana, and Google Books differ significantly. Basically, we might say that Google Books and Europeana each represent different strategies for making material available on an industrial scale while maintaining claims to legality. The sprawling and rapidly growing group of mass digitization projects interchangeably termed shadow libraries represents a third set of strategies. Shadow libraries[5] share affinities with Europeana and Google Books in the sense that they offer many of the same services: instant access to a wealth of cultural works spanning journal articles, monographs, and textbooks among others. Yet, while Google Books and Europeana promote visibility to increase traffic, embed themselves in formal systems of communication, and operate within the legal frameworks of public funding and private contracting, shadow libraries in contrast operate in the shadows of formal visibility and regulatory systems. Hence, while formal mass digitization projects such as Google Books and Europeana publicly proclaim their desire to digitize the world's cultural memory, another layer of people, scattered across the globe and belonging to very diverse environments, harbor the same aspirations, but in much more subtle terms. Most of these people express an interest in the written word, a moral conviction of free access, and a political view on existing copyright regulations as unjust and/or untimely. Some also express their fascination with the new wonders of technology and their new infrastructural possibilities. Others

merely wish to practice forms of access that their finances, political regime, or geography otherwise prohibit them from doing. And all of them are important nodes in a new shadowy infrastructural system that provides free access worldwide to books and articles on a scale that collectively far surpasses both Google and Europeana.

Because of their illicit nature, most analyses of shadowy libraries have centered on their legal transgressions. Yet, their cultural trajectories contain nuances that far exceed legal binaries. Approaching shadow libraries through the lens of infrapolitics is helpful for bringing forth these much more complex cultural mass digitization systems. This chapter explores three examples of shadow libraries, focusing in particular on their stories of origin, their cultural economies, and their sociotechnical infrastructures. Not all shadow libraries fit perfectly into the category of mass digitization. Some of them are smaller in size, more selective, and less industrial. Nevertheless, I include them because their open access strategies allow for unlimited downloads. Thus, shadow libraries, while perhaps selective in size themselves, offer the opportunity to reproduce works at a massive and distributed scale. As such, they are the perfect example of a mass digitization assemblage.

The first case centers on lib.ru, an early Russia-based file-sharing platform for exchanging books that today has grown into a massive and distributed file-sharing project. It is primarily run by individuals, but it has also received public funding, which shows that what at first glance appears as a simple case of piracy simultaneously serves as a much more complex infrapolitical structure. The second case, Monoskop, distinguishes itself by its boutique approach to digitization. Monoskop too is characterized by its territorial trajectory, rooted in Bratislava's digital scene as an attempt to establish an intellectual platform for the study of avant-garde (digital) cultures that could connect its Bratislava-based creators to a global scene. Finally, the chapter looks at UbuWeb, a shadow library dedicated to avant-garde cultural works ranging from text and audio to images and film. Founded in 1996 as a US-based noncommercial file-sharing site by poet Kenneth Goldsmith in response to the marginal distribution of crucial avant-garde material, UbuWeb today offers a wealth of avant-garde sound art, video, and textual works.

As the case studies show, shadow libraries have become significant mass digitization infrastructures that offer the user free access to academic articles

and books, often by means of illegal file-sharing. They are informal and unstable networks that rely on active user participation across a wide spectrum, from deeply embedded people who have established file-sharing sites to the everyday user occasionally sending the odd book or article to a friend or colleague. As Lars Eckstein notes, most shadow libraries are characterized not only by their informal character, but also by the speed with which they operate, providing "a velocity of media content" which challenges legal attacks and other forms of countermeasures.[6] Moreover, shadow libraries also often operate in a much more widely distributed fashion than both Europeana and Google, distributing and mirroring content across multiple servers, and distributing labor and responsibility in a system that is on the one hand more robust, more redundant, and more resistant to any single point of failure or control, and on the other hand more ephemeral, without a central point of back-up. Indeed, some forms of shadow libraries exist entirely without a center, instead operating infrastructurally along communication channels in social media; for example, the use of the Twitter hashtag #ICanHazPDF to help pirate scientific papers.

Today, shadow libraries exist as timely reminders of the infrapolitical nature of mass digitization. They appear as hypertrophied versions of the access provided by Google Books and Europeana. More fundamentally, they also exist as political symptoms of the ideologies of the digital, characterized by ideals of velocity and connectivity. As such, we might say that although shadow libraries often position themselves as subversives, in many ways they also belong to the same storyline as other mass digitization projects such as Google Books and Europeana. Significantly, then, shadow libraries are infrapolitical in two senses: first, they have become central infrastructural elements in what James C. Scott calls the "infrapolitics of subordinate groups," providing everyday resistance by creating entrance points to hitherto-excluded knowledge zones.[7] Second, they represent and produce the infrapolitics of the digital *tout court* with their ideals of real-time, globalized, and unhindered access.

Lib.ru

Lib.ru is one of the earliest known digital shadow libraries. It was established by the Russian computer science professor Maxim Moshkov, who complemented his academic practice of programming with a personal

hobby of file-sharing on the so-called RuNet, the Russian-language segment of the Internet.[8] Moshkov's collection had begun as an e-book swapping practice in 1990, but in 1994 he uploaded the material to his institute's web server where he then divided the site into several section such as "my hobbies," "my work," and "my library."[9] If lib.ru began as a private project, however, the role of Moshkov's library soon changed as it quickly became Russia's preferred shadow library, with users playing an active role in its expansion by constantly adding new digitized books. Users would continually scan and submit new texts, while Moshkov, in his own words, worked as a "receptionist" receiving and handling the material.[10]

Shadow libraries such as Moshkov's were most likely born not only out of a love of books, but also out of frustration with Russia's lack of access to up-to-date and affordable Western works.[11] As they continued to grow and gain in popularity, shadow libraries thus became not only points of access, but also signs of infrastructural failure in the formal library system.[12] After lib.ru outgrew its initial server storage at Moshkov's institute, Moshkov divided it into smaller segments that were then distributed, leaving only the Russian literary classics on the original site.[13] Neighboring sites hosted other genres, ranging from user-generated texts and fan fiction on a shadow site called samizdat.lib.ru to academic books in a shadow library titled Kolkhoz, named after the commons-based agricultural cooperative of the early Soviet era and curated and managed by "amateur librarians."[14] The steadily accumulating numbers of added works, digital distributors, and online access points expanded not only the range of the shadow collections, but also their networked affordances. Lib.ru and its offshoots thus grew into an influential node in the global mass digitization landscape, attracting both political and legal attention.

Lib.ru and the Law

Until 2004, lib.ru deployed a practice of handling copyright complaints by simply removing works at the first request from the authors.[15] But in 2004 the library received its first significant copyright claim from the big Russian publisher Kirill i Mefody (KM). KM requested that Moshkov remove access to a long list of books, claiming exclusive Internet rights on the books, along with works that were considered public domain. Moshkov refused to honor the request, and a lawsuit ensued. The Ostankino Court of Moscow initially denied the lawsuit because the contracts for exclusive Internet

rights were considered invalid. This did not deter KM, however, which then approached the case from a different perspective, filing applications on behalf of well-known Russian authors, including the crime author Alexandra Marinina and the science fiction writer Eduard Gevorkyan. In the end, only Eduard Gevorkyan maintained his claim, which was of the considerable size of one million rubles.[16]

During the trial, Moshkov's library received widespread support from both technologists and users of lib.ru, expressed, for example, in a manifesto signed by the International Union of Internet Professionals, which among other things touched upon the importance of online access not only to cultural works but also to the Russian language and culture:

> Online libraries are an exceptionally large intellectual fund. They lessen the effect of so-called "brain drain," permitting people to stay in the orbit of Russian language and culture. Without online libraries, the useful effect of the Internet and computers in Russian education system is sharply lowered. A huge, openly available mass of Russian literary texts is a foundation permitting further development of Russian-language culture, worldwide.[17]

Emphasizing that Moshkov often had an agreement with the authors he put online, the manifesto also called for a more stable model of online public libraries, noting that "A wide list of authors who explicitly permitted placing their works in the lib.ru library speaks volumes about the practicality of the scheme used by Maxim Moshkov. However, the litigation underway shows its incompleteness and weak spots."[18] Significantly, Moshkov's shadow library also received both moral and financial support from the state, more specifically in the form of funding of one million rubles granted by the Federal Agency for the Press and Mass Media. The funding came with the following statement from the Agency's chairman, Mikhail Seslavinsky: "Following the lively discussion on how copyright could be protected in electronic libraries, we have decided not to wait for a final decision and to support the central library of RuNet—Maxim Moshkov's site."[19] Seslavinsky's support not only reflected the public's support of the digital library, but also his own deep-seated interests as a self-confessed bibliophile, council chair of the Russian organization National Union of Bibliophiles since 2011, and author of numerous books on bibliology and bibliophilia. Additionally, the support also reflected the issues at stake for the Russian legislative framework on copyright. The framework had just passed a second reading of a revised law "On Copyright and

Related Rights" in the Russian parliament on April 21, 2004, extending copyright from 50 years after an author's death to 70 years, in accordance with international law and as a condition of Russia's entry into the World Trade Organization.[20]

The public funding, Moshkov stated, was spent on modernizing the technical equipment for the shadow library, including upgrading servers and performing OCR scanning on select texts.[21] Yet, despite the widespread support, Moshkov lost the copyright case to KM on May 31, 2005. The defeat was limited, however. Indeed, one might even read the verdict as a symbolic victory for Moshkov, as the court fined Moshkov only 30,000 rubles, a fragment of what KM had originally sued for. The verdict did have significant consequences for how Moshkov manages lib.ru, however. After the trial, Moshkov began extending his classical literature section and stopped uploading books sent by readers into his collection, unless they were from authors who submitted them because they wished to publish in digital form.

What can we glean from the story of lib.ru about the infrapolitics of mass digitization? First, the story of lib.ru illustrates the complex and contingent historical trajectory of shadow libraries. Second, as the next section shows, it offers us the possibility of approaching shadow libraries from an infrastructural perspective, and exploring the infrapolitical dimensions of shadow libraries in the area of tension between resistance and standardization.

The Infrapolitics of Lib.ru: Infrastructures of Culture and Dissent

While global in reach, lib.ru is first and foremost a profoundly territorialized project. It was born out of a set of political, economic, and aesthetic conditions specific to Russia and carries the characteristics of its cultural trajectory. First, the private governance of lib.ru, initially embodied by Moshkov, echoes the general development of the Internet in Russia from 1991 to 1998, which was constructed mainly by private economic and cultural initiatives at a time when the state was in a period of heavy transition. Lib.ru's minimalist programming style also made it a cultural symbol of the early RuNet, acting as a marker of cultural identity for Russian Internet users at home and abroad.[22]

The infrapolitics of lib.ru also carry the traits of the media politics of Russia, which has historically been split into two: a political and visible

level of access to cultural works (through propaganda), and an infrapolitical invisible level of contestation and resistance, enabling Russian media consumers to act independently from official institutionalized media channels. Indeed, some scholars tie the practice of shadow libraries to the Soviet Union's analog shadow activities, which are often termed *samizdat*, that is, illegal cultural distribution, including illegally listening to Western radio, illegally trafficking Western music, and illegally watching Western films.[23] Despite often circulating Western pop culture, the late-Soviet era samizdat practices were often framed as noncapitalist practices of dissent without profit motives.[24] The dissent, however, was not necessarily explicitly expressed. Lacking the defining fervor of a clear political ideology, and offering no initiatives to overthrow the Soviet regime, samizdat was rather a mode of dissent that evaded centralized ideological control. Indeed, as Aleksei Yurchak notes, samizdat practices could even be read as a mode of "suspending the political," thus "avoiding the political concerns that had a binary logic determined by the sovereign state" to demonstrate "to themselves and to others that there were subjects, collectivities, forms of life, and physical and symbolic spaces in the Soviet context that, without being overtly oppositional or even political, exceeded that state's abilities to define, control, and understand them."[25] Yurchak thus reminds us that even though samizdat was practiced as a form of nonpolitical practice, it nevertheless inherently had significant political implications.

The infrapolitics of samizdat not only referred to a specific social practice but were also, as Ann Komaromi reminds us, a particular discourse network rooted in the technology of the typewriter: "Because so many people had their own typewriters, the production of samizdat was more individual and typically less linked to ideology and organized political structures. … The circulation of Samizdat was more rhizomatic and spontaneous than the underground press—samizdat was like mushroom 'spores.'"[26] The technopolitical infrastructure of samizdat changed, however, with the fall of the Berlin Wall in 1989, the further decentralization of the Russian media landscape, and the emergence of digitization. Now, new nodes emerged in the Russian information landscape, and there was no centralized authority to regulate them. Moreover, the transmission of the Western capitalist system gave rise to new types of shadow activity that produced items instead of just sharing items, adding a new consumerist dimension to shadow libraries. Indeed, as Kuznetsov notes, the late-Soviet samizdat created a

dynamic textual space that aligned with more general tendencies in mass digitization where users were "both readers and librarians, in contrast to a traditional library with its order, selection, and strict catalogisation."[27]

If many of the new shadow libraries that emerged in the 1990s and 2000s were inspired by the infrapolitics of samizdat, then, they also became embedded in an infrastructural apparatus that was deeply nested within a market economy. Indeed, new digital libraries emerged under such names as Aldebaran, Fictionbook, Litportal, Bookz.ru, and Fanzin, which developed new platforms for the distribution of electronic books under the label "Liters," offering texts to be read free of charge on a computer screen or downloaded at a cost.[28] In both cases, the authors receive a fee, either from the price of the book or from the site's advertising income. Accompanying these new commercial initiatives, a concomitant movement rallied together in the form of Librusek, a platform hosted on a server in Ecuador that offered its users the possibility of uploading works on a distributed basis.[29] In contrast to Moshkov's centralized control, then, the library's operator Ilya Larin adhered to the international piracy movement, calling his site a pirate library and gracing Librusek's website with a small animated pirate, complete with sabre and parrot.

The integration and proliferation of samizdat practices into a complex capitalist framework produced new global readings of the infrapolitics of shadow libraries. Rather than reading shadow libraries as examples of late-socialist infrapolitics, scholars also framed them as capitalist symptoms of "market failure," that is, the failure of the market to meet consumer demands.[30] One prominent example of such a reading was the influential Social Science Research Council report edited by Joe Karaganis in 2006, titled "Media Piracy in Emerging Economies," which noted that cultural piracy appears most notably as "a failure to provide affordable access to media in legal markets" and concluded that within the context of developing countries "the pirate market cannot be said to compete with legal sales or generate losses for industry. At the low end of the socioeconomic ladder where such distribution gaps are common, piracy often simply is the market."[31]

In the Western world, Karaganis's reading was a progressive response to the otherwise traditional approach to media piracy as a legal failure, which argued that tougher laws and increased enforcement are needed to stem infringing activity. Yet, this book argues that Karaganis's report, and

the approach it represents, also frames the infrapolitics of shadow libraries within a consumerist framework that excises the noncommercial infrapolitics of samizdat from the picture. The increasing integration of Russian media infrapolitics into Western apparatuses, and the reframing of shadow libraries from samizdat practices of political dissent to market failure, situates the infrapolitics of shadow libraries within a consumerist dispositive and the individual participants as consumers. As some critical voices suggest, this has an impact on the political potential of shadow libraries because they—in contrast to samizdat—actually correspond "perfectly to the industrial production proper to the legal cultural market production."[32] Yet, as the final section in this chapter shows, one also risks missing the rich nuances of infrapolitics by conflating consumerist infrastructures with consumerist practice.[33]

The political stakes of shadow libraries such as lib.ru illustrate the difficulties in labeling shadow libraries in political terms, since they are driven neither by pure globalized dissent nor by pure globalized and commodified infrastructures. Rather, they straddle these binaries as infrapolitical entities, the political dynamics of which align both with standardization and dissent. Revisiting once more the theoretical debate, the case of lib.ru shows that shadow libraries may certainly be global phenomena, yet one should be careful with disregarding the specific cultural-political trajectories that shape each individual shadow library. Lib.ru demonstrates how the infrapolitics of shadow libraries emerge as infrastructural expressions of the convergence between historical sovereign trajectories, global information infrastructures, and public-private governance structures. Shadow libraries are not just globalized projects that exist in parallel to sovereign state structures and global economic flows. Instead, they are entangled in territorial public-private governance practices that produce their own late-sovereign infrapolitics, which, paradoxically, are embedded in larger mass digitization problematics, both on their own territory and on the global scene.

Monoskop

In contrast to the broad and distributed infrastructure of lib.ru, other shadow libraries have emerged as specialized platforms that cater to a specific community and encourage a specific practice. Monoskop is one such

shadow library. Like lib.ru, Monoskop started as a one-man project and in many respects still reflects its creator, Dušan Barok, who is an artist, writer, and cultural activist involved in critical practices in the fields of software, art, and theory. Prior to Monoskop, his activities were mainly focused on the Bratislava cultural media scene, and Monoskop was among other things set up as an infrastructural project, one that would not only offer content but also function as a form of connectivity that could expand the networked powers of the practices of which Barok was a part.[34] In particular, Barok was interested in researching the history of media art so that he could frame the avant-garde media practices in which he engaged in Bratislava within a wider historical context and thus lend them legitimacy.

The Shadow Library as a Legal Stratagem

Monoskop was partly motivated by Barok's own experiences of being barred from works he deemed of significance to the field in which he was interested. As he notes, the main impetus to start a blog "came from a friend who had access to PDFs of books I wanted to read but could not afford go buy as they were not available in public libraries."[35] Barok thus began to work on Monoskop with a group of friends in Bratislava, initially hiding it from search engine bots to create a form of invisibility that obfuscated its existence without, however, preventing people from finding the Log and uploading new works. Information about the Log was distributed through mailing lists on Internet culture, among many other posts on e-book torrent trackers, DC++ networks, extensive repositories such as LibGen and Aaaaarg, cloud directories, document-sharing platforms such as Issuu and Scribd, and digital libraries such as the Internet Archive and Project Gutenberg.[36] The shadow library of Monoskop thus slowly began to emerge, partly through Barok's own efforts at navigating email lists and downloading material, and partly through people approaching Monoskop directly, sending it links to online or scanned material and even offering it entire e-book libraries. Rather than posting these "donated" libraries in their entirety, however, Barok and his colleagues edited the received collection and materials so that they would fit Monoskop's scope, and they also kept scanning material themselves.

Today Monoskop hosts thematically curated collections of downloadable books on art, culture, media studies, and other topics, partly in order to stimulate "collaborative studies of the arts, media, and humanities."[37]

Indeed, Monoskop operates with a *boutique* approach, offering relatively small collections of personally selected publications to a steady following of loyal patrons who regularly return to the site to explore new works. Its focal points are summarized by its contents list, which is divided into three main categories: "Avant-garde, modernism and after," "Media culture," and "Media, theory and the humanities." Within these three broad focal points, hundreds of links direct the user to avant-garde magazines, art exhibitions and events, art and design schools, artistic and cultural themes, and cultural theorists. Importantly, shadow libraries such as Monoskop do not just host works unbeknownst to the authors—authors also leak their own works. Thus, some authors publishing with brand name, for-profit, all-rights-reserving, print-on-paper-only publishing houses will also circulate a copy of their work on a free text-sharing network such as Monoskop.[38]

How might we understand Monoskop's legal situation and maneuverings in infrapolitical terms? Shadow libraries such as Monoskop draw their infrapolitical strength not only from the content they offer but also from their mode of engagement with the gray zones of new information infrastructures. Indeed, the infrapolitics of shadow libraries such as Monoskop can perhaps best be characterized as a stratagematic form of infrapolitics. Monoskop neither inhabits the passive perspective of the digital spectator nor deploys a form of tactics that aims to be failure free. Rather, it exists as a body of informal practices and knowledges, as cunning and dexterous networks that actively embed themselves in today's sociotechnical infrastructures. It operates with high sociotechnical sensibilities, living off of the social relations that bring it into being and stabilize it. Most significantly, Monoskop skillfully exploits the cracks in the infrastructures it inhabits, interchangeably operating, evading, and accompanying them. As Matthew Fuller and Andrew Goffey point out in their meditation on stratagems in digital media, they do "not cohere into a system" but rather operate as "extensive, open-ended listing[s]" that "display a certain undecidability because inevitably a stratagem does not describe or prescribe an action that is certain in its outcome."[39] Significantly, then, failures and errors not only represent negative occurrences in stratagematic approaches but also appeal to willful dissidents as potentially beneficial tools. Dušan Barok's response to a question about the legal challenges against Monoskop evidences this stratagematic approach, as he replies that shadow libraries such

as Monoskop operate in the "gray zone," which to him is also the zone of fair use.[40] Barok thus highlights the ways in which Monoskop engages with established media infrastructures, not only on the level of discursive conventions but also through their formal logics, technical protocols, and social proprieties.

Thus, whereas Google lights up gray zones through spectacle and legal power plays, and Europeana shuns gray zones in favor of the law, Monoskop literally embraces its shadowy existence in the gray zones of the law. By working in the shadows, Monoskop and likeminded operations highlight the ways in which the objects they circulate (including the digital artifacts, their knowledge management, and their software) can be manipulated and experimented upon to produce new forms of power dynamics.[41] Their ethics lie more in the ways in which they operate as shadowy infrastructures than in intellectual reflections upon the infrastructures they counter, without, however, creating an opposition between thinking and doing. Indeed, as its history shows, Monoskop grew out of a desire to create a space for critical reflection. The infrapolitics of Monoskop is thus an infrapolitics of grayness that marks the breakdown of clearly defined contrasts between legal and illegal, licit and illicit, desire and control, instead providing a space for activities that are ethically ambiguous and in which "everyone is sullied."[42]

Monoskop as a Territorializing Assemblage

While Monoskop's stratagems play on the infrapolitics of the gray zones of globalized digital networks, the shadow library also emerges as a late-sovereign infrastructure. As already noted, Monoskop was from the outset focused on surfacing and connecting art and media objects and theory from Central and Eastern Europe. Often, this territorial dimension recedes into the background, with discussions centering more on the site's specialized catalog and legal maneuvers. Yet Monoskop was initially launched partly as a response to criticisms on new media scenes in the Slovak and Czech Republics as "incomprehensible avant-garde."[43] It began as a simple invite-only instance of wiki in August 2004, urging participants to collaboratively research the history of media art. It was from the beginning conceived more as a collaborative social practice and less as a material collection, and it targeted noninstitutionalized researchers such as Barok himself.

As the nodes in Monoskop grew, its initial aim to research media art history also expanded into looking at wider cultural practices. By 2010, it had grown into a 100-gigabyte collection which was organized as a snowball research collection, focusing in particular on "the white spots in history of art and culture in East-Central Europe," spanning "dozens of CDs, DVDs, publications, as well as recordings of long interviews [Barok] did"[44] with various people he considered forerunners in the field of media arts. Indeed, Barok at first had no plans to publish the collection of materials he had gathered over time. But during his research stay in Rotterdam at the influential Piet Zwart Institute, he met the digital scholars Aymeric Mansoux and Marcell Mars, who were both active in avant-garde media practices, and they convinced him to upload the collection.[45] Due to the fragmentary character of his collection, Barok found that Monoskop corresponded well with the pre-existing wiki, to which he began connecting and embedding videos, audio clips, image files, and works. An important motivating factor was the publication of material that was otherwise unavailable online. In 2009, Barok launched Monoskop Log, together with his colleague Tomáš Kovács. This site was envisioned as an affiliated online repository of publications for Monoskop, or, as Barok terms it, "a free access living archive of writings on art, culture, and media technologies."[46]

Seeking to create situated spaces of reflection and to shed light on the practices of media artists in Eastern and Central Europe, Monoskop thus launched several projects devoted to excavating media art from a situated perspective that takes its local history into account. Today, Monoskop remains a rich source of information about artistic practices in Central and Eastern Europe, Poland, Hungary, Slovakia, and the Czech Republic, relating it not only to the art histories of the region, but also to its history of cybernetics and computing.

Another early motivation for Monoskop was to provide a situated nodal point in the globalized information infrastructures that emphasized the geographical trajectories that had given rise to it. As Dušan Barok notes in an interview, "For a Central European it is mind-boggling to realize that when meeting a person from a neighboring country, what tends to connect us is not only talking in English, but also referring to things in the far West. Not that the West should feel foreign, but it is against intuition that an East-East geographical proximity does not translate into a cultural one."[47] From this perspective, Monoskop appears not only as an infrapolitical project of

global knowledge, but also one of situated sovereignty. Yet, even this territorial focus holds a strategic dimension. As Barok notes, Monoskop's ambition was not only to gain new knowledge about media art in the region, but also to cash in on the cultural capital into which this knowledge could potentially be converted. Thus, its territorial matrix first and foremost translates into Foucault's famous dictum that "knowledge is power." But it is nevertheless also testament to the importance of including more complex spatial dynamics in one's analytical matrix of shadow libraries, if one wishes to understand them as more than globalized breakers of code and arbiters of what Manuel Castells once called the "space of flows."[48]

UbuWeb

If Monoskop is one of the most comprehensive shadow libraries to emerge from critical-artistic practice, UbuWeb is one of the earliest ones and has served as an inspirational example for Monoskop. UbuWeb is a website that offers an encyclopedic scope of downloadable audio, video, and plain-text versions of avant-garde art recordings, films, and books. Most of the books fall in the category of small-edition artists' books and are presented on the site with permission from the artists in question, who are not so concerned with potential loss of revenue since most of the works are officially out of print and never made any money even when they were commercially available. At first glance, UbuWeb's aesthetics appear almost demonstratively spare. Still formatted in HTML, it upholds a certain 1990s net aesthetics that has resisted the revamps offered by the new century's more dynamic infrastructures. Yet, a closer look reveals that UbuWeb offers a wealth of content, ranging from high art collections to much more rudimentary objects. Moreover, and more fundamentally, its critical archival practice raises broader infrapolitical questions of cultural hierarchies, infrastructures, and domination.

Shadow Libraries between Gift Economies and Marginalized Forms of Distribution

UbuWeb was founded by poet Kenneth Goldsmith in response to the marginal distribution of crucial avant-garde material. It provides open access both to out-of-print works that find a second life through digital art reprint and to the work of contemporary artists. Upon its opening in 2001, Kenneth

Goldsmith termed UbuWeb's economic infrastructure a "gift economy" and framed it as a political statement that highlighted certain problems in the distribution of and access to intellectual materials:

> Essentially a gift economy, poetry is the perfect space to practice utopian politics. Freed from profit-making constraints or cumbersome fabrication considerations, information can literally "be free": on UbuWeb, we give it away. … Totally independent from institutional support, UbuWeb is free from academic bureaucracy and its attendant infighting, which often results in compromised solutions; we have no one to please but ourselves. … UbuWeb posts much of its content without permission; we rip full-length CDs into sound files; we scan as many books as we can get our hands on; we post essays as fast as we can OCR them. And not once have we been issued a cease and desist order. Instead, we receive glowing emails from artists, publishers, and record labels finding their work on UbuWeb, thanking us for taking an interest in what they do; in fact, most times they offer UbuWeb additional materials. We happily acquiesce and tell them that UbuWeb is an unlimited resource with unlimited space for them to fill. It is in this way that the site has grown to encompass hundreds of artists, thousands of files, and several gigabytes of poetry.[49]

At the time of its launch, UbuWeb garnered extraordinary attention and divided communities along lines of access and rights to historical and contemporary artists' media. It was in this range of responses to UbuWeb that one could discern the formations of new infrastructural positions on digital archives, how they should be made available, and to whom. Yet again, these legal positions were accompanied by a territorial dynamic, including the impact of regional differences in cultural policy on UbuWeb. Thus, as artist Jason Simon notes, there were significant differences between the ways in which European and North American distributors related to UbuWeb. These differences, Simon points out, were rooted in "medium-specific questions about infrastructure," which differ "from the more interpretive discussion that accompanied video's wholesale migration into fine art exhibition venues."[50] European pre-recession public money thus permitted nonprofit distributors to embrace infrastructures such as UbuWeb, while American distributors were much more hesitant toward UbuWeb's free-access model. When recession hit Europe in the late 2000s, however, the European links to UbuWeb's infrastructures crumbled while "the legacy American distributors … have been steadily adapting."[51] The territorial modulations in UbuWeb's infrastructural set-up testify not only to how shadow libraries such as UbuWeb are inherently always linked up to larger political events in complex ways, but also to latent ephemerality of the entire project.

Goldsmith has more than once asserted that UbuWeb's insistence on "independent" infrastructures also means a volatile existence: "… by the time you read this, UbuWeb may be gone. Cobbled together, operating on no money and an all-volunteer staff, UbuWeb has become the unlikely definitive source for all things avant-garde on the internet. Never meant to be a permanent archive, Ubu could vanish for any number of reasons: our ISP pulls the plug, our university support dries up, or we simply grow tired of it." Goldsmith's emphasis on the ephemerality of UbuWeb is a shared condition of most shadow libraries, most of which exist only as ghostly reminders with nonfunctional download links or simply as 404 pages, once they pull the plug. Rather than lamenting this volatile existence, however, Goldsmith embraces it as an infrapolitical stance. As Cornelia Solfrank points out, UbuWeb was—and still is—as much an "archival critical practice that highlights the legal and social ramifications of its self-created distribution and archiving system as it is about the content hosted on the site."[52] UbuWeb is thus not so much about authenticity as it is about archival defiance, appropriation, and self-reflection. Such broader and deeper understandings of archival theory and practice allow us to conceive of it as the kind of infrapolitics that, according to James C. Scott, "provides much of the cultural and structural underpinning of the more visible political attention on which our attention has generally been focused."[53] The infrapolitics of UbuWeb is devoted to hatching new forms of organization, creating new enclaves of freedom in the midst of orthodox ways of life, and inventing new structures of production and dissemination that reveal not only the content of their material but also their marginalized infrastructural conditions and the constellation of social forces that lead to their online circulation.[54]

The infrapolitics of UbuWeb is testament not only to avant-garde cultures, but also to what Hito Steyerl in her *Defense of Poor Images* refers to as the "neoliberal radicalization of the culture as commodity" and the "restructuring of global media industries."[55] These materials "circulate partly in the void left by state organizations" that find it too difficult to maintain digital distribution infrastructures and the art world's commercial ecosystems, which offer the cultural materials hosted on UbuWeb only a liminal existence. Thus, while UbuWeb on the one hand "reveals the decline and marginalization of certain cultural materials" whose production were often "considered a task of the state,"[56] on the other hand it shows how

intellectual content is increasingly privatized, not only in corporate terms but also through individuals, which in UbuWeb's case is expressed in Kenneth Goldsmith, who acts as the sole archival gatekeeper.[57]

The Infrapolitics of Shadow Libraries

If the complexity of shadow libraries cannot be reduced to the contrastive codes of "right" and "wrong" and global-local binaries, the question remains how to theorize the cultural politics of shadow libraries. This final section outlines three central infrapolitical aspects of shadow libraries: access, speed, and gift.

Mass digitization poses two important questions to knowledge infrastructures: a logistical question of access and a strategic question of to whom to allocate that access. Copyright poses a significant logistical barrier between users and works as a point of control in the ideal free flow of information. In mass digitization, increased access to information stimulates projects, whereas in publishing industries with monopoly possibilities, the drive is toward restriction and control. The uneasy fit between copyright regulations and mass digitization projects has, as already shown, given rise to several conflicts, either as legal battles or as copyright reform initiatives arguing that current copyright frameworks cast doubt upon the political ideal of total access. As with Europeana and Google Books, the question of *access* often stands at the core of the infrapolitics of shadow libraries. Yet, the strategic responses to the problem of copyright vary significantly: if Europeana moves within the established realm of legality to reform copyright regulations and Google Books produces claims to new cultural-legal categories such as "nonconsumptive reading," shadow libraries offer a third infrastructural maneuver—bypassing copyright infrastructures altogether through practices of illicit file distribution.

Shadow libraries elicit a range of responses and discourses that place themselves on a spectrum between condemnation and celebration. The most straightforward response comes, unsurprisingly, from the publishing industry, highlighting the fundamentally violent breaches of the legal order that underpins the media industry. Such responses include legal action, policy initiatives, and public campaigns against piracy, often staging—in more or less explicit terms—the "pirate" as a common enemy of mankind, beyond legal protection and to be fought by whatever means necessary.

The second response comes from the open source movement, represented among others by the pro-reform copyright movement Creative Commons (CC), whose flexible copyright framework has been adopted by both Europeana and Google Books.[58] While the open source movement has become a voice on behalf of the telos of the Internet and its possibilities of offering free and unhindered access, its response to shadow libraries has revealed the complex infrapolitics of access as a postcolonial problematic. As Kavita Philip argues, CC's founder Lawrence Lessig maintains the image of the "good" Western creative vis-à-vis the "bad" Asian pirate, citing for instance his statement in his influential book *Free Culture* that "All across the world, but especially in Asia and Eastern Europe, there are businesses that do nothing but take other people's copyrighted content, copy it, and sell it. … This is piracy plain and simple, … This piracy is wrong."[59] Such statements, Kavita Philip argues, frames the Asian pirate as external to order, whether it be the order of Western law or neoliberalism.[60]

The postcolonial critique of CC's Western normative discourse has instead sought to conceptualize piracy, not as deviatory behavior in information economies, but rather as an integral infrastructure endemic to globalized information economies.[61] This theoretical development offers valuable insights for understanding the infrapolitics of shadow libraries. First of all, it allows us to go beyond moral discussions of shadow libraries, and to pay attention instead to the ways in which their infrastructures are built, how they operate, and how they connect to other infrastructures. As Lawrence Liang points out, if infrastructures traditionally belong to the domain of the state, often in cooperation with private business, pirate infrastructures operate in the gray zones of this set-up, in much the same way as slums exist as shadow cities and copies are regarded as shadows of the original.[62] Moreover, and relatedly, it reminds us of the inherently unstable form of shadow libraries as a cultural construct, and the ways in which what gets termed piracy differs across cultures. As Brian Larkin notes, piracy is best seen as emerging from specific domains: dynamic localities with particular legal, aesthetic, and social assemblages.[63] In a final twist, research on users of shadow libraries shows that usage of shadow libraries is distributed globally. Multiple sources attest to the fact that most Sci-Hub usage occurs outside the Anglosphere. According to Alexa Internet analytics, the top five country sources of traffic to Sci-Hub were China, Iran, India, Brazil, and Japan, which account for 56.4 percent of recent traffic.

As of early 2016, data released by Sci-Hub's founder Alexandra Elbakyan also shows high usage in developed countries, with a large proportion of the downloads coming from the US and countries within the European Union.[64] The same tendency is evident in the #ICanHazPDF Twitter phenomenon, which while framed as "civil disobedience" to aid users in the Global South[65] nevertheless has higher numbers of posts from the US and Great Britain.[66]

This brings us to the second cultural-political production, namely the question of distribution. In their article "Book Piracy as Peer Preservation," Denis Tenen and Maxwell Henry Foxman note that rather than condemning book piracy *tout court*, established libraries could in fact learn from the infrastructural set-ups of shadow libraries in relation to participatory governance, technological innovation, and economic sustainability.[67] Shadow libraries are often premised upon an infrastructure that includes user participation without, however, operating in an enclosed sphere. Often, shadow libraries coordinate their actions by use of social media platforms and online forums, including Twitter, Reddit, and Facebook, and the primary websites used to host the shared files are AvaxHome, LibGen, and Sci-Hub. Commercial online cloud storage accounts (such as Dropbox and Google Drive) and email are also used to share content in informal ways. Users interested in obtaining an article or book chapter will disseminate their request over one or more of the platforms mentioned above. Other users of those platforms try to get the requested content via their library accounts or employer-provided access, and the actual files being exchanged are often hosted on other websites or emailed to the requesting users. Through these networks, shadow libraries offer convenient and speedy access to books and articles. Little empirical evidence is available, but one study does indicate that a large number of shadow library downloads are made because obtaining a PDF from a shadow library is easier than using the legal access methods offered by a university's traditional channels of access, including formalized research libraries.[68] Other studies indicate, however, that many downloads occur because the users have (perceived) lack of full-text access to the desired texts.[69]

Finally, as indicated in the introduction to this chapter, shadow libraries produce what we might call a cultural politics of parasitism. In the normative model of shadow libraries, discourse often centers upon piracy as a theft economy. Other discourses, drawing upon anthropological sources, have

pointed out that peer-to-peer file-sharing sites in reality organize around a gift economy, that is, "a system of social solidarity based on a structured set of gift exchange and social relationships among consumers."[70] This chapter, however, ends with a third proposal: that shadow libraries produce a parasitical form of infrapolitics. In *The Parasite*, philosopher Michel Serres speculates a way of thinking about relations of transfer—in social, biological, and informational contexts—as fundamentally parasitic, that is, a subtractive form of "taking without giving." Serres contrasts the parasitic model with established models of society based on notions such as exchange and gift giving.[71] Shadow libraries produce an infrapolitics that denies the distinction between producers and subtractors of value, allowing us instead to focus on the social roles infrastructural agents perform. Restoring a sense of the wider context of parasitism to shadow libraries does not provide a clear-cut solution as to when and where shadow libraries should be condemned and when and where they should be tolerated. But it does help us ask questions in a different way. And it certainly prevents the regarding of shadow libraries as the "other" in the landscape of mass digitization. Shadow libraries instigate new creative relations, the dynamics of which are infrastructurally premised upon the medium they use. Just as typewriters were an important component of samizdat practices in the Soviet Union, digital infrastructures are central components of shadow libraries, and in many respects shadow libraries bring to the fore the same cultural-political questions as other forms of mass digitization: questions of territorial imaginaries, infrastructures, regulation, speed, and ethics.

Chapter 4

1. Serres 1982, 55.

2. Serres 1982, 36.

3. Serres 1982, 36.

4. Samyn 2012.

5. I stick with "shadow library," a term that I first found in Lawrence Liang's (2012) writings on copyright and have since seen meaningfully unfolded in a variety of contexts. Part of its strength is its sidestepping of the question of the pirate and that term's colonial connotations.

6. Eckstein and Schwarz 2014.

7. Scott 2009, 185–201.

8. See also Maxim Moshkov's own website hosted on lib.ru, http://lib.ru/~moshkow.

9. Carey 2015.

10. Schmidt 2009.

11. Bodó 2016. "Libraries in the post-scarcity era." As Balazs Bodó notes, the first Russian mass-digitized shadow archives in Russia were run by professors from the hard sciences, but the popularization of computers soon gave rise to much more varied and widespread shadow library terrain, fueled by "enthusiastic readers, book fans, and often authors, who spared no effort to make their favorite books available on FIDOnet, a popular BBS system in Russia."

12. Stelmakh 2008, 4.

13. Bodó 2016.

14. Bodó 2016.

15. Vul 2003.

16. "In Defense of Maxim Moshkov's Library," n.d., The International Union of Internet Professionals, http://ezhe.ru/actions/lib/eng.html.

17. Ibid.

18. Ibid.

19. Schmidt 2009, 7.

20. Ibid.

21. Carey 2015.

22. Mjør 2009, 84.

23. Bodó 2015.

24. Kiriya 2012.

25. Yurchak 2008, 732.

26. Komaromi, 74.

27. Mjør, 85.

28. Litres.ru, https://www.litres.ru.

29. Library Genesis, https://lib.rus.ec/g.

30. Kiriya 2012.

31. Karaganis 2011, 65, 426.

32. Kiriya 2012, 458.

33. For a great analysis of the late-Soviet youth's relationship with consumerist products, read Yurchak's careful study in *Everything Was Forever, Until It Was No More: The Last Soviet Generation* (2006).

34. "Dušan Barok: Interview," *Neural* 44 (2010), 10.

35. Ibid.

36. Ibid.

37. Monoskop," last modified March 28, 2018, Monoskop. https://monoskop.org/Monoskop. https://monoskop.org/Monoskop.

38. "Dušan Barok: Interview," *Neural* 44 (2010), 10.

39. Fuller and Goffey 2012, 21.

40. "Dušan Barok: Interview," *Neural* 44 (2010), 11.

41. In an interview, Dušan Barok mentions his inspirations, including early examples such as textz.com, a shadow library created by the Berlin-based artist Sebastian Lütgert. Textz.com was one of the first websites to facilitate free access to books on culture, politics, and media theory in the form of text files. Often the format would itself toy with legal limits. Thus, Lütgert declared in a mischievous manner that the website would offer a text in various formats during a legal debacle with Surhkamp Verlag: "Today, we are proud to announce the release of walser.php (http://textz.com/trash/walser.php.txt), a 10,000-line php script that is able to generate the plain ascii version of 'Death of a Critic.' The script can be redistributed and modified (and, of course, linked to) under the terms of the GNU General Public License, but may not be run without written permission by Suhrkamp Verlag. Of course, reverse-engineering the writings of senile German revisionists is not the core business of

textz.com, so walser.php includes makewalser.php, a utility that can produce an unlimited number of similar (both free as in speech and free as in copy) php scripts for any digital text"; see "Suhrkamp recalls walser.pdf, textz.com releases walser.php," Rolux.org, http://rolux.org/texts/suhrkamp_recalls_walser.pdf_textz.com_releases_walser.php.

42. Fuller and Goffey 2012, 11.

43. "MONOSKOP Project Finished," COL-ME Co-located Media Expedition, www.col-me.info/node/841.

44. "Dušan Barok: Interview," *Neural* 44 (2010), 10.

45. Aymeric Mansoux is a senior lecturer at the Piet Zwart Institute whose research deals with the defining, constraining, and confining of cultural freedom in the context of network-based practices. Marcel Mars is an advocate of free software and a researcher who is also active in a shadow library named *Public Library,* https://www.memoryoftheworld.org (also interchangeably known as Memory of the World).

46. "Dušan Barok," Memory of the World, https://www.memoryoftheworld.org/dusan-barok.

47. "Dušan Barok: Interview," *Neural* 44 (2010), 10.

48. Castells 1996.

49. Kenneth Goldsmith,"UbuWeb Wants to Be Free" (last modified July 18, 2007), http://www.writing.upenn.edu/~afilreis/88/ubuweb.html.

50. Jacob King and Jason Simon, "Before and After UbuWeb: A Conversation about Artists' Film and Video Distribution," *Rhizome*, February 20, 2014. http://rhizome.org/editorial/2014/feb/20/and-after-ubuweb-distributing-artists-film-and-vid.

51. King and Simon 2014.

52. Sollfrank 2015.

53. Scott 1990, 184.

54. For this, I am indebted to Hito Steyerl's essay "In Defense of the Poor Image," in her book *The Wretched of the Screen*, 31–59.

55. Steyerl 2012, 36.

56. Steyerl 2012, 39.

57. Sollfrank 2015.

58. Other significant open source movements include Free Software Foundation, the Wikimedia Foundation, and several open access initiatives in science.

59. Lessig 2005, 57.

60. Philip 2005, 212.

61. See, for instance, Larkin 2008; Castells and Cardoso 2012; Fredriksson and Arvanitakis 2014; Burkart 2014; and Eckstein and Schwarz 2014.

62. Liang 2009.

63. Larkin 2008.

64. John Bohannon, "Who's Downloading Pirated Papers? Everyone," *Science Magazine*, April 28, 2016, http://www.sciencemag.org/news/2016/04/whos-downloading-pirated-papers-everyone.

65. "The Scientists Encouraging Online Piracy with a Secret Codeword," *BBC Trending*, October 21, 2015, http://www.bbc.com/news/blogs-trending-34572462.

66. Liu 2013.

67. Tenen and Foxman 2014.

68. See Kramer 2016.

69. Gardner and Gardner 2017.

70. Giesler 2006, 283.

71. Serres 2013, 8.

Chapter 5

1. Kelly 1994, p. 263.

2. Connection Machines were developed by the supercomputer manufacturer Thinking Machines, a concept that also appeared in Jorge Luis Borges's *The Total Library*.

3. Brewster Kahle, "Transforming Our Libraries from Analog to Digital: A 2020 Vision," *Educause Review*, March 13, 2017, https://er.educause.edu/articles/2017/3/transforming-our-libraries-from-analog-to-digital-a-2020-vision.

4. Ibid.

5. Couze Venn, "The Collection," *Theory, Culture & Society* 23, no. 2–3 (2006), 36.

6. Hacking 2010.

7. Lefebvre 2009.

8. Blair and Stallybrass 2010, 139–163.

9. Ibid., 143.

10. Dewey 1926, 311.

The Politics of Mass Digitization

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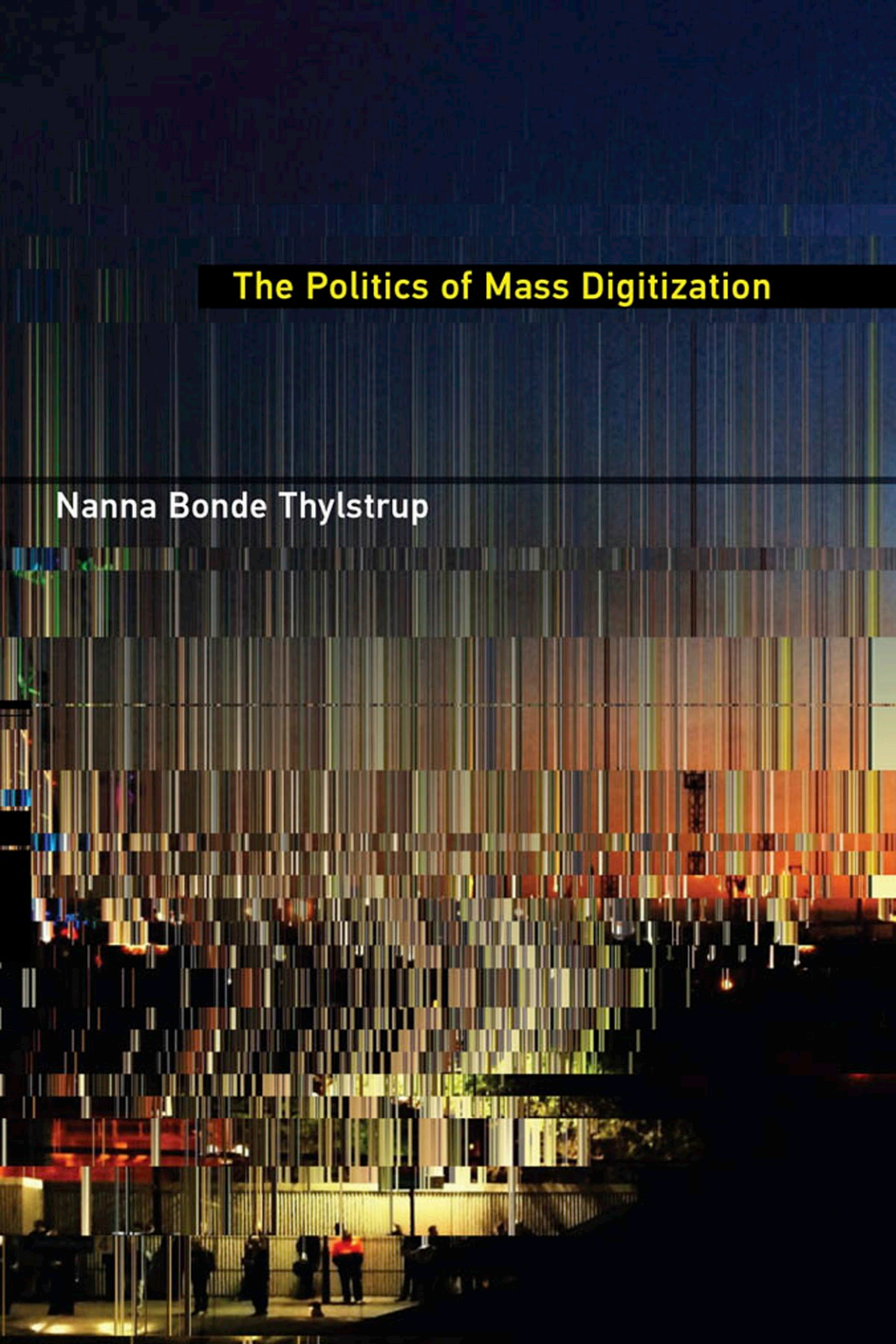

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