

Sharing Knowledge in the Arts: Creating the Publics-We-Need

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This article draws on collaborative work in the context of the ongoing research project *Sharing Knowledge in the Arts* at the Institute Experimental Design and Media Cultures, Basel Academy of Art and Design FHNW.¹ The project is a transdisciplinary collaboration involving archivists, designers, artists, and media studies and art history scholars to create a research database of net critical and cyberfeminist practices from the 1990s in the Global North. ‘Net critical’ was a self-description for critical discourse focused on the economization and the emergence of new markets amid the proliferation of the Internet and new media technologies. ‘Cyberfeminism’ applies a feminist lens to net critique, putting an emphasis on processes of ‘remaking the Internet’. Our project asks: How can we contextualize those practices with an archival approach, and how can we learn from them for publishing practice-based research in art and design universities?

The ‘Context’ section of this article outlines the framework of and motivation for the project *Sharing Knowledge in the Arts* and situates it in the Critical Publishing research strand at the Institute Experimental Design and Media Cultures. In the first section, the paper discusses how, in the artistic landscape of the Global North, artists engage in knowledge production and the development of knowledge infrastructures. Mapping existing research and methodologies to study and articulate such artistic knowledge-sharing practices, the section argues for the need to expand those methodologies to emphasize their socio-technical character. In this context, the second section discusses ongoing project work with the private archive of media artist Barbara Strebel and the development of a research database as a methodology seeking to grasp the invisible parts of artistic knowledge-sharing practices. Lastly, the section ‘Coda: Learning from...’ considers net critical and cyberfeminist

practices from the 1990s against the backdrop of publishing in practice-based research and discusses how learning from them can help to further our work towards helping shape knowledge infrastructures in art and design research.

Context

Sharing Knowledge in the Arts is a four-year research project funded by the Swiss National Science Foundation (SNSF), which is at the end of its first year.ⁱⁱ Beyond being the main funding body for research in Switzerland, the SNSF helps shaping the research landscape by setting policies regarding how research results are published (open access) and how research data are to be shared (open research data).ⁱⁱⁱ Thus, the questions addressed in the project of how to learn from net critical and cyberfeminist practices of the 1990s for knowledge infrastructures in practice-based research in art and design also point to the project's funding framework and its situatedness in a university of applied sciences and arts. In the Anglo-American context, the arts have long formed part of the academic arts and humanities. Conversely, in Switzerland, art and design are structurally connected to use-oriented research. The landscape of academic research at art universities in Switzerland, and more broadly in Europe, underwent significant changes following the Bologna reform of 1999. This reform transformed use-oriented educational institutions into universities of applied sciences, marking the beginning of formalized academic research in these fields.

In this context, *Sharing Knowledge in the Arts* articulates net critical and cyberfeminist practices through art historical discourses, media studies, practice-based perspectives and methods from digital humanities. In particular, it draws on open artistic knowledge practices and infrastructures, practices of handling digital cultural heritage and research data and experimental digital humanities investigations of open access policies set by the SNSF (amongst other stakeholders in the Swiss, or broader European, context).

From the early 1990s onwards, open access was pioneered and developed extensively in science, technology, engineering, and mathematics (STEM), where much of the attention was focused on scholars' online self-archiving of their published papers. This was a transformative initiative established by scholars and librarians who had concluded that the traditional publishing system was no longer willing or able to meet all of their communication needs. The movement aimed to harness the digital possibilities to make research more widely and easily available in a faster, cheaper, and more efficient manner (Adema & Hall, 2013: 147). The motives for doing

so varied. Some early open access advocates wanted to extend the circulation of research to all those interested in it, rather than restricting access to those who could afford to pay for it. In contrast, others sought to promote the emergence of a global information commons and, through this, to help produce a renewed democratic public sphere. In that sense, the open access movement aimed at strengthening the position of public actors and enforcing the interests of the scientific community vis-à-vis the particular economic interests of publishers.

Drawing on this history, current open access policies in the Swiss context are governed by a variety of stakeholders such as funding bodies, inter-institutional strategy groups, service providers, and research communities. In this setting, open access is often equated with the digital availability of research output for which readers do not have to pay. This understanding of openness and accessibility is limited as it tends to overlook the social and political factors that are crucial in determining how knowledge can become accessible. Rebekka Kiesewetter outlines the need for such an attentiveness to “who has access to, and controls the governance of, the means of knowledge production” (Kiesewetter, 2023). The humanities and social sciences have extensively debated the limits but also the potential of open access by exploring alternative genealogies of openness that position it as a critical practice resisting the marketization and objectification of scholarship (Adema 2021). They have discussed open access through feminist and anti-colonial lenses, emphasized openness as a practice centring ‘care, ethics, agency, responsibility, experimentation, and intervention’ (Kember 2014), or explored ways to collectively design open access systems that are ‘open and equitable for all’ across diverse regions (Chan et al., 2019).

Engaging with these discourses and contemplating the concepts of openness and accessibility, in *Sharing Knowledge in the Arts* we seek to deepen our understanding of the nature of research and the processes that bring it into being. Against this backdrop, we are particularly interested in exploring openness and accessibility beyond their associations with dissemination or digital availability. Instead, we see them as a tool for reflecting on how research takes shape and how this process should be understood as a contested and conflictual site of feminist and anti-colonial struggle.

The project is led by myself, Lucie Kolb, a scholar of critical publishing and research with a background in visual arts and art history. The project team consists of the Post Doctoral Researcher Stefanie Bräuer, a media historian responsible for a historical review

of net critical practices, and the Doctoral Researcher Lara Kothe, a design researcher developing and reflecting a knowledge representation for the research database. Additional team members who support the development of the research database are the archivist Philipp Messner and the developer-design-researcher Adrian Demleitner. The team is supported by the external partners Dragan Espenschied, the Preservation Director at the platform for born-digital art and culture Rhizome situated at the New Museum in New York, Lozana Rossenova, a digital humanities researcher at Open Science Lab of TIB – Leibniz-Informationszentrum Technik und Naturwissenschaften und Universitätsbibliothek Hannover, and Tobias Hodel, Professor of Digital Humanities at the Walter Benjamin Kolleg of the University of Bern. Further, the team includes the artist-researcher Eva Weinmayr who engages with artistic practices that reflect and modify library search interfaces.^{iv}

At Basel Academy of Art and Design FHNW, the project is embedded at the Institute for Experimental Design and Media Culture (IXDM)'s Critical Media Lab (CML), a physical space and a community of researchers and students committed to studying media and technology, focusing on their underlying biases and the ways they govern us. The lab is dedicated to developing alternatives that are critical in the sense of urgency, need, and life-affirmation. The *Sharing Knowledge in the Arts* project team contributes to the lab's research strand on critical publishing, investigating the publishing industry (particularly academic publishing and publishing in contemporary art) and working towards instituting publishing otherwise. The strand's research draws on an understanding of publishing as an applied critique of how research is published within and outside the university. In publishing practice-based research data in art and design universities in Switzerland for example, researchers face a space that is controlled, and restricted, by service providers. This often creates a great distance from production processes and compels researchers to shape the relation between research content and its publishing framework accordingly.

Against this backdrop, the Critical Publishing research strand invests in developing practices and 'provisional care infrastructures', supporting and nurturing collective publishing processes to create the publics-we-need in communities of practice in art and design universities' research. For example, in the context of the research project *Critical FAIRness* (2023-24), funded by swissuniversities, we are looking at the current policies in open research data publishing in Switzerland set by funding bodies, inter-institutional strategy groups, service providers and research communities. We are investigating the narratives of 'open' publishing defined in current policies and how

these are implemented in practice-based research in art and design.^v We work with a community of artists, researchers, open science administrators, and librarians to develop publishing practices based on solidarity and equity from a feminist and anti-colonial lens. With the project's results, we aim to raise awareness of the relevance of research infrastructure and build up know-how and expertise in legal, ethical, intellectual property and privacy issues and the overall management of data.^{vi} The teaching development project 'Critical Publishing' develops teaching methods to transfer the Critical Publishing research strand into teaching, drawing on the changes introduced by digitization: new possibilities of decentralized publishing, new multiple roles, and channels ranging from books to e-publications to social media, exhibitions, and public events. Together with students from the MA Transversal Design at the IXDM, we are investigating open access approaches dedicated to reframing artistic practice outside the institutional art world with information technology.^{vii}

The Critical Publishing research strand is developed in close dialog with distro, a self-organized learning environment and research library in Basel. Distro are dedicated to recursive publics—emphasizing these publics' ability to be part of the creation, control and maintenance of its infrastructure—and to the 'investment in the opposite'—intentionally diverging from conventional norms or methods within the field of publishing—as the artist and founder of the publishing house and bookshop *b_books* Stephan Geene has phrased it (Geene, 1994: 7).^{viii} Distro organize events and exhibitions and provide a reading infrastructure to gather, assemble, and exchange on and around publishing. The focus is, on the one hand, on methodologies for creating recursive publics. What are concrete strategies to move from one-to-many relations—as in traditional publishing where roles such as author and editor are hierarchically positioned within a distributed publication—to many-to-many publishing modes associated with relational database systems for a more collaboratively distributed and interconnected publishing approach? On the other hand, distro are interested in a methodological reflection on 'publishing studies': What methods are needed to analyze publishing as practice?

Recursive publics are vital when thinking about ways to publish critically. Anthropologist Christopher Kelty introduced the term to describe geek culture, early practices in and with the Internet (Kelty, 2008). He defines a socio-technical concept of the public shaping and participating in Internet culture through coding, policy-making, maintaining, publishing, and other activities. The term is helpful because it emphasizes the interlinking of social and technological

aspects in publishing considering that publishing requires layered and relational activities, both active and passive, for the process of creating a public. The concept emphasizes publishing beyond an act of transmission, means for sharing, making accessible, or gaining attention. Publishing does not simply make something known, it brings it into existence. It creates publics. In doing so, publishing is not merely a distribution act but a social and political process. The Critical Publishing research strand are interested in this focus on publishing as a recursive approach.

Drawing on Fred Moten, the members of the strand understand publications as props:

If you pick them up you can move into some new thinking and into a new set of relations, a new way of being together, thinking together. In the end, it's the new way of being together and thinking together that's important, and not the tool, not the prop. Or, the prop is important only insofar as it allows you to enter; but once you're there, it's the relation and the activity that's really what you want to emphasize (Moten, 2013: 106).

In this understanding, publishing instigates a process where producers guide other producers to production. Publishing is not understood as production for an anonymous public but a transformative process instigating knowledge practices.

Artistic knowledge production and the development of knowledge infrastructures

This section provides some context on the *Sharing Knowledge in the Arts* project's understanding of sharing knowledge in the art field and outlines artistic practices engaging in knowledge production and the development of knowledge infrastructures. Discussing how artistic knowledge sharing practices are studied in art theory, this section evaluates existing methodologies. The section asks about what methods are needed to make legible and visible those parts of sharing and publishing that are often not visible on their own, namely the socio-technical, care, and infrastructural work.

In *Sharing Knowledge in the Arts*, we depart from the assumption that contemporary art in the Global North operates within a knowledge economy which is characterized by a tension between economization and openness of knowledge (Holert, 2016). In such an economy, knowledge must constantly grow to drive valorization. As it is valorized, knowledge is controlled, privatized, and commodified—

and thereby made scarce. This economic system is predicated on how economic value is created by knowledge and collaborative organizational forms of work (Hardt & Negri, 2005). Such organizational forms are characterized by a conflictual relationship between the production of common knowledge and its appropriation (Roggero, 2009).

In contemporary art, the knowledge economy is mirrored in an increasingly discursive character of the art field. In the context of 1960s conceptual art and institutional critique, artists expanded the studio space to include the study and joined research endeavors and theoretical discussions (Chandler & Lippard, 1968). Artists established knowledge infrastructures, such as libraries, collections, archives, and journals, to create new forms of the public sphere to stage their work and document their research. A collaborative and project-based work mode accompanied this development.

According to Tom Holert, artistic knowledge practices draw on activist causes aiming at ‘righting the wrong of knowledge politics worldwide’ (Holert, 2016). They address and reflect on how knowledge commodification informs the prevalent knowledge infrastructures in the art field, such as ‘education’, ‘publication’, and ‘exhibition’. They also develop alternatives, such as concepts of social cooperation and knowledge commons—content being collectively owned by a community of practice. These alternatives emphasize ‘patterns of use and social relations arising from practices and experiences associated with its production and use’ (Vazquez & Gonzales, 2016: 144). In this context, artists have often raised issues of openness relating to debates on ownership and belonging while, at the same time, developing alternative forms of organizing knowledge production. These enable collaborative research through workshops, lectures, seminars, and round table discussions. Artists collaboratively organize spaces, workshops, and seminars, create libraries, run magazines, and set up websites for remote knowledge production and dissemination. Such artist-researchers explore the in-between space of different fields of expertise and disciplines, and, by traversing these fields, they ask fundamental questions about power distribution in knowledge production and organization (Holert & Hlavajova, 2017).

Irit Rogoff contextualized practices like these in what she described as a ‘research turn’ in art, characterized by the fact that research has shifted from an exclusively university-based activity to the heart of art practices (Rogoff, 2018). Such practices put forward knowledge forms that are not recognized, articulated, or prioritized within the academic framework of humanities research. They produce

speculative and experimental forms of research that play with genres and expectations as a mode of reaching new audiences and creating new publics. In doing so, they promote social change by understanding what is considered a legitimate form of scholarship and establish the artist as knowledge producer. Artists engaged in this field understand their practice spanning various skills and fields by taking on different roles such as writer, editor, designer, publisher, printer, manager, organizer, caretaker, and host. This traversing is a form of infrastructural critique, an intervention into dominant systems of knowledge and representation in the art field. Through publishing, artists invent new knowledge spaces mediating discourses within and outside the university.

One example of an artistic knowledge and infrastructure practice is the one of the cultural producer Marion von Osten. In the late 1990s, she investigated the emerging European Union and its uneasy linking of neoliberal and national agendas for the exhibition and publication project *MoneyNations* at the exhibition space Shedhalle in Zurich (1998). The project focused on articulating how, in German mass media, post-soviet nations were depicted as Europe's 'hinterland' ripe to be capitalized. Von Osten used the publication—exhibition, print, and website—to create a network of correspondents from post-soviet nations to produce counter-narratives to these depictions. The publication here is a tool to create a recursive public that puts forward storytelling by actively including agents from post-soviet nations in maintaining and controlling the narrative about these nations' roles and functions in Europe. Drawing on collaborative project work, the publication centers the critique of Western knowledge politics, while simultaneously developing situated speculative and experimental research on the impact of the constitution of Europe on post-soviet nations. Drawing on intersectional perspectives on economy, gender, race, and culture in post-soviet nations, von Osten questions the authority of hegemonial narratives and empowers bottom-up counter-narrative approaches (Kolb et al., 2024).

Studying artistic knowledge production

So far, artistic knowledge production and dissemination has been investigated primarily in research on self-organized art schools (Thorne, 2017), artists' libraries, collections and archives (Weinmayr, 2020), and artists' magazines (Allen, 2016), or, more generally, under the umbrella of 'publishing as artistic practice' (Gilbert, 2016). In her book *Publishing as Artistic Practice*, literary scholar Annette Gilbert pointed out the need to expand the art historical tradition of considering publishing either an oeuvre or

documentation and to seek out approaches highlighting the practice of publishing (Gilbert, 2016).

Such a perspective looks at publishing as a historically and socially shaped *modus operandi* that temporarily materializes in different processes and practices of filtering and amplification (Bhaskar, 2013). Drawing on the theoretical framework of the ‘practice turn’ (Schatzki, 2006), Gilbert proposes an interdisciplinary toolset to consider the contributing factors of practices, processes, and institutions at the intersection of theory, art, design, technology, law, politics, and economics that characterize the manifestations of publishing. The practice turn is characterized by research reconstructing cultural practices, technical and medial artifacts, or infrastructures. It emphasizes contextual aspects, as the identity of a practice ‘depends not only on what people do but also on the significance of those actions and the surroundings in which they occur’, such as the sites of practice—for example, the print or copy shop, the media lab, the internet café, or the living room (Stern, 2003: 185).

In *Sharing Knowledge in the Arts*, we build on this proposed shift to look at publishing not as a specific art genre but as a practice including care and infrastructural work. We want to expand our methodologies by drawing on critical infrastructure studies that emerged in the digital humanities to further examine the cultures, tools, and methods that define knowledge infrastructure practices (Gold & Klein, 2019; Liu, 2021). Critical infrastructure studies consider infrastructure an amalgam of things and ideas. Infrastructure is understood as what ‘supports, connects, separates, constraints, frees, transforms, communicates, and stores who we are’ including materials, networks, people, public and private organizations, and cultures, factors that shape our understanding of who we are (Forum TC Digital Humanities, 2018: para. 1). With Lauren Berlant, we understand infrastructure as ‘a movement or patterning of the social form’ manifesting in protocols, agreements, relations, hardware, and space (Berlant, 2016: 393). Studying such heterogeneous contributing factors requires an interdisciplinary approach to determine what infrastructure in practice-based research publishing is, who it is for, and how it can be envisioned better.

The goal of envisioning infrastructure better, always also urges us to look at our own practices exploring hands-on approaches to research by combining designer, builder, and critical activities (Liu, 2021). This emphasis on simultaneous analysis and *infrastructuring* of critical interventions provides the starting point for our practice-based research on infrastructures for sharing knowledge for and by artists.

Towards an infrastructural approach

This section introduces some of the ongoing practice-based project work with the private archive of media artist Barbara Strebel. Building on the methodologies and perspectives discussed in the first section, the *Sharing Knowledge in the Arts* project seeks to develop a research database as a methodology to grasp the invisible parts of artistic knowledge-sharing practices.

Over the past months, the project team has engaged with the private archive of Strebel who was crucial in pioneering net practices in Basel in the 1990s. She was involved in THE THING, an artists' network founded in 1991. According to the founder, Wolfgang Staehle, THE THING built on Bulletin Board System' (BBS) radical open access and sharing culture (Rhizome, 2021). A BBS allows users to connect to a system, read and upload data, and exchange messages with other users. In BBS networks, Staehle discovered a form of sharing of know-how and skills that the individualized, competition-driven art world of the 1990s in New York lacked. He wanted to create a space where artists could exchange ideas among peers. He saw the potential in an artistic approach to digital networks to create an immaterial space that enabled immediate transmission and global access (Rhizome, 2020). Based in New York, THE THING provided a digital space to chat, exchange knowledge, and publish texts and images with several independent nodes in Cologne (1992), Vienna (1993), Berlin (ca. 1995), Düsseldorf (ca. 1995), Amsterdam (1996), London (ca. 1995), Stockholm (ca. 1995), Frankfurt (1992), Hamburg (ca. 1995), Rome (2000), and Basel (1994) (Monoskop, 2024).

The emergence of BBS in the late 1980s and mailing lists in the early 1990s presented an important moment for critical publishing and recursive publics. Those systems differ from print media in two crucial points: While traditional print media are based on a one-to-many model, where information tends to go from producer to reader, the computer-based communication formats of many-to-many allow for an exchange among many. Each reader can simultaneously read and write, and information flows in diverse directions. The filter function, which editors in print media traditionally take on, is conducted by readers and producers themselves.

This has been pivotal for critical publishing, as it allowed to transgress from the prevalent alternative magazine culture, which sought to move towards a more democratic publishing approach via DIY production strategies, participatory approaches to editing and submissions, and situated modes of distribution. The digital means

allowed for an acceleration of this approach. The shared infrastructure of the board and, later, the mailing list created a situation of responsibility and distributed maintenance—all needed for the possibility of a recursive public. Creating a discursive digital space allowed for a reflection on sharing knowledge, while simultaneously modifying the practices and designing their infrastructures otherwise, and thus put forward open access and open source principles.

As examples of early mailing lists in the art field, I need to mention the mailing list 'nettime' (1995), dedicated to the dissemination of net critique, with its roots in collective art practices and political activism on the fringes of the squatter movement in Amsterdam (Geert Lovink) and Berlin (Pit Schultz). Another example is the German mailing list 'ComLink' (1990) founded by activist groups of the undogmatic autonomous left for discussion and organization. While non-institutionalized structures and trans-local networking facilitated trans-local exchanges, they also introduced complexity into decision-making processes. To address these challenges, physical exchange formats and sites became more critical in bridging the virtual and physical worlds, ranging from formal conferences and festivals (*Ars Electronica*, *Dutch Electronic Arts Festival*, *Root Festival of Hull Time Based Arts*, *Transmediale*, *Viper*), to off-spaces (L@den, Basel), informal dinner meetings, collaborative (art) projects, workshops (Copyshop, Cologne; Crossing Over; tech_nicks) and temporary media labs (The Hybrid Workspace at documenta X, Revolting, Temp).

Strebel was involved in the Basel node of THE THING, called THEswissTHING (1994-1998). In addition to running a digital platform, THEswissTHING also provided access to the net as an Internet Service Provider (ISP) and had a physical space, the L@den, where people could access the Internet on computer stations, read books from the library, attend talks and performances, or take part in skill-based workshops for digital literacy. Situating the practices and bringing contributors together on one site allowed for simultaneous participation in the platform and maintenance of its infrastructure, making it possible, to a certain extent, for the infrastructure—the BBS, network access and computer—to be used and controlled by its users.

Engaging with the private archive of Strebel provides us with a starting point for specifying aspects and thematic clusters relevant to understanding the artistic knowledge practices and infrastructures of the 1990s. For example, working through printed conversations among founders and system administrators of THE THING assists

in understanding the respective community's open source and access principles. Further, the conversations outline the self-understanding of *infrastructuring* and communicating as an art practice.

Strebel's materials—ranging from flyers, brochures, concept papers, to copied texts and printed email conversations—capture the participation in the discourse on access and openness amidst the economization of the Internet. The materials also document the conceptualization of net activist alternatives or the creation of experimental space for art in the digital space. Another aspect to carve out from those conversations ties in with discussions regarding the tension and overlaps between DIY and self-organization approaches versus startup culture. Further, we can trace the negotiation of ethical questions of accessibility and openness and arguments for more equitable, polyphonic, and diverse artistic and communicative forms of knowledge. Some receipts point to the history of technology linked to the project mapping the hardware and software used. Material such as correspondences and receipts provide different angles to access the 'patterning of social form' inherent to the net critical and cyberfeminist practices. Correspondences help in learning about relations and positionings, while administrative material supports understanding the financial and organizational structure of the involved initiatives and stakeholders.

Archiving Networks

Working through the material of the private archive, we realized that the encountered practices are challenging to grasp by focusing on one initiative only. Their patterning of community-based notions of sharing and open access operates much more networked—transcending the boundaries of a single initiative or project—thus requiring us to take on a perspective that captures the loose, open, and conflictual ways of working, often evading clear definitions and operating beyond the logic of conventional formats and roles. These observations build the starting point for our thinking towards mapping those knowledge practices and infrastructures in a research database. Some of the questions in this process of developing adequate mapping and archiving methodologies are how to articulate those parts of the infrastructure that did not leave any traces in the archive or did not materialize otherwise. We are querying about strategies to articulate the hidden parts of infrastructures, such as social patterns between the different actors, projects, and activities. And we are asking what new material needs to be generated to map the particularity of the social patterns.

One of the departure points for our thinking towards developing a methodology to map those knowledge practices and infrastructures is based on the experiences and reflections of Rhizome in their work with the digital archive of THE THING BBS, the bulletin board of THE THING, conducted in collaboration with Small Data Industries and financed by the National Endowment for the Humanities (Fino-Radin, 2020). As the main challenge of digital preservation, Rhizome call the fact that most digital artifacts rely on context external to the artifact itself (Conner et al., 2020). For example, a message posted on a message board is only legible with its surrounding information, such as a time stamp, username, name of the message board, and previous messages. Rhizome developed a strategy to meet such contextual understanding of data by restaging THE THING BBS in a way that made the traces of social and technical processes of the message board legible but did not fully emulate the actual board. The archive is presented on a website offering contextualized and restaged access to recovered messages published on THE THING BBS. This approach shows the messages in a context that allows users to experience THE THING BBS's artistic integrity.

Another approach to mapping disparate material and practices to articulate invisible relations and entanglements can be found in the project *Archivführer. Deutsche Kolonialgeschichte* by Susanne Freund at Potsdam University of Applied Sciences (Freund, 2019). The *Archivführer* is a meta catalog of selected archival holdings on German colonial history, exemplifying an attempt to contextualize archival material as openly as possible. The project summarizes and links the colonial traces in archival documents with information about different places, actors, and events. For this purpose, the open knowledge database Wikidata is used. Wikidata was developed in 2012 as a central repository for structured data for the Wikimedia ecosystem. The data is available in human- and machine-readable forms under a free license. The open structure of Wikidata allows third parties to supplement existing data and add their findings—which, in the context of colonial history, can include information on non-European individuals or groups that have not yet found their way into historical lexicons due to their assumed insignificance. Similarly, the *Joan Jonas Knowledge Base* research project, with the support of our partner Lozana Rossenova from the Open Science Lab TIB Hannover, experiments with Linked Open Data (LOD) as a cultural heritage research tool capturing the relationships between different datasets, such as exhibitions, iterations of specific works, collaborations with Joan Jonas, and curatorial and art historical study on the artist (Artist Archive Initiative, 2021).

These projects are relevant for our research database, as they combine technical aspects of openness, such as the need to make data machine-readable—and, if possible, available under an open license—with a broader understanding of openness.

Open research data and practices of openness

Drawing on the discussed methodologies, our research database explores ways to translate social and ethical community-based notions of sharing and open access from the 1990s to publishing research data. We want to approach the question of how to translate the notions from the 1990s by publishing our research material in a way that thinks through concepts of ‘openness’ and ‘accessibility’. Drawing on an understanding of design as a knowledge practice that creates public environments, invites audiences to engage, emphasizes relationships, stimulates associations, unveils access points, and instigates discussions, we want to transfer the project’s research findings on sharing knowledge in the arts into archiving practices in universities of art and design.

Sharing data openly in research projects comes with challenges. The prevalent practice for sharing knowledge in the research community in the Global North is linked to making data machine-readable, providing it with unique and permanent identities, and using standardized communication protocols and data usage licenses according to the FAIR principles. The FAIR principles are Findability, Accessibility, Interoperability, and Reusability (Wilkinson et al., 2016). Introduced in the British scientific journal *Nature* in 2016 by a group of hard and natural science researchers, they define a best practice standard for open science and guide researchers in science, technology, engineering, and mathematics (STEM), ensuring transparency, reproducibility, and reusability of their data management. FAIR emerged in the context of Open Science (OS), promoting and encouraging participation in scientific progress for everyone, regardless of cultural, social, or geographic background and thus helping to produce a democratization of research (UNESCO 2023). To achieve this, these principles primarily center technical aspects, such as the support of machine-based processes for automated data finding and use.

The principles received critique from humanities and social science contexts, drawing attention to the fact that researchers should not only consider ways to make research accessible but also ask why it needs to be available and how that benefits the communities in which data originates—data providers (GIDA, 2019). Challenging the FAIR principles, the Global Indigenous Data Alliance (GIDA)

pointed out that, in Open Science discourses, accessibility is often set equivalent to democratization of research. However, the prevalent understanding of access and openness is linked to technological innovation, which might provide technical access—the mere digital availability of content—but does not automatically enable accessibility—the ability to access the content. With this in mind, in 2019, GIDA articulated alternative principles, the CARE principles. The acronym CARE stands for Collective Benefit, Authority to Control, Responsibility, and Ethics. With these principles, the alliance stresses some pressure points in the FAIR principles. Whereas FAIR principles prioritize end-users (ensuring easy access to data), the CARE principles prioritize the communities of origin. This prioritization questions the scaled-up open science research economy and the pursuit of individual reputation and intellectual capital. GIDA notes that although data can be 'findable, accessible, interoperable, and reusable,' this does not guarantee that the way data is shared and made accessible is fair. Thus, for the CARE principles, GIDA outline socio-technical aspects to consider when thinking about ways to share research data fairly.

The CARE principles resonate with the social and ethical community-based notions of sharing and open access from the 1990s and approaches to publishing research data. For our project and the question how to translate those notions into the publication of a research database, we thus want to build on the CARE principles. Doing so, raises the following questions for our project:

Authority to control: How do we address the clash between historical approaches and self-historization, between our research perspective and the lived experience of those participating in and maintaining bulletin board and mailing list infrastructures?

Responsibility: Who builds and maintains the archival infrastructure and how do we negotiate the struggles over the narrative, as there are different levels of involvement in these initiatives?

Collective benefit: When data results from a loose network infrastructure without defined authorship, who has the authority over the data, and who benefits from sharing the data? How can we map the network from manifold and potentially conflicting perspectives?

Ethics: How do we navigate the fundamental conflict between the demand for openness in providing permanently

referenceable data—linked open data—and the non-public character of archive material?

For us, the first step towards finding answers and meeting some of those challenges is to develop a knowledge representation of a research database that informs its users about the mechanisms and structure it bears to provide access to material: A knowledge representation which maps the research perspective on the material and discloses the project's methods, decisions, and positionality. Where are the project's data from, what models were developed, what analysis was performed, who was on the team, what were points of tension and disagreement, and which hypotheses were pursued but proven false? We understand such revealing as a feminist act, highlighting the involvement of money, institutions, humans, and tools. And the revealing is crucial insofar as it builds the foundation for the possibility of sharing research fairly.

Coda: Learning from...

One year into our project, we cannot provide an extensive conclusion yet. Instead, I want to tease out how we seek to learn from the net critical and cyberfeminist practices of the 1990s for developing said research database. By developing a research database, we are thinking through research infrastructures from a practice-based art perspective. By publishing research data in the arts and contributing to the discourse on open research data in art and design research, we are intervening into how access to knowledge is understood in practice-based research publishing. We see this as an attempt to use academic structures to subvert academic systemic problems and, thereby, contribute to ongoing discussions on the critical state of publishing in practice-based research.

The 'Publishing after Progress' special issue of *Culture Machine* speaks to the crucial task of putting forward an applied critique of research infrastructure and publishing formats and attempting to institute them otherwise. Drawing on radical open access movements, digital activism, autonomous grassroots organizing, and research at the Center for Postdigital Cultures at Coventry University, the issue, among other things, questions the underlying paradigms of open access and the ways in which, today, it is often being governed through commercial academic publishing houses. The issue aims to 'map academic-led publishing and editorial practices driven not by profit and progress thinking but by solidarity, critique, and creativity', as the call for papers for 'Publishing after Progress' stated. With this paper, we hope to contribute to this mapping by articulating historic infrastructural examples of

knowledge sharing practices in the arts and how they have produced publics. We juxtapose those practices to current research publishing infrastructures, thereby opening a space for questioning as to how they can be conceived otherwise.

We observe a particular gap between the existing academic infrastructures for publishing and the understanding of publishing as a transformative social and political process in practice-based research discussed throughout this paper. There is a sense of urgency to act and help develop advanced infrastructures and formats that understand the process of sharing knowledge as socio-technological and augment the operations of practice-based research. Through our project, we are committed to helping to develop that.

In doing so, we are interested in thinking about accessibility beyond dissemination, as a tool to reflect on how research becomes accessible. Because how we access research, often also influences how we are oriented towards research, what we understand as research. Do we encounter it in an academic paper such as this, creating a narrative and interpreting and framing ongoing collaborative research processes? Do we encounter it in a report, an excel list, a manifesto, or a database? How does the chosen materialization influence the prevalent understanding of research? If we take the claim for democratization of research seriously, we need to think about access differently and ask how research is ‘published’ and thus instituted.

Sharing research process material provides insight into approaches, ways of studying and articulating. Allowing researchers to access process material, makes research accountable insofar as it makes possible for others to wander off crafted narratives, and instead, through engaging with material, come up with new articulations and interpretations—providing the possibility for research to become more plural. Published material is not neutral either, but in its loose form creates openings allowing other researchers to connect. In this context, centering methods and processes instead of results through publishing research data provides a massive potential.

While the net critical and cyberfeminist practices of the 1990s were not developed in a research context and didn’t aim at contributing to the research domain, they proposed a methodology relevant to consider in the context of practice-based research. Firstly, because of how they have established a link between what is published and how it is published. Secondly, because of how they put forward open access and open source principles and, thereby, an understanding of publishing aiming at a democratization of publishing and utilizing

technological and infrastructural means to create a shared infrastructure. Thirdly, because of how they activated their readers, and moved away from one-to-many communication modes to recursive, many-to-many models.

Publishing in practice-based research regulates the collecting and sharing of knowledge. This makes publishing a contested and conflictual site of feminist and anti-colonial struggle. Engaging with publishing open research data, for us, presents an opportunity to denaturalize our participation ‘in some of these systems of exploitation and to reorient our work towards anti-colonial and anti-racist research habits, protocols and relationships’ as T.L. Cowen and Jas Rault have pointed out (Cowen & Rault: para. 5).

One necessary action to denaturalize our participation in publishing open research data is to try together to understand its protocols and develop the tools necessary to uncover its mechanisms. Firstly, this includes strategies that establish a link between what is published and how it is published. For example, more plural forms and formats of publishing that provide insights into the methods and processes of research, allowing for other researchers to connect and reach out. Secondly, it asks us to use and help maintain shared infrastructures controlled by researchers, thus helping to create a setting, in which publishing and sharing supports researchers in guiding other researchers to research. Thirdly, we are urged to develop many-to-many relations, finding publishing forms that allow for recursive research, research that provides cracks or entry points into its narratives, and connects to plural perspectives on the discussed material. With this in mind, we hope to articulate and challenge the limiting understanding of openness and accessibility in academic publishing and develop together forward-facing strategies of fair sharing that prioritize ‘relationship building, reciprocity and trust’ (Cowen & Rault, 2024).

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End Notes

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ⁱⁱ Find further information on the *Sharing Knowledge in the Arts* research project here:

<https://criticalmedialab.ch/projects/sharing-knowledge-in-the-arts/> (accessed August 13, 2024).

ⁱⁱⁱ See the regulations for ‘Open Access to Publications’ by the Swiss National Science Foundation (SNSF):

<https://www.snf.ch/en/VyUvGzptStOEpUoC/topic/open-access-to-publications>; and for ‘Open Research Data’:

<https://www.snf.ch/en/dMILj9t4LNk8NwyR/topic/open-research-data> (accessed August 13, 2024).

^{iv} Eva Weinmayr’s work builds on the collaborative project ‘Teaching the Radical Catalog. A Syllabus’ (together with Lucie Kolb). Drawing on Emily Drabinski’s article ‘Teaching the Radical Catalog’ (2008), the project has been developing a study and research program that investigates the politics of naming and framing and the practices of searching and finding in libraries from an intersectional and decolonial perspective. <https://radicalcatalogue.net> (accessed August 13, 2024).

^v One of the project’s methodologies is a reading group looking at literature such as ‘Decolonizing Open Science: Southern Interventions’ (Dutta et al., 2021), ‘Open Science, Data Sharing and Solidarity: Who Benefits?’ (Staunton et al. 2021), ‘Open Ethnographic Archiving as Feminist, Decolonizing Practice’ (Okune, 2020), ‘Feminist Data Manifest-No’ (Cifor et. al., 2019), and ‘Operationalizing the CARE and FAIR Principles for Indigenous Data Futures’ (Carroll, 2021).

^{vi} Find further information on the research project *Critical FAIRness* led by Lucie Kolb and coordinated by Patrizia Munforte here:

<https://criticalmedialab.ch/projects/critical-fairness/> (accessed August 13, 2024).

^{vii} Find further information on the ‘Critical Publishing’ teaching development project led by Lucie Kolb and supported by Lara Kothe here:

<https://criticalmedialab.ch/projects/critical-publishing/> (accessed August 13, 2024).

^{viii} Find further information on the research library distro situated at the self-governed studio house ADW11 in Basel and led by Lucie Kolb and Philipp Messner here: <https://distro.info-space.ch> (accessed August 13, 2024).