

strictions while raising legitimation from the art world as cultural capital that could protect them against possible copyright charges (WHW 2016). The presentation and realization of the projects within allied institutions obscure the question of legality.

The defense of the project draws on the 'autonomy of art,' which supposedly gives art its own laws to not be controlled by external forces (Stakemeier & Vishmidt 2016). WHW and Public Library test the power of that claim installing art as a "field of unlimited freedom" (WHW 2016, 292). However, this account would also imply that through that said autonomy art can acquire the power to act in other realms, even as the character of art and what makes it a distinct mode from other practices is continuously up for question (Stakemeier & Vishmidt 2016). In case of a possible lawsuit against Medak, Romić, WHW, or the gallery, the claims of autonomy create a partial shielding cover of untouchability as all art parties become complicit in the operation. Institutions embracing and co-opting critique provide, in this case, an advantageous situation. Memory of the World / Public Library uses the public status of the art institution to communicate free access and circulation of knowledge as common sense, while the institution brings knowledge to the public and supports creativity (WHW 2016). The cooperation of the institutions intensifies the influence the shadow library could have in the public sphere lowering the risks to jeopardizing the project.

4~4 CIRCULATION

The same methods that grant market regulations could also be applied to exert political government, making copyright a tool for political censorship. There was a time when the internet was seen as the fulfillment of decentralized communication and sharing. People were proud of the possibilities offered by the rhizomatic network, a structure that ideally could overcome censorship and restraint. This was proven wrong in 2011 in Egypt under Mubarak regime, again in 2013 with Edward Snowden's leaks, and continues to manifest as national governments and corporations seek to limit, filter, record and otherwise prevent free internet traffic. Governments and private companies regulate copyright by censorship to accomplish their policy goals of controlling free speech (Parisi 2015). Agents such as internet service providers and search engines tend to remove legitimate content created by users without much review. In most cases, it would be too complicated to evaluate the legality of each rights holder's claim against transformative uses.

Making information free online seemed like a good idea at the time. However, tactics had to change towards the issues around metadata. The resistance extends from freeing information to liberating information about information. This operation moves the focus from data to metadata. A similar tendency has been seen in the way knowledge production moves from writing to publishing, from art-making to curating, from research to archiving (Medak et al. 2015). An interesting point of this mode of circulation is the labor that goes into making public copyrighted files. Shadow libraries enable the distribution of native digital publications but also scanned copies, what Hito Steyerl would call the poor image (Steyerl 2009). Often after image optimization and optical character recognition (OCR) conversion, these digitized copies circulate thanks both to the compression of information and the addition of new data. After each file modification –conversion from JPG to PDF, renaming the file, adding title's information– the content from the original source is enhanced by the users to enable its distribution (Wark 2015). Compressed, reformatted, re-edited, altered by traces of paper and hands, the scanned publications exchange quality for accessibility, defying

ownership and copyright. For Steyerl, quality is identified as a privilege; meanwhile, resolution and accuracy reveal a condition of marginalization leading to the status of their online circulation as poor images. "Poor images are poor because they are not assigned any value within the class society of images—their status as illicit or degraded grants them exemption from its criteria" (Steyerl 2009). In this way, based on Steyerl's writing, the concept of poor could be expanded; it not only refers to the publication's material properties but also to its way of circulating and the value assigned as a copy.

Some of the additional pieces of information and the identities of who create data modifying the digitized publications are private to other people. But much of it is owned by tech companies and might be tracked and shared with businesses and governments. However, information moves back and forth whether there is unrestricted internet access or not. As it has been seen in North Korea, where dissidents smuggle flash drives in an effort to inspire a cultural revolution (Christian 2012) or due to the lack of infrastructure in the Solomon Islands (Hobbis 2017), free internet access is not guaranteed. In this way, back up plans are improvised to keep sharing information for unrestricted kinds of exchange. Nowadays, offline file systems exist in relation to online file systems, complementing each other. Although rapid communication offline is impossible, the ability of people to exchange vast amounts of data is securely expanded as hardware and software technologies advance. Offline file sharing was familiar in the 1990s as Sneakernet: a name for people sharing information on floppy disks. However, when the availability of online transfer increased, offline sharing became almost obsolete (Warwick 2014), especially in the case of small files or text-based material.

With the new vulnerabilities of the online, the return to offline digital distribution has gained momentum. Although restoring an earlier form of exchange, contemporary devices provide more agile equipment to circulate larger quantities of data in less time. Methods for offline sharing are often used for artistic projects. One of these works is The PirateBox, a creative gesture by David Darts. Drew on his own need, Darts built the box for himself and posted the instructions on how to assemble it on a dedicated wiki page. The first one he made was a metal lunch box painted black with a white skull-and-crossbones, inside a micro-server was mounted running the Linux operating system and on top of that, a Python-powered web server and a Wi-Fi router were included. The device creates an open file-sharing network in any public space (Strubel 2018) and the wiki offers the instructions to appropriate that technology by anyone interested.

Another example is Dead Drops, a project conceived by Berlin-based conceptual artist Aram Bartholl. Bartholl installed the first USB mass storage device in a public space in October 2010 in Brooklyn. The USB flash drives are typically mounted on outdoor brick walls and secured in the structure with concrete. People are implicitly invited to find or leave files by plugging their laptops or mobile devices into the wall-mounted USB sticks in order to transfer data (Bartholl 2011). Dead Drops could be regarded as a form of anonymous, offline file sharing network. The project is also documented online on a website under the same name, providing DIY instructions to build their own devices.

Although Darts' and Bartholl's propositions are quite relevant for the circulation of shadow libraries in general, especially as the artists shared the projects as open source works, when found in countries from the Global South these practices become more than creative gestures. Cuba has one of the highest standards of literacy in the world but at the same time one of the lowest rates of Internet access. Most Cubans reach the Internet through public WiFi parks, which are expensive, inconsistent and inconvenient. Some people are also able to connect online at work or in educational institutions; however, the bandwidth is restricted and some content may be unavailable (Pinargote Bravo et al. 2018). As a result, Cubans have developed an offline system for distributing digital content called El Paquete

Semanal (The Weekly Package). El Paquete Semanal is a digital library distributed unofficially through USB sticks and portable hard drives since approximately 2008. It includes a diverse collection, including movies and TV shows, music, video games, digitalized magazines and books, religious materials, mobile and PC applications, and complete copies of websites including Wikipedia.

The distribution of El Paquete has been allowed by way of a lack of government disruption. The Cuban state tolerates El Paquete as long as the Paqueteros continue to self-censor overtly political content (Köhn 2019). While Cuban communication is still profoundly shaped by the state and its official media, El Paquete reveals how a decentralized network is virtually impossible to control. Almost everyone in Cuba has a source for receiving El Paquete, whether it is a store, a neighborhood distributor they pay, or a friend who gives them a copy free of charge (Pinargote Bravo et al. 2018). Once data is purchased from a distributor, it can then be shared with others through hand-to-hand transmission on USB storage or over Bluetooth between mobile devices. Thus, while a large amount of content is paid for, many Cubans rely on friends and family members to get content second-handed.

Beyond foreign material, there is a significant amount of content produced specially for El Paquete. Some examples include Vistar (an independent magazine devoted to Cuban culture), PlayOff (a magazine about sports and sports culture), and !!!Sección A R T E (a collection of Cuban art material). A single week's "!!!Sección A R T E" might contain e-books and PDFs, audio lectures, video clips, images, and saved HTML documents, taking full advantage of the digital affordances of the distribution system (Pinargote Bravo et al. 2018)

Each collection travels Cuba through a network of hard drives moved via car, plane, train and bus. Several mid-level distributors may modify the content, editing, removing or adding material. This distribution network is rooted in old physical channels established to disseminate international publications in the 1970s by entrepreneurs after the Revolution. The first to circulate underground were paperback novels and while obtaining books was difficult, the only option to enlarge the inventory was to connect different cities to get the materials from various sources. Physical sharing was crucial to grant access to media outside government control (Weist and Siré 2018). The new networks of distribution are organized upon older forms of communication. Nevertheless, the acquisition of those materials is structured around institutional and underground ways of accessing information. The content that makes El Paquete is secretly downloaded at university computers, government workplaces or luxury hotels, brought into the country on physical hard drives by friends or relatives from abroad or captured from illegal satellite dishes (Köhn 2019).

Offline circulation provides for one type of anonymity: more visibility to people taking part in the underground circulation system while less surveillance from the government or corporate entities (Pinargote Bravo et al. 2018). Preventing monopolies, this highly decentralized and personal form of distribution ensures enormous penetration throughout the country (Köhn 2019). Its fluid form turns El Paquete into a complex arrangement full of interdependencies of infrastructural, technological and social elements (Slater 2013). Far from only existing as folders crammed with data, El Paquete is equally determined by the infrastructural legwork performed by Paqueteros. The trusting relationships between Paqueteros and their clients are born out of particular local necessities (Köhn 2019), shaped by a Cuban culture of problem-solving and inventiveness and built upon Cuban social values of solidarity and redistribution that it cannot be understood without its social context.

In recent years copyright enforcement has started to enlist online intermediaries and tried to establish itself in more fundamental, architectural levels of internet technologies. This move made people adapt and evolve: they turned to the tools of the censored to resist copyright enforcement. Shadow amateur librarians gained more than just an internet filtering circumvention technology; they also found more evident causes for their rebellion: persecution, political censorship and economic deprivation (Bodó 2015b). Shadow libraries become spaces to share not only information but also a strong desire for anonymous, private and undisturbed online communication.

For access to copies of journals articles or books, shadow libraries work perfectly. However, the value of these copied publications relies on the existence of archived trusted versions of the originals. If uncertain about whether a copy is trustworthy, users may turn to the original documents if possible. Shadow libraries exist in an illegitimate relation to a dominant economy conflicting with it but without boycotting it. It is through such a practice that less legitimate, less valued materials are suddenly and unexpectedly allowed to take part in the construction of knowledge. What recognizes some discourses dominant and others marginalized? Which are the institutions that organize, circulate and validate such discourses? The institutional library has a crucial role to play in the maintenance and legitimation of particular contributions at the expenses of others (Radford 1992). Many amateur shadow librarians take these questions as an essential part of their actions. Interested in forgotten histories and intersectional practices, their work indicates what is still missing in established libraries and databases. Many publications which do not conform with the canon of Western, white, patriarchal academia, or institutional publishing have been marginalized, not as a result of censorship but in response to the lack of maintenance of that knowledge. Publications with a small print run or which had not been reprinted, and even books without translations are left outside some institutions because of lack of availability, a limitation imposed by the market. Shadow libraries focus on the role of publications as “transaction spaces” (Nowotny, Scott, and Gibbons, 2004) to tackle asymmetrical relationships, indicating that institutions have come to a new understanding of knowledge creation as transfer relationships. Under this expanded definition of transfer, they shift the focus to introduce different voices and languages, having agency in different international debates from a local perspective. This phenomenon is what Alessandro Ludovico would call “Distributed Library” (2017), collections of content mostly absent from library catalogs and assembled and hosted by different small collectives or individual practitioners. Distributed Libraries can grow even more and faster than standard libraries because they are not constrained in a single place. Preserving knowledge under these conditions assumes new values, which rise from social needs and self-organizing networked structures so that the distribution of knowledge itself becomes a strategy rather than a limit. In a Distributed Library system, the transfer obtained through the networked infrastructure becomes fully functional to the storage needed to preserve the physical copies, in a way that they are mutually necessary rather than competing with each other.

As it is well known, governments and companies have come to regard the management of data as increasingly important (Hall 2008). Whereas previously economies were understood as being driven by the manufacture of goods and services, these days it is information’s commercial exploitation often held as the key to success and future economic prosperity. Digital technologies help to transform traditional modes of production, consumption and distribution, introducing new types of businesses, products and markets based on the commodification of knowledge (Hall 2008). Communication has become a principal terrain through which power relations are established today. Shadow libraries are immersed in this knowledge economy, creating value through the indexing and connectivity (WHW 2016, 305) enabled by the circulation of scanned and digitized books.