From Proletariat to Precariat:

An Interactive Documentary Intervention

in Northwest Bosnia-Herzegovina

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

Practice elements relating to this thesis can be found at:

http://www.pro2pre.com, optimized for desktop browsers

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I dedicate this thesis to Sead Mujagić (1958 - 2011), in loving memory.

Abstract

This practice-based PhD interrogates the capacity of interactive documentary as a tool for civic action. More specifically, it looks at interactive documentary as a social practice and form of intervention; a method of building and mobilizing community archives. The central piece of practice associated with this PhD is a web-based interactive documentary titled *From Proletariat to Precariat* that can be accessed at www.pro2pre.com. The project, hereafter *Pro2Pre*, is a proof of concept and an enactment of the methodological excursions explored in this thesis. Synthesizing viewpoints from several different disciplines, this thesis argues that interactive documentary can be employed and studied as a collective archiving practice, serving the needs of different communities and engaging the historical from below. Furthermore, it proposes a new theoretical framework for interactive documentary as a counter-archive; one that calls attention to different software modalities and foregrounds site-based work and encounters. Finally, due to concerns regarding technological idiosyncrasies and instabilities that threaten to wipe out or turn much of activist media labor into ineligible digital data, this thesis also proposes some strategies for preservation and access.

Research Questions

Situating this project both historically and within the register and traditions of documentary as social practice, the research raises the following questions:

1. What are the epistemological and political implications of interactive documentary as a counter-archive?
2. In light of the rising doubts about democratic potentials of digital media, how can we make use of digital tools to document and catalyze surprising, unlived forms of social relationality?

3. Lastly, through the lens of historical materialism, what role do infrastructures, class and economic circumstances play in these alternate forms of archiving and knowledge production?

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Introduction

> Memory is not an instrument for surveying the past but its theater. It is the medium of past experience, just as the earth is the medium in which dead cities lie buried. (Benjamin in Jennings, Eiland and Smith, 2005: xii)

Documentary has often been on the forefront of examining and critiquing society and challenging our knowledge about the world. As a practice, it evolved through different technological innovations and immutable desires for a form that not only strives to show and interrogate life as it really is, but also aims to imagine a different world. After casually introducing the term 'documentary' in one of his film reviews[1], John Grierson later described it as "creative treatment of actuality" (Grierson, 1926), a definition that despite its contradictions remains widely used and cited. Over the years, reconfigurations of Grierson's interpretation evolved to accommodate ever greater diversity of engagement with the form (Winston, 1995; Bruzzi, 2006). This also meant relaxation of previously strict boundaries between documentary and fiction.

Even though today's definitions of documentary are far more fluid, popular perceptions continue to suggest a vocation for devoted truth seekers, human rights advocates and social justice warriors. Documentary is, broadly speaking, principally concerned with the 'real'. A documentarian, it is believed, pokes around archives, spends months or even years living with the protagonists, charts uncanny new territories, and educates about people and situations that otherwise stay invisible or out of reach. Despite the fact that documentary's history is fraught with hotly debated issues of

[1] More specifically, Grierson's review of Robert Flaherty's film Moana (1926), published in *The New York Sun* February 8, 1926.

representation and participation, it continues to be regarded as an art form that addresses the most pressing and complicated issues, probes various power structures, and frequently positions itself as an active agent of social change. Those perceptions should not be surprising; a century of social engagement through documentary shows that the affective powers of documentary can indeed raise awareness, change lives, create communities, and influence policy makers.

The emergent forms of documentary—and the focus here is on the interactive, web-based variants—are not much different. Over the last decade, many projects—*GDP* (Helene Choquette, 2009), *4 Stelle Hotel* (Valerio Muscella and Paolo Palermo, 2014), *Le Grand Incendie* (Samuel Bollendorff and Olivia Colo, 2013), *Rapporteur de crise* (Bollendorff and Colo, 2011) and *18 Days in Egypt* (Yasmin Elayat and Jigar Mehta, 2011), to name but a few prominent examples—have been conceived as activist responses to the profound social and economic disruptions of our time. These works can be considered as forms of present-day political interventions with a particular social goal in mind. Just like their linear predecessors, they aim to grapple with social issues and intervene in places where misconceptions or abuses of power lead to violence, oppression, or censorship. Upon closer inspection, most of the examples from this new crop of documentary media remain linked to traditional documentary practices. They exhibit nearly all of Michael Renov's (1993, p. 30) four fundamental functions of documentary:

> 1) to record, reveal, or preserve; 2) to persuade and to promote; 3) to analyze and interrogate; and 4) to express.

However, what distinguishes these new forms of cultural expression from their time-based counterparts is a whole new gamut of technological affordances and audience dynamics. Particularly striking is the wide range of possibilities for simultaneous collective and collaborative work across different media and remote geographical locations. The questions of representation, authenticity and

voice—issues that go hand in hand with documentary practice—have also grown to become more complex and difficult to assess. These profound shifts have led to claims that we are witnessing the nascent days of a whole new form, as suggested by Tom Perlmutter, the former head of the *National Film Board of Canada*:

> The advent of digital or interactive work is not simply another part of a linear development; rather, it is the birth of an entirely new art form, the first such in over a century. (Policy Options, 2014)

At the same time, documentary practice remains inextricably linked to archives and historiography. One just needs to look at the long and rich past of documentary film to see, for example, how both scholars and practitioners have animated the archive by (re)narrativizing its fragments, speculating on its omissions and exposing its hegemonic discourses. Throughout the history of audiovisual media, documentaries have not only sought to reconstruct historical events by borrowing from the archives; they have often become historical documents themselves. In the 1920s, the pioneer of the so-called 'compilation film', Esfir Shub, constructed her documentaries almost exclusively out of archives. Her method is particularly noteworthy for its dialetics; Shub recontextualized the material in such way that she preserved the meaning of the original "whilst simultaneously imposing a fresh interpretative framework" (Bruzzi, 2006, p.28). In fact, as Shub's *The Fall of the Romanovs* (1927) demonstrates, some of the key events in world history are now accessible thanks to such documentary interventions within the archive.

Described as discourses of sobriety (Nichols, 1991), "creative treatments of actuality" (Grierson, 1926) and democratic tools with civic potential (Nichols et al., 1994), documentaries frequently charted new territories of social activism and became deeply embroiled in debates over politics and ethics of representation. Expanding on this tradition, the more recent, interactive forms of

documentary make use of software to explore reconfigurations, new contexts and varied readings of archives and their ideological biases. Furthermore, the opportunity arises for documentary practitioners to employ the new technologies not only to record, preserve and organize, but also to devise entire archival systems, with principles and logic that usurp the hierarchies common to traditional, state-owned and institutional archives.

Centered on databases, but employing a host of different interaction protocols, presentation and navigation methods, interactive documentaries challenge the idea of archive as a stable and non-negotiable repository of knowledge. Inherently open-ended, these works can engage various forms of community and activist media, correspondence, gestures and impressions collected from the Web and social media. Most importantly, they explore horizontal access as well as participatory and inclusive forms of knowledge gathering and sharing. Works like Yasmin Elayat and Jigar Mehta's *18 Days in Egyp*t (2011) or *The Quipu Project* (2015) by Maria Court and Rosemarie Lerner are just some of the examples of this confluence of interactive documentary and archive making from below. A quick look through MIT's Docubase[2], a curated database of projects that employ such modalities, reveals a number of works that put an accent on counternarratives, suppressed histories, censored knowledge, and polycentric storytelling. One could argue that they all epitomize the possibility of - to paraphrase Marxist historian Raphael Samuel - making the history "the work of a thousand different hands" (Samuel, 1994, p. 59).

Over the last ten years, I became very interested in this peculiar nexus of archives, networked and interactive technologies, documentary engagement, and social activism. I have explored it in various

[2] Accessible at http://docubase.mit.edu

permutations, mostly through web-based documentary work and site-based projects in northwest Bosnia-Herzegovina – the location of my field work and the place where I was born. These engagements included a web-based documentary *Dayton Express: Bosnian Railroads and the Paradox of Integration*[3] (Husak, 2009) that looked at the country's devastated railways as a metaphor for social disintegration and, *Not by Note* (Husak, Karakayali, Meissner, 2011) – a collaborative site-based intervention that sought new paths within artistic debates on the constitution of power, culture and identity. The motivations for this PhD stem from my close and familial bonds with the place, and my lived experience as someone who had to flee the country due to war and nationalist partition of the 1990s. As a practicing artist-documentarian, native of Bosnia - albeit with a permanent address in the U.S. - and someone who has close family and friends still living in the region, I continue to have vested interest in the country's cultural, political and social life.

The knowledge and skills that I bring to this PhD were acquired through years of formal education and professional practice in the field of media arts. After settling in the United States and pursuing degrees in film and media – more specifically, a BA in Media Arts and an MA in Media Studies - I have worked on a number of film projects and installations as a director, editor and sound designer. Focusing on archival and social functions of film and interactive media, I became firmly committed to assisting communities and articulating collective histories that belie official discourse. In 2013, for example, I completed a Fulbright fellowship at Humboldt Universität with a project that explored the use of public space and the ensuing gentrification in immigrant neighborhoods in Berlin, Germany. I have screened, curated and exhibited work at such diverse places as *Cinemateca Distrital* (Bogota, Colombia), *SXSW* (US), *Sundance Film Festival* (US), *Stadtmuseum Graz* (Austria), *Sarajevo Film*

[3] This project can be found here: http://www.daytonexpress.net

Festival (Bosnia & Herzegovina), *TV Cultura* (Brazil), *Hot Docs* (Canada) among others. These engagements and my sustained research and activism, have greatly informed- and led to the production of a public intervention and exhibition named *Nothing is the Same Anymore*. Produced in the summer of 2014, just a few months after the protests broke out in Bosnia-Herzegovina, *Nothing is the Same Anymore* laid the groundwork for this practice-based PhD. It exemplified my sincere interest in participatory media experiments and the concomitant, radically different and potentially more inclusive kinds of knowledge production.

The revolt of 2014 was remarkable in its diverse expressions of discontent that spread like a wildfire in only a few days. Aside from highlighting and documenting cultural expressions of this pivotal juncture in the country's recent past, the exhibition *Nothing is the Same Anymore* was also an attempt to intervene and answer a call for radical change. It happened at the juncture of creative practice and politics. A result of collaboration with local artists, activists and worker associations, the exhibition sought to keep the critical momentum of the uprising alive and document the events surrounding the crisis. On a more practical level, it involved a concerted effort of recording, collecting and exhibiting various kinds of text, artifacts and media, most of which were later incorporated into *Pro2Pre*. This thesis embodies some parts of that work as well as fragments from my writing on the topic; exhibition catalogue texts, conference presentations and journal articles[4]. The Project

[4] More specifically, this includes excerpts from my two previous publications on the topic: Husak, Amir. "Exercising Radical Democracy: The Crisis of Representation and Interactive Documentary as an Agent of Change." *Alphaville: Journal of Film and Screen Media*, no. 15, Summer 2018, pp. 16–32. www.alphavillejournal.com/Issue15/ArticleHusak.pdf and *Kriza, Umjetnost, Akcija (Crisis, Art, Action)*. In Bosnian, ed. Amir Husak and Irfan Hošić, Bihać, Gradska Galerija, 2017.

Background chapter provides more details about the early stages of research and outlines the location-specific contingencies, history and genesis of the project.

The practical basis of this PhD, *Pro2Pre*[5], is a web-based interactive documentary and a dynamic, living digital archive that examines the roots and causes of the 2014 social unrest in Bosnia-Herzegovina. Within this work, methodological contributions were made through interface and database customizations (developed by the author and several collaborators) that seek to enable different modes of representation and facilitate incisive readings of the assembled archive. The result could also be described as an intermediation between ongoing dialogues, history, collective action and site-based interventions. Aside from documenting the uprising, *Pro2Pre* delves deeper into the past and calls attention to destruction of land and labor resources - particularly the demise of industry in the northwestern town of Bihać. The project features a growing database of interviews, activist and citizen videos, photographs, sound recordings, social media posts, correspondence, news reports and print media. Incorporating experimental navigation, indexing, cross-linking, and curation of these database entries, *Pro2Pre* employs the capacities of interactive documentary as both an archiving practice and an art of social engagement.

The arguments put forth in the thesis and the associated practice were, for the most part, developed synchronously. In this case, the results from one method shaped subsequent methods or steps in the production process. It is therefore suggested to consider them in unison, allowing the relationships between the theoretical and practical components to come into full view.

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[5] Accessible at http://www.pro2pre.com (user: guest, password: pro2pre). Note that the current version is optimized for desktop browsers and kiosk mode installations. For best viewing experience it is suggested to use a Firefox browser on a desktop or laptop computer.

To promote that kind of 'reading', there are direct references and footnotes in this paper that link to pertinent samples in *Pro2Pre* as well as other associated media. It is important to note that the structure of this thesis diverges from the norm and deliberately blurs the formal distinctions between the literature review, methodology and results. The sections are organized in a sequence that provides contextual and historical background, frames the practice and chronicles the creative process to shed light on its methodological excursions and, ultimately, discusses different implications of interactive documentary as a counter-archiving practice.

The principal claim of this thesis is that emergent forms of documentary not only aid an important work of memory, but could possibly change the way we negotiate power and articulate politics of dissent. This is particularly important in situations such as the one faced in Bosnia, where traditional and state institutions rely on hegemonic tactics of exclusion, suppression and erasure.

As a preamble, I also wish to add that this type of practice-based research necessitated a hybrid methodology and working across different disciplines. I have embarked on it from a perspective of an artist-documentarian, gradually adapting and borrowing methods from different disciplines as a way of responding to specific challenges that emerged in the creative process. This included seeking recourse in anthropology, sociology and design studies among others and, more concretely, meant employing mixed methods to come up with creative alternatives to traditional or more monolithic ways of understanding and addressing a set of issues. Reflecting on those junctures, I see this work as a quest for emancipatory politics; a search for an aesthetic that maybe closely resembles what Frederic Jameson once anticipated and labeled "cognitive mapping" - the means to show social

totality, shed light on class structures, and make the present world comprehensible through a situational apprehension of circumstances[6] (Jameson in Grossberg and Nelson, 1988, p. 352).

Project Background

Starting with a revolt of the dispossessed workers in the city of Tuzla, a wave of protests began to spread across Bosnia Herzegovina in February of 2014. In a fit of rage, the protestors set government buildings and offices on fire, demanding an end to more than two decades of political clientelism, corruption and dubious privatizations programs. Particularly interesting was the protestors' strategic resurrection of *class* as a cornerstone of new political solidarity, which presented a formidable "challenge to the nationalist hegemony, and effectively ushered in a new era of *postsocialist* politics" (Hromadžić and Kurtović, 2017, p. 4). Rejecting the identitarian politics of the post-war period[7], the uprising was a powerful display of civic courage and determination. The events that followed demonstrated that the citizens of Bosnia-Herzegovina no longer accepted the status of an 'underclass' situated outside the political community. This, in and of itself, was a major

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[6] Drawing from Kevin Lynch (1960), Jameson suggests that the concept of mental maps of city space could be translated into a mental map of social and global totality that "we all carry around in in our heads in various garbled forms." (Jameson, 1988, p. 353).

7 Reflecting on the protest's repudiation of politics of 'identitarinism', Tuzla based scholar and activist Damir Arsenijević (2014, p. 45) writes: "At the threshold of hunger and despair, people refused to occupy the identitarian category to which they have been neatly assigned for over two decades. They proved in practice that solidarity is still operative as a way of materializing and thinking equality. Protests at the same time brought together these various groups and brought down these identitarian walls. Against the fetish of difference and reification of ethnicity—enforced by the alliance of ethnic oligarchs and the members of the so-called "International Community"—the people in the protests insisted on commonality and joint demands for justice for all."

breakthrough and a remarkable moment of political sobriety. Furthermore, the uprising raised hopes and signaled that things could start changing.

1.1 Ruptures and the 2014 discourse shift

Not long after the first flames engulfed the government buildings, a number of international media outlets including *BBC*, *AlJazeera* and *New York Times* rushed to label the uprising 'Bosnian Spring', thus suggesting that there are perhaps inherent parallels with the Arab Spring or the Prague Spring. Yet, as some of the articles[8] suggested, the protests in Bosnia did not come out of the blue, nor did the characteristics of this unrest precisely correlate with the revolts in Egypt, Tunis, or the Czechoslovakia of 1968. The trajectory of this particular crisis was long and uniquely different. After the devastating war that ended with the Dayton Peace Agreement in 1995, Bosnia-Herzegovina quickly plunged into the quagmires of corruption and political gridlocks precipitated by the arrangements signed in Ohio. Today, the ethno-nationalist elites, greatly responsible for the war in the 1990s, and their oligarch successors control disproportionate amounts of the country's wealth and continue to uphold and institute laws that divide and marginalize (Donais, 2005). The most pressing, yet the least addressed problem is the growing inequality, i.e. the deepening rift between the so-called *plutonomy* and the *precariat*[9]. Over the years, a wide range of statistics revealed an alarming image of a country whose citizens are being pushed to the very margins of existence.

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[8] See https://www.bbc.com/news/world-europe-26093160; https://www.nytimes.com/2014/02/08/world/europe/protests-over-government-and-economy-roil-bosnia.html; and https://www.aljazeera.com/indepth/opinion/2014/02/it-spring-at-last-bosnia-herzegov-201429653789844 3.html

[9] The term plutonomy was allegedly first coined by the Citigroup analysts in 2005, referring to the economies where all growth is powered and consumed by the wealthy few. Here, however, I allude to the dichotomy between plutonomy and

Once viewed as a guarantor of stability and recovery, the international community in Bosnia again – much like in the 1990s - assumed the role of a frowning observer. Particularly unsettling is the fact that a number of predatory financial institutions, the EU and international organizations, have done more than just passively stood by; some have been complicit in enabling the ruling nationalists to privatize public property and tear the country's fragile social fabric to shreds (Donais, 2005; Coles, 2007). The explosive mix of helplessness, uncertainty and the eroding trust in Western democracies gave rise to all sorts of sentiments[10]. Taking into account the staggering youth unemployment rate of 60%[11], reported just prior to the protests, it was not very surprising that the revolt broke out. The unemployment statistics also partially explain why the most vigorous and radical protesters of 2014 were young men and women – those who felt most robbed of their futures.

1.2 From "Bebolution" to Tuzla

The political impasse of 2013 brought about the first significant protest in post-war Bosnia, the so-called "Bebolution", which in hindsight can be regarded as a prelude to the more radical and far-reaching 2014 protests. The 2013 protest was a response to the delay in adopting a new law to assign social security numbers to the newborn citizens of Bosnia-Herzegovina. As a result of this neglect

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precariat as explained by Noam Chomsky. For more see Chomsky, Noam. *Occupy.* Brooklyn, NY: Zuccotti Park, 2013, pp. 52-57.

[10] Some of the more worrying variants have nurtured a wide range of conspiracy theories and ethno-religious militancies rooted in nationalisms of the 1990s.

11 See UNDP, "Southeast Europe Regular Economic Report" Report 78505-ECA, 2013, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/06/17/000356161_20130617141957/Rendered/PDF/785050NWP0Box30ith0Albania0update0.pdf

by the elected officials, a three-month old Berina Hamidović died after being denied entry into neighboring Serbia for urgent medical treatment; the infant was ineligible for a passport due to not being granted social security number. Thousands of people took to the streets and formed a chain around the parliament, preventing politicians from going home until the ethnic squabble within government ended and the social security number issue was resolved. An estimated 10,000 protesters took part in the parliament blockade[12]. The Bebolution was a critical sign that mass revolt in Bosnia may be far more likely than previously imagined or believed. Future, more serious uprisings seemed inevitable. As expected, the big revolt arrived about six months later, in February of 2014.

After mistreatment of protesting workers by the police in Tuzla, citizens across the country mobilized to show solidarity and hold those in power accountable. Overnight, spontaneously and without prior coordination, citizens began occupying central squares, marching through the cities, surrounding government buildings, and demanding accountability. As the protests intensified and turned violent, several ministers, cabinets, and locally elected officials resigned and, in some cases, went into hiding. The protesters clearly identified who they thought was responsible for the grave conditions, poverty and suffering that befell them, and they were not afraid to express their rage publicly. This was particularly evident in targeted attacks on nationalist party headquarters and residences and businesses of select politicians[13].

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[12] For detailed coverage of these events see openDemocracy report at https://www.opendemocracy.net/en/bosnias-baby-revolution-is-protest-movement-coming-of-age/

[13] In Bihać, this took on another dimension as angry protesters gathered in front of the private residence of the cantonal Prime minister, Hamdija Lipovača, who was later forced to resign. They later moved on to demolish a luxury hotel belonging to one of premier's close relatives. See section 3.2 for more details about this event.

In the immediate aftermath, high ranking officials called for peaceful demonstrations. Organizing spontaneously, citizens held mass assemblies, aka "plenums", to devise a course of action, address the most immediate concerns, and discuss the possibility of establishing interim administrative bodies. It was precisely at this stage, as the citizens were attempting to organize politically and turn their ideas for change into action, that the elected officials and media began to vilify the protestors as hooligans and vandals who destroy private and public property, cause social instability, hinder progress, and discourage investors[14]. At the same time, well-known political figures paraded on TV expressing heartfelt commitment to finding resolutions. In retrospect, however, this brief moment of reconciliatory language could be interpreted as a systematic regrouping tactic[15].

By the beginning of April 2014, the number of public assemblies dwindled and an atmosphere of exhaustion, disappointment and disorientation began to permeate the post-protest landscape. Largely disseminated by the members of the ruling parties and the media, a myriad of conspiracy theories and smear tactics coupled with intimidations by the police force helped bring the momentum to a grinding halt. Some protesters were identified, detained and interrogated, while a

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[14] In an interview for the Federal Television, just two days after the unrest broke out, the chairman of the presidency of Bosnia Herzegovina Bakir Izetbegovic expressed his concern that the protests could interfere with the opening of the new *Zara* clothing store in Sarajevo and chase away foreign investors. See *Pro2Pre* clip here: http://www.pro2pre.com/zara-izetbegovic

[15] Several of my interlocutors, for example, talked about practices of cooptation. This was discussed at length at a panel I organized and moderated in August of 2014, and later referenced by Hromadzic and Kurtovic (2017, p. 24) who write: "Different parties within the governing structures of the Federation focused on particular segments of the protesting populations (workers, veterans, etc.) promising them (temporary) deals (pensions, salaries, employment, etc.). These pressures of cooptation – when combined with the internal fragmentations and disparate visions of the post-protest political futures – divided up the protesting body which was still searching for its connective tissue, something that could politically articulate and solidify the politics of empty bellies, and thus, protestors hoped, impel more ordinary Bosnian citizens to join in the struggle."

barrage of court hearings continued for more than two years after the protests. These included high monetary penalties and charges[16] against the most vocal protesters.

Although the repression exercised by the authorities was not as aggressive as say in the aftermath of similar protests in Turkey or Greece, it has done a remarkably good job in polarizing the already desperate, divided and doubtful public. Yet, not all was lost, and many began to recognize the unprecedented forms of solidarity and the emergence of new political subjectivity as a direct result of the civic action that took place (Arsenijević, 2014). This realization prompted important networking efforts between the newly formed community and activist groups, and the various existing associations of workers, human rights advocates, and academics.

The 2014 uprising is widely perceived as the most radical social protest in Bosnia-Herzegovina in recent memory, not only because of the violent incidents, but also because of the collective departure into new forms of political action and reflection that turned to the socialist past for inspiration (Arsenijević, 2014; Hromadžić and Kurtović, 2017). The protests exposed nearly all of the malignancies of the post-Dayton Bosnia: political and economic stagnation, corruption, nepotism, and the widespread social suffering. Despite their apparent failure to achieve immediate and long-lasting social change, the February protests need to be regarded as historical moments of clarity and a critical sign that future negotiations of power in Bosnia may never be the same again. February of 2014 saw the country's first direct affirmation of 'multitude'[17] as a genuine collective body and possibly one of the most important political turns in over two decades. They presented a

[16] See https://bhprotestfiles.wordpress.com/2014/04/24/sejdic-charges-against-protest-organiser-serve-as-threats/

[17] In his book *The Savage Anomaly*, Antonio Negri (1991, p.194) defines the multitude as "an unmediated, revolutionary, immanent, and positive collective social subject capable of non-bewildered forms of democracy."

new departure point for many conversations about the future of Bosnia and Herzegovina, and as such have prompted a myriad of critical engagements[18] including petitions, public appeals, scholarly articles and publications, various forms of civil disobedience, and art interventions. As a project that sprang out of the February 2014 protests, *Pro2Pre* also belongs to that particular register of engagements.

1.3 "Nothing is the Same Anymore"

Nothing is the Same Anymore was an exhibition that took place between July 31 and August 4th 2014 at Gradska Galerija (The City Gallery) in the city of Bihać, northwest Bosnia. It involved an extended stay and field research to collect and present expressions that captured the anger, elation, frustration and hope of the extraordinary civic action taking place in Bosnia. Although it reflected on the events that took place in various parts of the country (and partially reconstructed them), the exhibition primarily drew upon local experiences and the events that took place in the city of Bihać. By presenting a mélange of artifacts, videos, photographs, art works, public installations, panel discussions and participatory works, the project sought to understand the scope of the crisis, articulate the ideas of struggle, and explore possibilities of continued civic engagement in the distinct new political reality of post-protest Bosnia. It did not seek to call attention solely to works by professional artists responding to these events, but rather focused on the creative and interpretative powers of society at large. Furthermore, it investigated prospects of social engagement through creative practice beyond the conventional domains of art production. As such, it presented a wide

[18] Some of the analyses, opinions and commentaries can be found here: https://bhprotestfiles.wordpress.com/

range of responses to the crisis including social media postings, private journal entries, correspondence, and newspaper clippings.

The exhibition took place in the municipality's last remaining public art gallery[19]; The City Gallery is located in the heart of the city's pedestrian zone, overlooking the central square where most of the public gatherings and protests occurred during the so-called Bebolution in 2013 and the February 2014 uprising. The choice of venue had very little to do with the intent of staging this project within the confines of the art world. Due to its central location and social function as the city's most important incubator of cultural life, the gallery was a logical choice. It stands as the last remaining publicly funded institution that, for the past 15 years, manages to sustain some autonomy and presents a wide range of exhibitions, talks, and performances that engage, provoke, entertain or simply inform. Most importantly, the gallery management was sympathetic toward projects and events that aimed to critically engage local audiences.

1.3.1 Site-specificity: Bihać

Although Tuzla was the epicenter of the Feburary 2014 protests, and arguably still remains the hotspot of social justice activism in Bosnia, choosing Bihać as the site for the exhibition had more to do with practical concerns. As a native of Bihać who left the country shortly before the outbreak of the war in 1992, I maintained contacts with friends and family and visited frequently. I have conducted research in the city and its vicinity before and, for those reasons, found it much easier to

[19] Due to its prime location in the heart of the city, this gallery recently became a target of potential investors. Thanks to a swift reaction by the citizens, it survived a covert attempt by the former mayor to shut it down, i.e. to rent the space to a foreign credit bank and displace the gallery activities to an unfinished building outside of the city center. See also http://www.h-alter.org/vijesti/galerija-nije-samo-izlozbeni-prostor-ona-profilira-javnost-Bihaća-kao-osvijestenu

facilitate the encounters and establish a reliable network of collaborators for this particular project. There were, however, also some other justifications worth noting.

Although creative and critical potential certainly exists in Bihać, its citizens rarely have an opportunity to publicly engage in these types of conversations, let alone through art or other creative endeavors. This was an important factor and something I took rather seriously.

Separated by a mountainous terrain from the Federation of Bosnia Herzegovina mainland, bordering Republika Srpska to the south and east and Croatia to the north and west, Bihać is the largest city in the country's northwest canton of Una-Sana (aka USK), a region that is home to 300,000 people. The city functions as a *de facto* regional center and the seat of the cantonal government. During the war of the 1990s, Bihać remained under military siege for more than 3 years. Over 6,000 people died, while the city's infrastructure, public and private property suffered immense destruction. This had a devastating effect on the city's social and cultural life. Unlike other Bosnian cities such as Sarajevo, Tuzla, Banja Luka or Mostar - all of which are home to a number of larger cultural institutions and international organizations - Bihać offers relatively little to nothing when it comes to public programs that promote community activism and emphasize critical engagement with the issues of local, national, or international importance. The cultural clubs, district and community assembly halls from the socialist period were all destroyed in the war, or privatized in the so-called "transition" period. This kind of situation, in turn, necessitated a project that can build and sustain critically engaged local community and support the existing voices of dissent.

1.3.2 Art context and the sociality

In essence, all so-called socially engaged art projects depend on the involvement and active participation of others beside the author-instigator of the project. In that regard, the groundwork laid with "Nothing is the same anymore" was purposefully site-specific and almost entirely

dependent on the contingencies of its location and audience. Using symbolic and/or actual gestures, it sought to connect with communities and produce interactions that, in a best case scenario, can lead to positive social change. Following this criteria, the principal aim of *Nothing is the Same Anymore* was to gather the citizens to re-engage in conversations that were started during the February protests.

As modes of engagement, audience participation and active spectatorship are nothing new in the art world. The Situationist interventions of the 1960s, Joseph Beuys' social sculpture, or the Fluxus group performances are some of the early examples of works that involved the public directly. The last three decades saw an expansion of this practice and the emergence of new kinds of conceptual works that principally involved the sphere of interhuman relationships as a site for artwork. The most notable works of this recent wave come from artists such as Gabriel Orozco, Thomas Hirschhorn, and Rirkrit Tiravanija. Art critic Nicholas Bourriaud (2002) labeled these tendencies "relational aesthetics", adding that relational art aims to establish intersubjective encounters in which meaning is elaborated on collectively. In other words, the value is placed on encounters, exchanges, and community building. Conceiving and producing such works often involves a combination of ethnography, sociology, community activism, and creative media making. *Nothing is the Same Anymore,* again, was no different. It was inspired by these ideas and practices as it sought to bring the community together, document the collective experience and look for ways of articulating the present struggles.

1.3.3 Industrial past, precarious present

No conversation about the 2014 protest and the looming crisis would have been complete without a consideration of the country's socialist and industrial past, and the hardships its laid-off workers faced in the post-war years. Nearly all conversations generated within *Pro2Pre* pass through the prism

of these pasts and explore their meaning in the context of present-day struggles. In the early stages of research, the exhibition *Nothing is the Same Anymore* alluded to these by incorporating artifacts and photographs as means of initiating conversations and providing historical context to the 2014 uprising.

Bihać's three largest factories, Krajinametal, Kombiteks, and Polietilenka employed more than 7000 people before the war broke out in the 1990s. Along with Šipad (forestry and wood processing) and several other regional manufacturing and processing enterprises, these state-owned but worker-managed firms constituted an economic backbone of the region. Gradually dismantled and devalued in an onslaught of dubious privatization schemes and systematic liquidation of assets, these factories are now ghostly remnants of the city's once vibrant industrial past. Home to packs of stray dogs, and in the process of being totally reclaimed by nature - trees, shrubs, insects and weeds - these foreboding sites hang in limbo and waited on potential investors and buyers. With all their historical weight, symbolism and enigma, they undoubtedly belong to the mosaic of contemporary Bosnia-Herzegovina.

1.4 From proletarian to beggar

In the obscure process of transition, the erstwhile mighty workers associations and labor unions lost much of their bargaining powers and political influence. Over the years, most of these alliances have all but entirely dissolved. Today, some 2000 former employees of the industrial sector still await severance pay and, in some cases, as much as two years' worth of unpaid wages. Those whose work history reached the 30-year mark – the country's minimum number of years in service required for retirement - were sent to early retirement with an average monthly pension of 387KM (roughly 190

Euros). One such retiree is Ramiz Alić[21], a former employee of the Krajinametal steel processing factory and one of the interviewees in the project. As a widower living in a small apartment – provided to him by the factory in the pre-war years – and caring for his disabled daughter, Ramiz barely scrapes by. A veteran of the 1990's war, he often reached into the past and painted a rosy picture of his prewar years at Krajinametal. He reminisced about his daily routines at the factory, collegial atmosphere, holiday bonuses, leisure activities organized by the union, and the many benefits he and his family enjoyed, which included deep discounts on vacation packages to the Adriatic coast, ski trips in the Slovenian Alps… things an average laborer in Bihać today can only dream of. At one of our meetings, he said something that truly reflected the dismay:

> They told us we live in a democracy now, that the evil days of socialism are over. I don't know. That word democracy, I don't know if I understand it. What are we talking about? To me it means crime. We are living a crime.

Ramiz is not the only one who feels that way. Many have expressed similar frustrations, especially those of the older generations who were gainfully employed in one of the city's factories and enjoyed considerable benefits. They now watch as their children struggle to find decent employment; observe silently as local oligarchs build mini empires; and watch in disbelief as shopping malls, multiplex cinemas, entertainment centers and credit institutions sprout up around them and occupy ever larger swaths of public land. Increasingly, they perceive this new image of progress as a shrewd deception, for only a handful of jobs in these new enterprises come with a

[21] Excerpts from an audio interview with Alić can be found in *Pro2Pre* at https://pro2pre.com/kombiteks-vanishing-point/

decent living wage and benefits. The rest, mostly in retail and service industry, involves long working hours, limited or no benefits, meager pay and no union representation.

Under mounting pressures by the advanced neoliberal market economy, many choose to emigrate. Those less fortunate tend to fall into the same trap seen in other post-socialist countries: to supplement their income, afford basic goods, and feed their families, many apply for loans and gradually acquire significant debt. Stuck between a rock and a hard place, they try their luck in one of the countless new local casinos and gambling establishments – a risky maneuver with disastrous consequences.

1.5 Humor and revolt

The most poignant and politically viable moments of the 2014 dissent were the public assemblies, aka plenums, that were open to all citizens and sought to articulate their claims against the political class. In Bihać, however, there were also some noteworthy preludes to the plenums. Here, I want to highlight the first open-microphone event at the central square in Bihać, a popular gathering place located in the pedestrian zone adjacent to the gallery where *Nothing is the Same Anymore* exhibition later took place. In a vibrant display of civic courage, a diverse group of citizens – laid off workers, retirees, veterans, teachers, and students of all ages - took to the stage and spoke of hardships, uncertainty, fears and hopes[22]. In an address that confidently blended the personal with the political, they saluted civic action, called for greater solidarity with the protesters in Tuzla and demanded immediate reforms. The therapeutic, performative, and political aspects of these social gatherings bore some striking similarities with the Occupy Wall Street People's Mic and the Gezi park public forums in Turkey. When I asked the local organizers and activists whether they modeled the Bihać

[22] A curated sequence of clips from this event can be found in *Pro2Pre* in the "Curated" section under the title "Citizens Speak Montage": https://pro2pre.com/curated

"open mic" gatherings after those in the U.S. and Turkey, many responded that they barely knew about the specifics of those revolts, let alone how the "open mic" forums were organized and used as a form of protest. It was a spontaneous action, they told me, adding that they remember it as one of the most invigorating moments of the uprising. In retrospect, the moment perfectly encapsulated the potential of new solidarities and demonstrated the vitality, diversity and clarity of the participants' voices. The often humorous remarks and satirical jokes aimed at the corrupt government permeated these public gatherings and sparked off laughter and a sense of relief. Many of my collaborators stressed the importance of these moments and suggested including the documentation in the project. Here, I would like to underline what one of the protest participants later said about this:

> These smiles were a true sign of relief. I remember it clearly. All of a sudden, we were all in it together. And, for the first time, it felt like we can win.

In a Skype conversation shortly these events, Aida Sejdic, a chemistry teacher-cum-activist and one of the most prominent faces of the Bihać uprising, expressed her worries about the gradual erosion of enthusiasm, trust and solidarity seen in those first days of the protests. Aida was also among those who later faced charges and had to go to court hearings for alleged disturbance of public order and instigating destruction of public and private property. Much of what transpired during and after the protest outlined the urgent need for an autonomous platform, however temporary, where citizens can freely reflect on the meaning of these events, dispel fears of further engagement and keep the discourse alive. *Pro2Pre* responds to this need directly and seeks to preserve and mobilize an archive of dissent.

1.6 Transgressing the divide

For years after the end of the 1990s war, fear of another ethnic conflict has been a powerful agent in subduing criticism of elected officials and evading allegations of corruption. There is a lot of evidence of the same rhetoric being used during the 2014 protests. At various points during the protests, leading politicians and public safety officials argued that any form of social unrest would lead to a destabilization of the country and that the resulting power vacuum would allow the enemy – essentially referring to the neighboring entity - to undermine their statehood and gradually take over[23]. In one such episode, the chief of the USK cantonal police force attempted to dissuade the public from further gatherings by fabricating a story about heavily armed Serb policemen setting up checkpoints on the phantom border between Republika Srpska and the Federation[24]. This was quickly denounced on social media by the citizens who happened to travel between both entities that same evening and who reported no checkpoints or armed policemen in sight whatsoever. Activists later raised concerns about the fact that the highest-ranking police officer can deliver such statements without ever apologizing or following up with an explanation. On a more symbolic level, these exploits raised the fears that the ruling elite, afraid to lose its grip on power, was ready to resort to a variety of dubious methods to disorient the public and create an atmosphere of fear and uncertainty. For a country that carries deep scars from the 1990's conflict and continues to struggle with traumas of the war, talk of armed confrontation triggered a host of deep-seated anxieties.

The protests, however, also showed potential to transgress the ethnic divide. Particularly interesting were the expressions of solidarity that called for dismissal of nationalist parties: social media

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[23] For a recount of these exploits go here: https://zastone.ba/en/the-success-of-the-protest-is-serb-croat-and-bosniak/

[24] A recording of this statement, delivered at the crisis meeting on Febrauary 10th, 2014, can be found in *Pro2Pre* at: https://pro2pre.com/usk-police-commissioners-statement/

(inter)actions, gatherings in support of protesters in both entities, and a wide range of regional networking attempts that followed. A protest sign that perfectly epitomized this moment and became quite prominent during the protest read: "We are hungry in all three languages"[25]. Commenting on the widespread use of this remarkable sign, Hromadžić and Kurtović (2017, p.19) write:

> This linguistic act spread around quickly and it beautifully subverted the charges of ethnonationalism, while using and reinserting, yet trivializing, the "grammar" of ethnonational division.

The cooperation and reaching out across entity lines reemerged soon after the protests, during the catastrophic May 2014 flooding, which affected communities in both entities and prompted volunteers to coordinate and work tirelessly together to provide relief[26]. The volunteers regularly sidestepped political institutions and protocols that, for the most part, obstructed or discouraged such forms of cooperation across ethnic lines. These genuine, albeit isolated expressions of solidarity presented a healthy antidote to endless nationalist diatribes. Most importantly, the uprising also showed many no longer believe that any form of social protest destabilizes their autonomy and makes the threat of yet another episode of ethnic cleansing palpable. For the first time since the signing of Dayton Peace Accords in 1995, the question of social justice took precedence over the question of safeguarding one of the troubling legacies of the war: the incontestable loyalty to ethno-nationalist state and its doctrine.

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[25] "Gladni na sva tri jezika", referring to the country's three official languages: Bosnian, Serbian and Croatian, which are mutually intelligible and, practically, the same language.

[26] See, for example, Lana Pasic's news story about this at: https://www.aljazeera.com/indepth/opinion/2014/05/balkan-floods-bosnia-201452073456580374.html

This shift away from identity-driven politics and toward the questions of class and distribution of wealth was, as said earlier, to be expected. Years of post-war nationalist rhetoric, in conjunction with the painful memories of the war, have not only continued to exacerbate ethnic divisions but also created a new type of 'underclass' that remained excluded from political, economic and cultural life and production. Behind the smokescreen of identity politics, propelled by the arrival of the open market economy and the lasting bureaucracies of the Dayton Peace Agreement, a host of dubious policies and economic restructuring led to devastation of the commons. As ethnic identity concerns continued to dominate public discourses, and unemployment figures became impossible to ignore, the question of social justice rose to the surface. Nancy Fraser and Alex Honneth (2003) observe that in the present-day world, demands for social justice appear to be divided into two categories: protests that seek egalitarian redistribution of resources and wealth, and those that seek recognition of the unique identities of racial, ethnic and other minorities. They contend that an adequate conception of justice must include both of these categories. In Bosnia, a notable absence of the former in the first two decades after the war has been something of an anomaly, and perhaps explains why the sudden shift in 2014 seemed so radical in its demands and expression. According to Fraser (2003, p. 19), there are certain groups, which are ostracized two-dimensionally with respect to the economic class and their social status (due to ethnic identity and/or other belonging), suffering both maldistribution and misrecognition. This casting aside has taken on multiple forms in Bosnia, from failing to provide citizens with a social security number to openly discriminating and denying access to public resources. Because of such tendencies, Fraser argues that "justice today requires both redistribution and recognition. Neither alone is sufficient" (2003, p. 9). This, again, was perfectly captured in 2014 with the protest slogan "We are hungry in all three languages", which essentially intertwined these concerns and announced the resurgence of class in a society deeply impoverished and anesthetized by problematic identity discourses.

1.7 The aftermath

Arguably the most significant outcome of the 2014 protests in Bosnia is the rise of civic networks, partnerships, and dialogues that have continued to this day. The 2014 protests were essentially a long-awaited opportunity for many to step out of the shadow, meet one another, and seek a radical cut with the opaqueness, anonymity and depoliticization of everyday life. In a state that seemingly favors neoliberal market economy over notions of social justice, solidarity networks between the many and disparate refuseniks are ripe with hope. Despite their failure to achieve long-lasting change, the protests helped articulate some ideas for radical change. Furthermore, in a country divided by war, the newly-formed alliances between young activists across ethnic lines harbor even a greater promise; one of convocation that demonstrates readiness for dealing with the difficult past, imagining the future, and articulating ideas and tactics for the much-needed social change. In the post-war years, such attempts at solidarity and cooperation across ethnic lines happened almost exclusively under the sponsorship and authority of foreign NGOs, and many a time within a framework of badly planned "reconciliation" initiatives led by dreadfully obtuse "experts". Too often marred by ill-defined objectives and covert commercial interests, such initiatives all but completely failed. Examples of strong and productive alliances, of true social cohesion, were few and far in-between. Even though they are still in their infancy, the most promising exchanges are now happening between lone-acting activist collectives, independent creatives, smaller grassroots organizations and academics.

2. Framing the practice: interactive documentary

Over the last two decades a substantial amount of scholarship has been produced that studies, theorizes and speculates on new and expanded forms of documentary practice. Initially, much of the writing drew from traditional documentary and cinema studies. The problem with this approach, however, is that the ontological-theoretical framework of the so-called old media goes only so far and often fails to account for the significantly more complex processes that underscore the new digital forms. Radically transformed by advanced technologies, the emerging forms of documentary incorporate, transcend and defy the workings of conventional time-based media. This, in turn, produces an entirely different media ecology (Hight, Nash, and Summerhayes, 2014). A more rigorous study of these practices calls for a look toward what Orit Halpern has called 'communicative objectivity', which considers new forms of observation, rationality, and economy based on the management and analysis of data (Halpern, 2014, p.1).

At this point, even naming this relatively new form presents a host of challenges. In absence of fixed terminology, a variety of labels permeate the scholarly talk: transmedia, cross-media, expanded and hybrid media, etc. – nearly all referring to the same thing. In any case, the term that seems to persist is 'interactive documentary'. As ongoing scholarly engagements show[27], despite its wide use, interactive documentary is a concept that still awaits full definition. For the purpose of this research - and for the sake of precluding any redundant discussions - I find the description offered by Dayna Galloway to be very fitting. He described interactive documentary as "any documentary that uses interactivity as a core part of its delivery mechanism" (Galloway, 2007, p.326). Even though it

[27] Particularly interesting in this context were contemplations and provocations about the meaning of "i" in i-docs at the i-docs symposium in 2018; interactive, intelligent, inspiring, introspective and so on.

suggests a wide range of modalities, this concise definition speaks directly to the methods of knowledge production found in many works including *Pro2Pre*, the practical component of this PhD.

2.1 Interactive documentary as polyphonic practice

Subject to change, dispersed, open-ended and vulnerable to manipulation, interactive documentaries seem inherently erratic. It is, however, their capacity to visualize complexities and incorporate multiple perspectives that perhaps attracts, puzzles and fascinates the most. To find a fitting grammar and better understand this work, different conceptualizations are being introduced and tried out. Much is contested as documentary scholars and practitioners increasingly borrow from communication sciences, new media theory and cybernetics to think of taxonomies that can help us analyze and classify the ever-growing pool of this new breed of documentaries. In search of theoretical constructs that account for interactive documentary's shift from macro and the singular to micro and the multiple, several scholars found the concept of polyphony to be particularly useful (Daniel 2011, Zimmerman and de Michiel 2018, Aston and Odorico 2018,). In the past, polyphonic forms were most prominently featured in music and literature, characterized by different rhythms, patterns and voices, each retaining its own distinct quality but being presented together as a bundle of different tones and meanings. In his analysis of Dostoyevsky's work, Mikhail Bakhtin described polyphony as containing many different voices, unmerged into a single perspective, and not subordinated to the voice of the author (Bakhtin in Aston and Odorico, 2018, p.64). Drawing from Bakhtin's contemplations of polyphonic novel, Aston and Odorico see polyphony in interactive documentary as a ground method and a form of dialogue that extends beyond co-creation and collaboration. The dialogic approach, they argue, also appears to be far better suited to address the complexities of present-day life (p.72). By accommodating consensus, contradictions, and a host of different disjunctures, polyphonic arrangements function as de facto rejections of binaries and oversimplifications. Traits that usually distinguish hegemonic narratives such as continuity, linearity

and causality can be naturally dissolved in a polyphonic arrangement. Ultimately, it is the plurality that takes precedence over a single author's viewpoint.

Invoking Foucault's notion of "heterotopia" - as a possibility of juxtaposing seemingly irreconcilable sites and ideas – Patricia Zimmerman argues that plurality and multilevel thinking are also of great importance to historical discourse. She adds:

> A polyphonic history breaks a single historical event into pieces, and then builds interpretation through a mosaic of arranged and contrasting fragments and routes. Polyphonic historiography's explanatory models expand the number of voices from below. (Zimmerman, 2018, p.59)

Pro2Pre is greatly informed by the polyphonic model. To extrapolate from Zimmerman, the inciting historical event, in this case, is the 2014 social uprising. Through the prism of that paradigm-shifting event, the project incorporates voices of both past and present to actualize its polyvocality across space and time. Herein, the polyphony is reinforced not only as an aesthetic modality, but also as a method of production; media that constitutes the project's database originates from various sources and informs different perspectives, disrupting and further complicating the concept of singular authorship. Further, in reference to interaction and interpretation, the idea of a 'mosaic' is reflected in *Pro2Pre*'s central interface, the media grid (Fig. 1): an arrangement that embraces contradictions and contrasts – side by side - to enable history speaking from below. There are different reasons why I opted for this mode of presentation. First, the grid is considered the hallmark of the modernist era, frequently seen in art of the early 20th century and later revived in different disciplines as an

emancipatory postmodernist pastiche aesthetic[28]. It has been replicated many times, in various contexts. Most recently, the navigation interfaces of Zoom, Google Hangout, Netflix or Amazon Prime Video attest to its ubiquity in contemporary media and communication technologies.

Fig. 1: *Pro2Pre* Media Grid. Screenshot

Prior to settling on the grid as the organizational logic for the archive, other models were considered and tested. This was done at different stages in the project. After each new batch of interviews, project edits and incorporation of new archival material, a prototype was shown to the interlocutors - usually 10 to 15 individuals - for comments and feedback. The project was presented as a web app on either a laptop or a touch-screen device, and the users were asked to explore and provide

[28] Questioning Frederic Jameson's earlier dismissal of pastiche as "blank parody", Ingeborg Hoestery suggested that, in the meantime, postmodern pastiche has moved toward emancipatory aesthetic. She contends, "pastiche opens up horizons of the past that seemed closed forever. It posits our cultural existence as intertextual and demands our dialogue with the "archive" that modernist positions had needed to dismiss" (Hoestery, 1995, p.508).

feedback. No other instructions on navigating or using the interface were shared. Knowing that new meanings and contexts were likely to emerge if there is sustained interaction and linking of objects, I was particularly interested in the sequence of their interactions. The participants clicked, watched, listened, clicked some more and at some point would articulate an idea of what they were working with, by saying, for example, "This is a start button that launches a related clip". Interestingly, there was rarely anything in the design that resembled a start button. There were no graphic elements/symbols that would help them decode it as such. I then observed that my interlocutors rarely came to such conclusions from a formal analysis of the objects on screen. Notably, they also did not conclude it from the look of the objects, as most of them appeared the same (circles, squares or rectangles with text). The notion of a start button, for instance, gradually emerged from the interactions as the clickable object replicated its response to the user's actions over and over.
The sooner the users were able to draw some inference from the logic of the interface - and therefore also devise their own method of navigation - the more likely they were to embark on "journeys" through the archive and arrange interesting sequences. However, designing an interface that can be easily mastered and encourage such interactions is no easy task. One of the early iterations of the interface featured an abstract circular design (figs. 23 & 24), in which individual media pieces were arranged as concentric circles - with the center being an inciting event or an overarching theme. The idea behind this design was to enable different hierarchies and rearrangements (by date, subject, location, etc.) that can appear as radial chains and visualize causal links between different media clips and historical events. Visually arresting, the circular interface produced some interesting initial interactions. Over time, however, my interlocutors found it too abstract and at times too confusing to navigate. Many repeated the same sequence twice and quickly lost track of previously seen clips. This, in the end, failed to produce meaningful sequences and adequately visualize the links between database entries. It became clear that a different organizational

logic was needed. Upon hearing a talk by Brewster Kahle[29], digital librarian and the founder of the Internet Archive, in which he outlined some of the principal arguments for universal access to knowledge, I began researching Open Access archives and studying their interfaces. The more I researched, the more I became aware of the prevalence of the grid-based aesthetic. The Internet Archive, Smithsonian Open Access, Library of Congress… all these collections employed grids as the organizational logic of the archive or featured a grid as one of the available interfaces to browse the collections. After a couple of email exchanges with web archivists and application engineers at Internet Archive, and consultations with my back-end developer, Jean-Philippe Ung, I designed the first grid-based iteration of *Pro2Pre*. In my subsequent tests, the response to the grid interface was overwhelmingly positive. My interlocutors explored the project with a greater sense of agency, took written notes of clips and paths, and adapted to some of its idiosyncrasies rather quickly. One of the participants suggested it reminded her of a *ciglana kuća* (a brick building, in Bosnian). To her, the media objects resembled bricks and windows that can be stacked to create new "homes". I was particularly fond of this interpretation.

Pro2Pre employs the grid aesthetic also as a symbolic reflection of its politics – using a nonhierarchical circuit in which all squares are the same size, and no single square/voice is awarded dominance, the project embodies a democratic structure. As the archive grows, so does the grid. With each new record and addition, depending on causal linking and taxonomy, the project's database can grow both inwards and outwards at the same time. Proposing a centrifugal and centripetal reading of such grids in art, Rosalind Krauss (1979, p. 53) posits:

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[29] See Kahle, B. 2017. Universal Access to All Knowledge. [Online]. 10 November, UNC School of Information and Library Science, Chapel Hill. [Accessed 18 November 2017]. Available from: https://livestream.com/unc-sils/brewster-kahle

> Logically speaking, the grid extends, in all directions, to infinity… By virtue of the grid, the given work of art is presented as a mere fragment, a tiny piece arbitrarily cropped from an infinitely larger fabric. Thus the grid operates from the work of art outward, compelling our acknowledgement of a world beyond the frame. This is the centrifugal reading. The centripetal one works, naturally enough, from the outer limits of the aesthetic object inward. The grid is, in relation to this reading a re-presentation of everything that separates the work of art from the world, from ambient space and from other objects.

As a living archive, *Pro2Pre* employs grid aesthetics as an organic structure seen through a centrifugal lens– a structure that grows outwards exponentially. Even though this choice was to some extent influenced by other projects and interface layouts such as those seen in *Internet Archive, Question Bridge, 18 Days in Egypt, Capturing Reality: The Art of Documentary* and others (Fig. 2), it was the conversations and testing with my interlocutors that ultimately led to implementation of a grid as principal database interface. Participants, some of whom rarely use computers or interact with screen-based technologies, found the grid logical, inviting and easy to interact with.

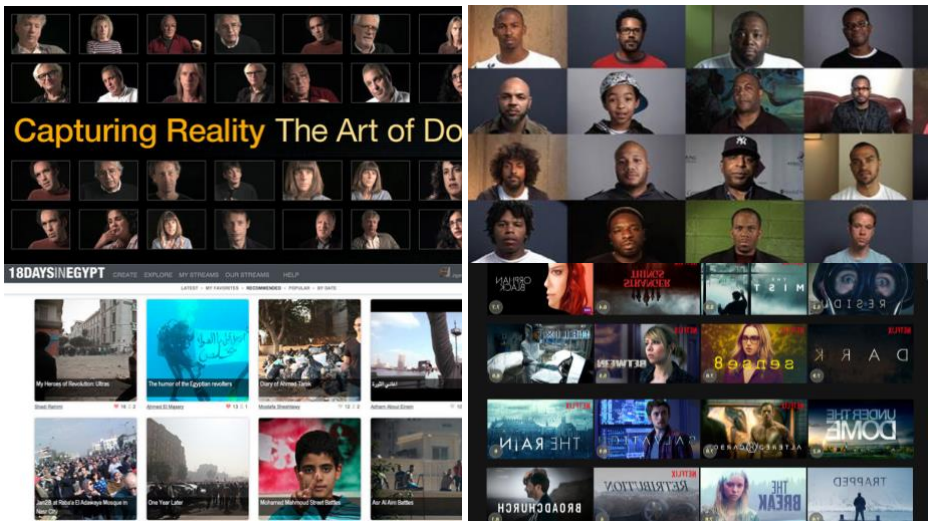

Fig. 2: Examples of grid aesthetics in web-based media interfaces.

This wide and seemingly indiscriminate incorporation of data, openness and polyvocality does have its downsides. To borrow from music theory again, bringing together many disparate elements can create a cacophony; noise, discord, and lack of organization. While the principal investigator and core participants can detect and trace meaningful dialogues, external researchers or the general public might have a difficult time distinguishing between signal and noise, meaning and context. The project's design, taxonomy and strategies for database curation are critical to avoiding cacophony. *Pro2Pre* employs curated sequences and crosslinking via cue points to contextualize and create narrative lines across the database. Aside from making assemblages and continuous edits possible, the sequencing can also engage the dialectics of Eisenstein's montage as collision and juxtaposition of (ideological) opposites and a play of contradictions (Eisenstein in Leyda and Harcourt, 1977).

In regard to the tensions and contradictions that surface between the objectives of theory and interactive media and those of political activism, the work of Sharon Daniel was particularly influential for me. Drawing from Ranciere's articulation of politics and transposing it into the register of new media art, Daniel seeks to "materialize a space of 'dissensus' – not a critique, or a

protest, but a confrontation of the status quo with what it does not admit, what is invisible, inaudible and othered" (Daniel, 2013). Foregrounding and questioning the role of art in politics, her database documentaries / i-docs, and her work in new media in general, offer a unique strain of transformative experiences to the public. For example, in *Public Secrets* (2008), her abolitionist idoc that highlights the voices and experiences of incarcerated women in California prisons, Daniel employs a strategy that renders the context and the afflicted community as a "site" and rejects a mono-voiced, linear story or single narrative lines. It is through interface and information design that the collected testimonies can be rearranged to form concrete arguments. As audiences navigate this space, they engage in a series of encounters that forge distinctive paths of inquiry as a challenge to previously held beliefs about incarceration. Daniel explains that, as an artist, she sees herself as a "context-provider" (2013) - someone who arranges platforms and tools to prompt her interlocutors to speak for themselves:

> I engage with groups of participants who live at the margins, outside the social order, and attempt to create a space for the assertion of their political subjectivity. This process of subjectivation occurs both through speaking and being heard.
>
> (Daniel, 2013)

Both in theory and practice, Daniel reminds us that she is not neutral. Most importantly, she stresses the impossibility of being nonpartisan in these kinds of interventions. The abolitionist viewpoint of *Public Secrets* is not disguised, and it does not compromise the project. Refusing to accept the current state of affairs, Sharon blends theory, design and testimony in an open invitation to the audience to hear/see for themselves; to reveal and understand the costs - both personal and social - of the current incarceration practices. Learning from Daniel, I took a similar approach in *Pro2Pre* and presented both the issues and the afflicted community as a "site". My concerns, however, were not

only limited to the concept of space. I sought to expand the scope of inquiry and also engage polyphony over time, incorporating expressions and syntax that firmly belong to the distant and contested (socialist) past.

2.2 Mapping and visualizing contradictions

Vis-à-vis contradictions, I found Bruno LaTour's "cartography of controversies" particularly useful as a research and production method for *Pro2Pre*. Based on LaTour's earlier conceptions of a "heterogenous network" and the widely referenced Actor-Network-Theory[30], cartography of controversies was conceived as a set of techniques to map disputes (Venturini, 2010, p. 797). By bringing different viewpoints under one umbrella - a social cartography - it aims to provide insight not into scientific knowledge *per se*, but rather into *the process of gaining knowledge* (Latour 2005, Venturini 2010). Much to the dismay of those who expect simplifications and clear-cut answers, cartography of controversies reveals a world of complexity, divergence and uncertainties. The resulting map, however, is not of great use if it only mirrors the complexity; that can only stir the project away from polyphony and toward cacophony. The point of mapping controversies is to make complexities legible, not overwhelming and opaque.

In *Pro2Pre*, the contradictions, disputes and presumptions surrounding the ongoing crisis are critical for understanding the social dynamics, and therefore important to map. As contributions (interviews, clippings, statements, etc.) kept growing and the project evolved, the rhizome of

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[30] A framework and systematic way to consider the infrastructures surrounding technological achievement, Actor-Network Theory assigns agency to both human and non-human actors. See Latour, B. (2005). Reassembling the Social: An Introduction to Actor-Network-Theory (Oxford: Oxford University Press).

controversies started revealing its nodes. Even though my initial questions revolved around the protests, the respondents increasingly invoked memories of the socialist past and anecdotal evidence of post-war corruption. This, in turn, enriched *Pro2Pre* with a whole new batch of juxtapositions, actors and viewpoints, traversing both space and time in a dizzying manner. The task at hand was to order this complexity digitally and find fitting modes of representations for the web. Commenting on these issues of convolutedness and the potentials of digital technologies for mapping controversies, Tommaso Venturini (in Simmoneaux and Simmoneaux, 2015) adds:

> The economic inequities, the environmental crises, the bioethical conundrums and all the issues troubling modern societies are imbroglios of politics, ethics and technologies impossible to disentangle. In these hybrid situations, public participation becomes more and more difficult. To navigate in a world of uncertainties, future citizens need to be equipped with tools to explore and visualize the complexity of public debate. The purpose of mapping controversy is to contribute to the development of these tools through the creative use of digital technologies.

It is, however, important to acknowledge some of the shortcomings of both cartographies of controversy and its precursor, the actor-network theory. Both understand the world as made up of subjects that are related in some way, and as an amalgamate of artifacts - political, social, cultural - distributed across the spectrum as interconnected nodes. The relations that emerge between these nodes are simultaneously the proof of their agency. In that arrangement, almost everything can have agency. No special privileges are assigned to the human, cultural, social, and so on. Depending on the context, this can result in seeing all actors on the map as equals, which renders structural and power relations nearly invisible. Furthermore, there is a risk of maps devolving into endless webs of

association. Aesthetic/design interventions to correct this are not always as straightforward as imagined; it can vary from project to project.

Controversies pertaining to Bosnia's social and political discords became obvious in the early stages of my research, when I resorted to analog mapping as a way to record affect and explore how politics of dissent can be articulated. An overture to a later, more granular digital cartography of controversies, a physical map was produced in collaboration with a local designer to solicit input that can help visualize the politics of space and the ongoing loss of commons. Taking into account the various public and communal grievances at the protests, this mapping practice was driven by ideas of production of space and spatial justice as put forward by David Harvey (2012, xv):

> To claim the right to the city is, in effect, to claim a right to something that no longer exists (if it ever truly did). Furthermore, the right to the city is an empty signifier. Everything depends on who gets to fill it with meaning.

After several renditions, we produced a large (4 x 3 meters, Fig. 3) map and invited citizens to participate and, to borrow from Harvey, "fill it with meaning". Several weeks prior to and during the exhibition, the citizens were invited to come to the gallery and contribute to the map by marking specific locations that, for them, represent the crisis. A call for participation was distributed via flyers, posters, social media and popular online news portals. Over a period of one week, citizens came into the gallery and contributed to the map. Within two days, it became obvious that the markings, notes and commentaries pinned to the map do not necessarily help articulate dissent; it is their astounding diversity that matters. Accommodating manifold notes - from marking the local police station, university, and even the hospital's morgue as bastions of corruption, to addressing important environmental issues, reminiscing about the socialist past, criticizing diaspora, or just

venting about the lack of public spaces for leisure - the map became a communal blackboard and an emblematic space of inscription.

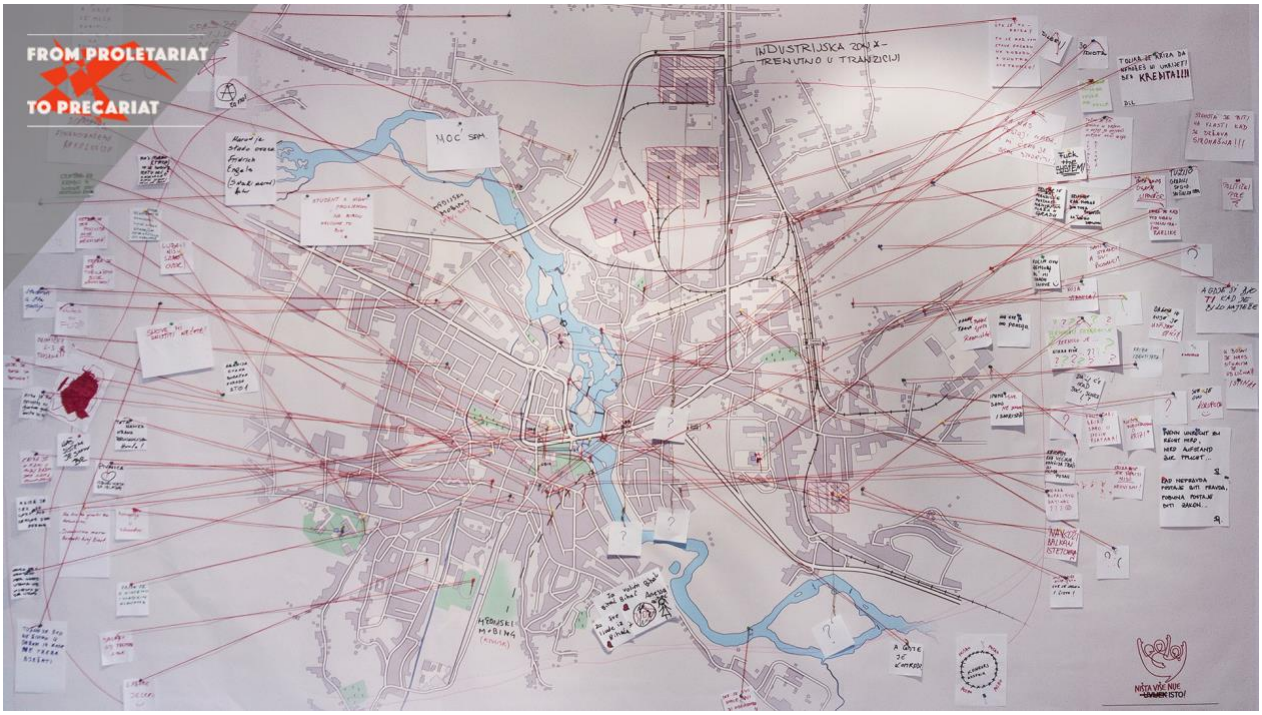

Fig. 3: *Pro2Pre*, collaborative (analog) mapping as articulation.

The mapping stretched beyond an attempt to visualize protest grievances and identify flashpoints. The result was full of contradictions, variance and, in some instances, cryptic messages that seemed to harbor peculiar sentiments of nostalgia (Fig. 4). To my surprise, the markings brought the socialist industrial past into play more prominently, juxtaposing it with postindustrial present and the uncertain future. This spatio-temporal fusion not only underlined the importance of the demise of industry in the present disputes, but also complicated the work of representation. Ultimately, the map framed the situation along the lines of what Claire Bishop (2004, p.79) in her critique of Bourriaud's concept of relational aesthetics described as relational antagonisms:

> This relational antagonism would be predicated not on social harmony, but on exposing that which is repressed in sustaining the semblance of this harmony.

Fig. 4: Map as an emblematic space of inscription.
Citizen entry (left): "The crisis is so big, you can't even die without taking out a loan" (transl. from Bosnian)

To draw from Bakhtin, the dialogism present here is not merely a set of different perspectives on the world. Embracing and understanding the variety of these inscriptions, of which some clearly contradicted each other, is central to the notion of participatory democracy. Taking into account that the constitutionally nominated space for debate is overrun by the interests of the ruling oligarchy and their associates, this new discursive space is very much in line with what Manuel Castells (2015, p.11) has labeled a "space for deliberation". He writes:

> By constructing a free community in a symbolic place, social movements create a public space, a space for deliberation, which ultimately becomes a political space, a space for sovereign assemblies to meet and to recover their rights of representation, which have been captured in political institutions predominantly tailored for the convenience of the dominant interests and values.

The mapping, face-to-face interactions and public interventions are integral to *Pro2Pre* as an activist interactive documentary that aims to produce such spaces for deliberation. Its politics foreground recursive bodily presence as an act of reclaiming the commons both on the Internet and in real life. This hybridity and fluidity between the physical and virtual is worth discussing in more detail. At a time when data worlds and digital approximations (Internet, social media, etc.) seem to overshadow our existence, Judith Aston (2017, p.234) argues that:

> Incorporating elements of live performance into i-docs, whether as process or as end-product, can be a way to engage our full complement of senses by bringing us together through physical co-presence.

Such performative strategies were described by Aston as "emplaced interaction" - a way of eschewing the flatness of the virtual and bringing the physical into the center of our actions through and with interactive documentary (Aston, 2017). Similarly, drawing lessons from the Occupy movement, Alexandra Juhasz (2014, p.47) suggests that:

> For a *digital documentary* to also be *activist* it must participate in an artful leaving of the digital so as to allow the body to also engage in a place beyond representation.

These activities amount to what she labeled "political mimesis", seeking to transcend the digital and experiment with new ways of being and acting in the world (Juhasz, 2014). In a similar context, other scholars have also stressed the importance of designing encounters, dialogues and on-site engagements. Partially borrowing from Augusto Boal and Grant Kester's explorations of socially engaged art, scholar Patricia Zimmerman (2018, p. 37) writes:

> The designed encounter that integrates film, installations, multimedia presentations, and photography gives creators and audiences permission to enter into a different kind of communicative space, one that promises an experience beyond film festival post screening question and answer sessions. In these third spaces, conversation among makers and audience can change the interaction into something more intimate and self-reflective for everyone taking part in the event.

As a socially-engaged and politically-minded project, *Pro2Pre* incorporates such performative elements in both process and the end-product. Process, as described earlier, is entirely contingent upon public interactions and contributions on-the-spot. This extends to the end-product in a peculiar loop. For example, the curated section of the project allows the invited participant-curator to create a thematic sequence of database items/clips and present it as a linear "film" in which clips play automatically in order they are arranged (Fig. 5)[33]. The sequences can then be saved and used as a backdrop-presentation to perform live – in intimate, lecture or large group settings – with functions and trigger points reminiscent of those found in performance and presentation software solutions such as PowerPoint, Isadora, or Millumin. The curated sequences easily morph into micro-stories using video, image and text. A user can create 'compilations films' *à la* Shub[34], engaging in re-narrativization and dialectical juxtapositions of different parts of the archive. Simultaneously, the sequence clips also retain a variety of predetermined crosslinking options via cuepoints and nodal

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[33] The curated section of the project can be directly accessed here: https://pro2pre.com/curated

[34] Esfir Shub and others who later embraced the same method suggest that there is a meaningful dialogue to be had "between original newsreel, home movie footage and the like and the critical eye of the filmmaker (and the implied new audience)." (Bruzzi, 2007, p.28)

connections (see section 4.2) that allow for live improvisation – another important performative aspect and an opportunity for soliciting additional input and discovery.

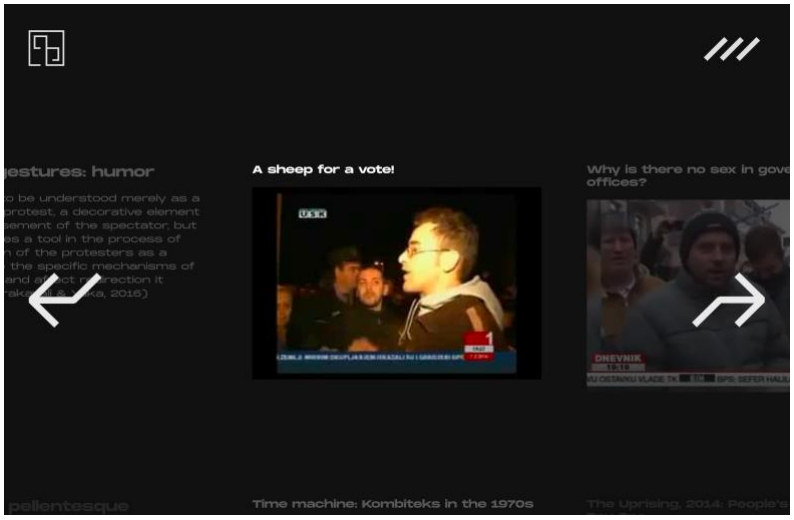

Fig. 5: *Pro2Pre* curated sequence view. Navigable with keyboard arrows. Screenshot.

Throughout the process, encounters and performances with the archive (Fig. 6) have garnered new gestures-contributions and amplified commonalities between the makers and the public. This made an infinite number of sequences and reconfigurations of the archive/database possible. As a result of this, there is never a single viewpoint, unless one wants to impose it via curation or performance. The form is rather loose as it enables different entry points; in stark contrast to authorial roles in a traditional linear documentary, interactive documentary authors are more facilitators than narrators, operating in a plurivocal and co-authored relational environment (Gaudenzi, 2017, p.126).

I am convinced that *Pro2Pre* would fall short of achieving its objectives if it operated exclusively within the virtual, digital realm. Fluid transitions between its modalities, blending digital interactions with narration and live performance, are critical and distinctive features of a project like this as it intervenes politically. Positioned uncomfortably between and across a variety of disciplines, I have searched for ways to facilitate conversations, encourage interactions, and document the events for

further perusal. I should add that I was lucky enough to work with local activists, artists, educators, media creatives, humanitarians, and worker associations. My continued interactions with them also helped expand the work beyond the confines of the art gallery and the Internet and brought into play various other points of sociality such as abandoned factories, offices, studios, riverside cafes, living rooms, and communal backyards (Fig. 6). It is through these experimental geographies and ensuing dialogues that *Pro2Pre* acquired its true meaning and function as an 'emplaced interaction'. I contend that such strategies help advance the work into an open-ended and resolutely political intervention.

Fig. 6: Project encounters. Author presenting found footage
to local activists and former employees of the textile industry (bottom left) in 2016

2.3 Trace as method

Looking at *Pro2Pre*'s research trajectory, the 'analog' map and site-based interactions have served as a launch pad for the later digital cartographies of controversy (Fig. 7). With the transition to digital, the contributions increased in both number and diversity. Images, social media posts, memes, and other digital gestures expanded the database and presented a host of new challenges. Further, digital mediation added to collective phenomena certain properties that are particularly interesting for cartographic explorations: traceability and aggregability.

> If you compose a poem using a word processor, the versions you go through, the time you spend editing, the words you try, the verses you ponder, all the twists and turns of your inspiration can be easily tracked by your very typing software. The same may happen if you exchange emails with colleagues, share opinions in a forum, seduce someone in a chat room. Anything you say or do in a digital environment is traceable and often actually traced (Venturini, 2010, p.801).

Fig. 7: Digital mapping of controversies. *Pro2Pre* prototype

I contend that a digital trace presents a unique opening for interactive documentary as an investigative practice. Herein, I am not necessarily referring to what is commonly known as digital footprint or digital shadow[35] - concepts that raise grave concerns about data privacy and surveillance – but the way we can construct a narrative from the object's digital imprint. The trace, in this context, is perhaps most interesting in the form of the file's metadata, i.e. its tendency to impart critical information (about an event, person or device) and make specific patterns visible. *Pro2Pre* makes use of metadata to reconstruct events via spatial montage and experiments with different indexing methods to rethink both interface and database aesthetics. I will later refer to specific examples of this and the greater implications of metadata as a voice.

Being a living archive, *Pro2Pre* aims to find traces that can also uncover the power structures underneath the process of preserving, collecting and organizing. Because of that, the project's core function is discursive, simultaneously revealing the concept of the digital trace and putting it under scrutiny: who recorded or uploaded the file, by which means, and for what purpose? Ultimately, to seize a digital file – or a copy of it - is to affirm its continuity, often detached from circumstances, author, or intentions.

2.4 Mobile video and interactive documentary as 'Imperfect cinema'

Pro2Pre assembles a great variety of digital files, of which mobile video recordings play a particularly important role. What truly redefined media activism and expanded the dialogic, participatory and social dimensions of digital documentary is the rise of mobile video and social media as a parallel public sphere. These two developments have brought rarely heard voices into public focus and

[35] Our browser history, for example.

enabled greater influence and correspondence between protests staged virtually and those happening in physical reality.

Fig. 8: Citizens record the protest with a smartphone. Bihać, February 2014. Image by Lenka Samardžić

In a shift toward participatory and polyphonic media, the labor of capturing visual evidence is no longer delegated solely to professional filmmakers and media activists; anyone with a mobile phone can record and participate-intervene (Fig. 8). Situated outside the industry systems of production and distribution, amateur mobile filmmaking not only contributes to democratic processes and equity, but calls into question traditional modes of production and reception (Berry and Schleser, 2014). Commenting on such uses of mobile, Michael Chanan (2012, p.219) writes:

> Within the manifold of digital communicative practices, video has come to play an exemplary role in purveying alternative versions of contemporary reality that belie official

> discourse... typically shot on the streets with a mobile phone in the heat of the moment and rapidly posted on YouTube, (it is) providing vital evidence of events beyond the reach of the centralized mainstream media.

This is clearly demonstrated in mobile documentations of the recent plight of refugees in Europe and the ongoing racism and police brutality in the United States, where ordinary citizens recorded and shared countless evidence of power abuse and thereby greatly influenced public opinion. At the time of this writing, protests that erupted after the brutal murder of George Floyd in Minneapolis are gradually transforming into legal action and policy changes that are long overdue. By now, it is almost indisputable that the mobile video recording of the horrific incident played a pivotal role in these developments. Defunding police departments and repealing legislation that protects abusive police officers — proposals that were considered too extreme or too fringe to actually happen — are realities now.

> Everyone knows that the police officers who killed George Floyd never would have been fired or arrested if a courageous black girl had not filmed the incident on her phone and posted it to social media. (Alexander, 2020)

The George Floyd video, however, was not the first mobile recording to prompt legal proceedings. Looking back, one such video led the grand jury in South Carolina to sentence Michael Slager, a white police officer, to twenty years in federal prison for the murder of Walter Scott, a black citizen, in April of 2015 (Fig. 9). In that particular case, the video that surfaced on the web clearly contradicted the official police report and showed the policeman shooting the unarmed Scott from behind, and then planting what looks like a taser gun next to his body. The videos of the killings of Walter Scott, George Floyd, Tamir Rice and Eric Garner have been prominently featured in activist social media campaigns which helped forge an international activist movement, *Black Lives Matter*, a

decentralized network that uses variety of tactics to build power through protest. Aside from criminal charges against police officers, other noteworthy actions have included forcing the former president of University of Missouri, Tim Wolfe, to step down[36] after he repeatedly failed to address a series of racist incidents at the university. Although the full impact of the movement's digital strategies may be difficult to assess at this point, *BLM* has done a remarkable job of employing mobile video to bring important issues of racial discrimination and structural injustice into the center of public discourse.

> Poor images show the rare, the obvious, and the unbelievable—that is, if we can still manage to decipher it. (Steyerl, 2012: 33)

Fig. 9: Shooting of Walter Scott, April 2015. Screenshot.

[36] See https://www.forbes.com/sites/christopherrim/2020/06/04/how-student-activism-shaped-the-black-lives-matter-movement/#2b9a375c4414

The use of mobile video as critical evidence - and a form of counter-archiving practice - is also formally acknowledged through a whole range of tactics, protocols and guidelines that are being developed and deployed in human rights and social justice campaigns. Arguably the most prominent is the work of *Witness* and *Video4Change Network*, organizations dedicated to training activists and citizen witnesses around the world to capture video with enhanced evidentiary and documentation value. Witness publishes and frequently updates detailed guidelines for recording, encrypting, sorting and archiving[37] videos that can serve as critical evidence. A growing number of documentary media makers are integrating these practices and developing collaborative, community-oriented works that aim to counterbalance the mainstream narratives[38].

Pro2Pre integrates a broad spectrum of citizen-recorded media, most of which was recorded with personal mobile devices and varies greatly in image and sound quality. Initially, due to the heterogeneity of the material, this presented concerns about project's aesthetics, i.e. the impossibility of maintaining uniform visual and technical quality standards. But the importance of these records and their immediate mobilization in current disputes easily justified the method. For this reason, *Pro2Pre* adheres to an approach that is format- and technology-agnostic and uses 'any media necessary'[39]. That kind of heterotopia also reflects the democratic ideals of participatory media, and enables more incisive, micro-level surveys of specific situations.

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[37] See, for example, Witness' detailed guide for archiving video, which also includes a comprehensive system for creating and managing metadata at https://archiving.witness.org/archive-guide/

[38] This use of mobile media in documentary can be seen, for example, in Ava Duvernay's project 13th: https://www.avaduvernay.com/13th/

[39] Here, I draw from a Visible Evidence 2016 conference presentation titled "Speculations and Inquiries on new Participatory Documentary Environments" by Reece Auguiste, Helen De Michiel, Aggie Ebrahimi Bazaz, and Patricia R. Zimmermann in which they stated: "Participatory and collaborative documentary is format- and technology-agnostic: it uses, to paraphrase Malcolm X, any technology necessary." Similarly, albeit in a slightly different context, Henry Jenkins (2016) speaks of "any media necessary".

I also see this kind of practice as an extension of Julio García Espinosa's 'imperfect cinema', the opposite of the 'perfect cinema,' which is technically and artistically magisterial but almost always reactionary (Espinosa, 1979). From a more contemporary perspective, Hito Steyerl (2012, p.39). asserts:

> The imperfect cinema is one that strives to overcome the divisions of labor within class society. It merges art with life and science, blurring the distinction between consumer and producer, audience and author. It insists upon its own imperfection, is popular but not consumerist, committed without becoming bureaucratic.

She suggests that the creation and distribution of poor quality images enables what Vertov has imagined and labeled "visual bonds" – ways of connecting workers of the world with each other (Vertov in Michelson and O'brien, 1995). Along with all the confusion and propensity for abstraction, this wide circulation of moving images possibly generates radical thought and affect.

> The poor image—ambivalent as its status may be—thus takes its place in the genealogy of carbon-copied pamphlets, cine-train agit-prop films, underground video magazines and other nonconformist materials, which aesthetically often used poor materials.
> (Steyerl, 2012, p.43)

A good case in point is a video that was sent to me in 2016 by a resident of Cazin, a town only 30 kilometers away from my principal site of investigation. In a shaky, low resolution ('imperfect') mobile video recording we see a man who gives a brief speech, pours gasoline all over his own body, and then self-immolates in front of the town hall (Fig. 10)[40]. In a blur of commotion, fire and

[40] The video can be accessed directly here: https://pro2pre.com/self-immolation-warning-graphic-content/

screams, citizens jump to extinguish the flames and rescue him. The sender of the video informed me that the man is Senad Begić, a 54-year-old war veteran whose requests for adequate housing and disability pension had been repeatedly denied by the town's government for the past 10 years. In a final, desperate act of protest, he voiced his grievances and set himself on fire. Even though the incident occurred in the very center of town, around noon, and with more than two dozen of witnesses present, it went by largely unnoticed in the media. It also failed to garner much attention on social networks. Upon receiving the video, local activists immediately reacted and shared it with independent news agencies. Next, they demanded a response from local and cantonal government and public safety officials. It took some time, but news reports followed and, eventually, a court hearing ensued regarding Begić's standoff with the town's government. The video has since been uploaded to *YouTube* and is also featured in *Pro2Pre* as further evidence of hardships and the ongoing marginalization of the populace on the periphery.

Fig. 10: The self-immolation of Senad Begić. Screenshot, *Pro2Pre.com*

In the project, the self-immolation clip stands as a contested voice and in stark contrast to other records like, for example, the promotional trailer[41] for the local luxury hotel owned and operated by a relative of the Prime minister. The polyphonic arrangement of *Pro2Pre* engages the harrowing clip in multiple dialectical relationships; depending on the sequence, it corroborates, subverts and challenges ideological grounds of reasoning. Keywords and nodal cue-points (Fig. 11) further expand its 'reach', providing additional juxtapositions within the archive as well as outside of it.

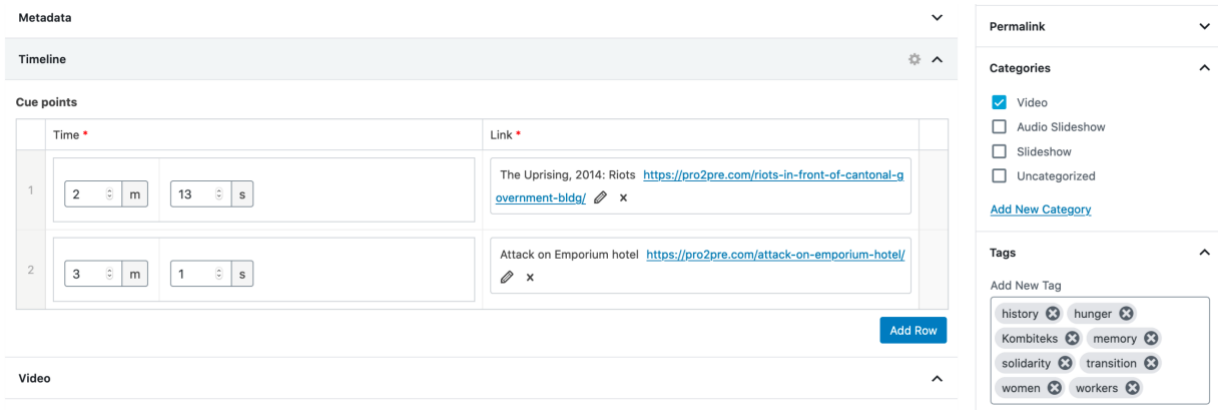

Fig. 11: Context expansion and cross-linking via cuepoint and metadata/keyword edits. *Pro2Pre* administrative interface (custom-coded). Screenshot.

2.5 Interactive documentary uncertainties

Commenting on epistemological shifts in documentary early in the 1990s, Bill Nichols (1994, p.1) foreshadowed the impending crisis and the concomitant structural changes when he wrote:

> Traditionally, the word documentary has suggested fullness, and completion, knowledge

[41] The video can be seen here: https://pro2pre.com/emporium-hotel-promo-video-just-imagine/

> and fact, explanations of the social world and its motivating mechanisms. More recently, though, documentary has come to suggest incompleteness and uncertainty, recollection and impression, images of personal worlds and their subjective construction.

Since then, the functions and capacities of documentary practice have greatly expanded and altered our understanding of the form. A new shadow of uncertainty has evolved to accompany contemporary, digital forms of documentary. As evident in many projects of the newer date, the meanings are rarely explicit, complete or clearly defined. Instead, the works are permanently open to reinterpretation and reconstruction. As a web-based project and a living archive, *Pro2Pre* is not immune to these shifts. In contrast to the days when independent documentaries were screened in alternative venues and often only to the communities they portrayed, the new socially engaged documentary heavily relies on communication networks, data centers, corporate infrastructures and platforms such as *YouTube*, where it exists among many other pieces of media, unstable and ready to be repositioned. Although this particular "problem" relates to and affects so many other systems of knowledge production of the present, one can trace its origins to the early days of digital media. The beginnings of digital documentary, it should be noted, occur in the nascent days of post-Fordism —an age marked by fragmentation and pluralism, incommensurable heterogeneity, immaterial labor and an upsurge in individualist modes of thinking (Kumar, 1995, p.76). The wide and deep, sweeping changes have left no stone unturned, and have profoundly influenced economy, politics and industrial relations, culture and ideology. Thus, the contemporary documentary crisis is, one could argue, a mere reflection of these widespread epochal changes. The Internet, with its maze of contradictions, further added to such complexity and also deepened the representational crisis. It gave rise to a whole new world of remixes, mashups, low-resolution mobile phone videos, incriminating recordings, snapchats, selfie sticks and drone cameras; slices of reality that terrify,

disturb, confuse, but also entertain, motivate, and inform. Are these the twenty-first century versions of what the Lumière brothers once called "actualities", mere reflections of the world? Be that as it may, much of media conversations—such as the debates about the fake news phenomenon—put forward one troubling question: is this for real?

The disputes over authenticity go astray and frequently turn into conversations about technological developments, i.e. the advent of digital tools and advanced methods for capturing, manipulating, and distributing audiovisual content. But there is much more at stake. The resulting uncertainties prompt much larger questions about the underlying economic and social powers that shape the trajectory of the new crisis. Aware of these contingencies and potential limitations in regard to my intervention intent, I have purposefully looked toward methods of emplaced interaction. *Pro2Pre* had to tap into collective knowledge in both process and form, balancing careful curation, interface design and indexing in order to avoid – as much as possible - deeper uncertainties, confusion and *noise*. This is also where I see firm distinctions between *Pro2Pre* as a curated counter-archive, and other projects of the similar register - *18 Days in Egypt*, for example - which crowdsource the content indiscriminately and without a clear organizing principle. Although they enable ample participation, such open structures tend to get increasingly cacophonic with continued aggregation of content. In fact, one of the most enduring critiques of projects such as *18 Days* is that the widely open participation model and non-hierarchical design quickly overwhelm the user with varying content. Due to the fragmented, dispersed nature of the medium itself, context can have a critical agency in establishing the necessary framework here. In interactive documentary, this means that the role of an

artist/author-instigator is increasingly one of a "context provider"[42]. Commenting on this complex dichotomy between content and context, Lovejoy, Paul and Vesna (2014, p.2) write:

> Information usually is of little value if it cannot be contextualized and filtered, and digital technologies are the perfect tool for creating a referential framework that supports these tasks and processes. The way data and information are processed by means of these technologies—particularly within a communications network such as the Internet— again requires a renegotiation of polarities, such as text/context and content/context.

Finally, one must realize the limitations of participatory practice; the important one being that keeping the project door wide open can also invite a barrage of undesired or useless content. One may quickly be faced with an impossible task at hand of sorting, organizing and deciphering countless clips, most of which can turn out to be completely irrelevant to the project. At times it can feel as daunting as attempting to catalog the whole of *YouTube,* as I have come to learn in the initial stages of my work. Still, the idea of participation and its democratic principles continue to be widely romanticized. This is true for interactive documentary projects as well as domains of art, social media, local and national referenda, etc. But while there have been some sincere attempts to create inclusive and engaged models of practice, participation does not always result in greater democratization and coherence. Questioning these tendencies, Markus Miessen (2011, p.50-54) writes:

> When outrage and heterogeneity have been eaten up by societal consensus instead of having disrupted it, and controversial debates can no longer take place, there is no shared space

[42] For example, artist Sharon Daniel sees herself as "context provider" and adds: "This is a way of explaining a shift in my role as an artist from creating content to framing a context—a space for those whose voices are not included in dominant socio-political discourse to speak and be heard." (Daniel in Aston and Odorico, 2018, p.99)

> where conflicts can be played out… Why is participation mostly understood as a consensus-based, deliberately positive, and politically correct means of innocently taking part in societal structures?

I contend that these problems of widely open participatory models - often in the name of democratic ideals and horizontal distribution of knowledge - tend to be easily overlooked in much of interactive documentary practice. To move away from the cacophonies of data overload, forced consensus by design and ambiguous participation parameters, I advocate for a model that foregrounds limited but purposeful curation; smaller and thematic subsets of content; and, most importantly, performative (real life) engagements with the project's database. Even though this approach may not encompass all the critical viewpoints in the early stages, it will yield a more coherent and manageable workflow. As a living archive, the project can then be fine-tuned over time by gradual expansion, newer perspectives and alternate readings of the database. Given its political intent, *Pro2Pre* has benefited from this approach, letting the relational antagonisms and controversies reveal themselves through continued engagement and reordering of content in different on-site and online settings. This enacts meaningful polyphony over time and awakes radical and social potential of interactive documentary as an ongoing process of negotiation, opposition and counter-archiving.

2.6 Material conditions and relations of production

The contradictions, contrasts and conflicts that became more evident with every new step in the process were also indicative of deeper inequities and unstable bases of material life in northwest Bosnia. Throughout my practice, there were different challenges that necessitated looking through

the lens of historical materialism;[43] an assertion that economic and class relations are at the core of all social phenomena. First and foremost, the large-scale dispossession, asset-stripping and dissolving of the previously mighty industries has led to migration, unemployment and deep precarity for tens of thousands of people in both urban and rural areas. Gone were also the strong unions and workers' associations that not only ensured inclusion in power sharing, but stimulated social life and fostered various kinds of collectivism[44].

At the same time, since the end of the 1990's war, only scarce resources were made available to preserve the rich histories of local industries and the associated organizations and collectives. Those things, according to the vanguards of the transition - aka the newly elected public officials - belonged to the dustbin of history, deemed not worthy of remembrance. Ultimately, such sentiments have led to a gradual loss of valuable archival material: workers newspapers, pamphlets, protocols, meeting minutes and various forms of cultural expression. The little that survived is mostly found in private collections, owned by former workers who saved it in their attics, closets and basements protecting it from almost certain disappearance. *Pro2Pre* features a significant amount of digitized collection of such material donated to the project by different interlocutors and local hobby archivists (Fig. 12).

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[43] If we follow the principles and logic of historical materialism, i.e. Marx' claim that what we produce to sustain life determines everything else in society, the widespread loss of means of production has had a devastating impact on social as well as cultural life in Bosnia.

[44] Among the materials I gathered during my research is also a rare 16mm film of Kombiteks textile factory's social and recreational gatherings. This remarkable footage is also the only surviving moving image record of the factory from the pre-war period. It can be seen here: https://pro2pre.com/archive-1980-worker-olympics/

Fig. 12: Salvaged photographs documenting activities of the now-defunct Kombiteks textile factory.

This neglect of one's own history can be interpreted as a peculiar pushback against the socialist past; purposeful and ideologically motivated. Aside from state propaganda, much of the discourse found in these records of the past is concerned with material conditions of life and strengthening of the collective. As such, they do not fit the ethno-capitalist narrative predicated upon market competition, individualist modes of production and free enterprise. Hence it is not surprising that the 2014 protest stressed the legacies of the socialist past in present mobilizations for social justice. This was clearly evident in different expressions, the language of the protest and demands during the uprising and shortly after.

Various patterns of economic inequality are almost always reflected in other forms of access including the use of communication technology (Pew, 2015). There is, indeed, a formidable 'digital divide' that correlates with the socio-economic status and, to a lesser degree, age of *Pro2Pre*

contributors[45]. In order to assess the real impact of digital media projects involving radical politics and community engagement, acknowledging that divide is critical. Furthermore, our understanding of a grassroots politics of transformation in the age of big data will be severely flawed unless we address the question of material conditions and relations of production. *Pro2Pre* tries to counter these problems by probing the various encounter modalities and experimentation with access design, which I will discuss in the next chapter.

2.7 A Habermasian public sphere?

By employing mixed methods—freely combining media formats, designing encounters and encouraging open discussion—interactive documentary does have a potential to develop as one of the battlegrounds where neoliberal capitalism is confronted. I would, however, advise against equating this new documentary space with the Habermasian public sphere, often seen as a terrain where one should aim for reaching rational consensus (Habermas, 1989). Calling into question official versions of reality requires a more antagonistic approach. In fact, such symbolic enacting of radical democracy through polyvocal creative media practice is exactly what some political theorists have advocated. Chantal Mouffe (1994), for example, argues that the realm of culture plays an important role in challenging hegemonic politics and that it allows for different, new and important forms of identification. Arguing for plural democracy and competing narratives of our identities as citizens, she writes:

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[45] Out of 76 interlocutors who in different ways participated in the project, 32 did not own a smartphone; 16 did not have an internet connection; while 10 participants said that they had never used a computer (or a tablet). Majority (86%) of those who reported having limited experience with newer technologies were aged 55 or older.

> A healthy democratic process calls for a vibrant clash of political positions and an open conflict of interests. If such is missing, it can too easily be replaced by a confrontation between non-negotiable moral values and essentialist identities (Mouffe, 1994, p.6).

In the act of resistance, various new forms of citizen engagements through documentary media can play an increasingly important role. Interactive documentary, with its polyphonic modalities, could help foster a shared political identity amid many varied struggles for inclusion and power sharing. That, however, will need a healthy dose of utopian thinking and awareness of the paradoxes of new technologies.

Even though it is alluring to think that the emergent media can escape the dictates of mainstream and commerce-driven information, the obstacles faced are not easily surmountable and appear to be similar to those of previous decades. A cautionary tale can perhaps be found in the history of video guerrilla movements of the early 1970s. Just like contemporary digital formats, portable video raised hopes of a more democratic, accessible media production and distribution. The information was to be liberated from the grip of institutional, commercial and reactionary networks. In the hands of activists and critically minded citizens, video was to become a weapon in a fight for a more just, democratic society in which information power remains with the people (Boyle, 1997). Sadly, the consolidation of media markets, the weakening of public TV, cuts in funding, and a number of legislative changes have diminished the power of socially conscious video collectives. There is, however, much to learn from their archival aspirations, which I will discuss in the next chapter.

3. Engaging A Counter-archive

The word 'archive' invokes a lot of different ideas, attitudes and practices. Principally, one can think of an archive as a place, whether physical or virtual. From grand edifices housing state records, guarded and protected; over private collections of postcards, neatly labeled and organized in a shoebox; to open source web databases, an archive can be almost anything and anywhere. Where and how an archive comes into being speaks volumes about the underlying desires, function, and its ideological grounds. For Michel Foucault (1972), the archive is an obscure structure of power that organizes and controls social values and networks of knowledge. It is through this structure, he argues, that certain ideas become seen and acknowledged, while others remain dormant or completely absent. Archives are never static, self-evident or neutral, but exist as sites of struggle and ideological tensions (Foucault, 1972).

> The archive is first the law of what can be said, the system which governs the appearance of statements as unique events. (Foucault, 1972, p.129)

The archive, thus, is also a theoretical construct and an eternal enigma, a set of interconnected objects or relations to be assembled, reconfigured and reimagined. Principally concerned with the past, the archive is a riddle of distinct temporalities and attempts to preserve both knowledge and logic of a given period. To engage with an archive is to bring the past into collision with the now. Methodologically speaking, this collision can occur in various different ways and employing different modalities. Image-making and documentary arts frequently tap into archives to change the present vantage point and reorder our ideas about the past. Archivist and filmmaker Rick Prelinger's *Lost Landscapes* (2017, Fig. 13) project is an excellent case in point . An exegetic blend of the said reimaginations, modalities and archival dialectics unfolding over time, it employs a montage of

found home movies, made for specific purposes at specific times, to picture granular details of American cityscapes and reveal hidden histories. Furthermore, these 'discoveries' are greatly contingent upon audience participation – at the screening, the viewers are invited to comment, ask questions and to interact with each other[46]. This, in turn, allows for details to jump out and warrants a polyphonic reading of the past as well as reconfigurations of the existing or widely accepted narratives. Mobilized in the present, the imagery (and interactions) helps the viewer, as Prelinger puts it, "look into the future and extrapolate to how environments to come will evolve from those that exist today" (Inquiry, 2018).

Figure 13: Frame grab from *Lost Landscapes of New York* (2017).
A scene from the New York World's Fair. Credit: The Prelinger Archives

46 In my practice I took a similar approach by organizing a screening event and showing an assemblage of found archival material to the former managers and workers of the textile factory Kombiteks. As the footage did not include sound, I have encouraged the attendees to make comments and talk during the screening. During the screening they recognized former colleagues and long-gone friends, loudly shouting their names. This greatly informed the project and opened up a long discussion after the screening. See section 2.2 for more details.

Archival engagements such as Prelinger's *Lost Landscapes* project also reinforce the notion that the past - as we know it – is mostly a product of the present. Indeed, anywhere we look there seems to be no foreseeable end to our reshaping of memory, rewriting history, and fabricating artifacts (Lowenthal, 2016, p.26). The problem with this is that troubling revisionist histories also find their way into the public arena, often through erasure, omission or even forgery of records. With ever advancing tools for editing and image manipulation, film and digital media makers are perhaps most acutely aware of these kinds of prospects and the implicit volatility of historical records. I will return to these predicaments later in my discussion of practice and field work contingencies.

At the base level, there are three motives that propel an artist-activist as a would-be time traveler to grapple with archives: to improve (or tear down) the image of the past and those who dwell in it; to make the present better and more livable by retrieving and revealing the sequence of events that has led up to it; and/or to secure the tenor of the present by changing or protecting the past from undesired incursions by others (Lowenthal, 2016, p.27). To pursue preservation of an archive is, ultimately, to take up a profoundly political work of memory.

3.1 The digital turn

The emergence of digital technologies and, ultimately, the web profoundly influenced and changed how archives operate. The ensuing reordering, however, did not change the core ideals of archival practice. Concerned with the threat of disappearance, it continues to be affixed to preservation, and in turn, the need to store memories for future excavations. Evidence, as archivists and criminal law experts remind us, cannot be preemptively put into records; they must first be created and preserved (Brothman, 2001, p.52). From a more pragmatic standpoint, the need to preserve is deeply rooted in

our limited ability to remember everything, individually or as a collective. And once it became possible to delegate preservation and memory work to machines, there was no turning back.

> Memory is always transitory, notoriously unreliable, and haunted by forgetting —in short, human and social. (Huyssen, 2000, p.38)

If we are to think of memory as a "theater of the past" (Benjamin in Jennings, Eiland and Smith, 2005, xii), the sheer abundance of records both personal and public, as well as their dissemination in the age of digital storage and networks, raises questions about *whose* memory is worth preserving. The ongoing miniaturization of records in conjunction with ever-changing software protocols, standards and the omnipresence of digital reading/writing tools compounds this volatility of public memory even further, requiring archivists to think strategically about what records should be kept. This occurs for a very simple reason - there are too many records to analyze. As Andreas Huyssen (2008, p.38), drawing from Charles S. Maier, puts it: "If we are indeed suffering from a surfeit of memory, we do need to make the effort to distinguish usable pasts from disposable pasts."

The World Wide Web devours everything. An information universe with no clear boundaries, it can be anything – "from an organized library to a dump for miscellaneous debris to the mind of God" (Cox, 2004, p.201). The future archive, then, increasingly resembles a repository of stuff that is only loosely classified, and whose status may be hard to determine; "somewhere between rubbish, junk and significance; material which has not been read and researched" (Featherstone, 2006, p.593).

The digital turn precipitated not only a whole new gamut of methods for storing and retrieving, but also dangers of losing data for good[49]. On the other hand, surprising new vantage points and impulses to curate history for various kinds of perusal and presentation are now possible. The rise of machine learning and algorithmic media, as Ernst Wolfgang (2013) asserts, has transformed the concept of an archive from a passive storage space to something more generative, dynamic and self-reflexive. In this reordering, the existing architectures based on keywords and inventories became subject to algorithmically ruled processes, enabling insight through patterns and variations (Ernst, 2013, p.29). At the heart of this paradigm shift is metadata, a set of data that describes other data and usually consists of text and numbers that refer to location, date of creation, author, software or hardware specifics, and so on. It is the object's metadata – the richer the better - that allows for surprising future excavations of the archive. Metadata is "a love note to the future"[50], as digital utopians like to exclaim.

3.2 Metadata: polyphony over time

Invoking this permanent extendibility of the computer meta-medium, Lev Manovich writes: "Turning everything into data, and using algorithms to analyze it changes what it means to know

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[49] Good illustration of this are the problems experienced by the MetaArchive Cooperative, a community-based distributed digital preservation network, after a power failure led to a chain of unnerving data rescue efforts. For a detailed discussion of this case, see Dearborn, Carly, and Sam Meister. "Failure as Process." *Alexandria: The Journal of National and International Library and Information Issues*, vol. 27, no. 2, Aug. 2017, pp. 83–93, 10.1177/0955749017722076.

[50] Although the origins of this expression are not clear, the earliest record appears to be a tweet from 2011 by historian and archivist Jason Scott. See https://twitter.com/textfiles/status/119403173436850176

something. It creates new strategies that together make up software epistemology" (Manovich, 2013, p.337). Commenting more specifically on audiovisual digital media and database dynamics, Manovich proceeds: "Algorithms and software applications that analyze images and video provide particularly striking examples of this capacity to generate additional information from the data years or even decades after it was recorded" (Manovich, 2013, p.338). The result, I would argue, is a conspicuous polyphony over time; revelations and truth claims that can contradict the original text and/or reframe the subject in surprising ways.

This is illustrated in the recent case of labor reform amendments in Brazil. Namely, after *The Intercept* Brazil downloaded and analyzed the PDF archive of 850 amendments, it turned out – as metadata revealed - that lobbyists and business associations are the true authors of more than one third of the documents[51]. The texts defend employer interests, without consensus with workers, and were registered by 20 deputies as if they had been elaborated by their offices.

Pro2Pre makes use of metadata in several different ways. In some instances, montages of video clips were entirely informed by metadata analysis. An example of this is the documentation consisting of various videos that cover one, rather important side-event, an attack on a private hotel owned by a local oligarch, who is also prime minister's close cousin (Fig. 14). By comparing time stamps, among hundreds of videos in the database, I accidentally identified clips that captured this attack in parallel, from different perspectives. Later analysis and consultation with the activists who witnessed the event firsthand also revealed that two of the clips in this montage actually came from undercover police informants. Furthermore, the reconstruction contradicted the police version of the events and

[51] Full story can be found here: https://theintercept.com/2017/04/26/lobistas-de-bancos-industrias-e-transportes-quem-esta-por-tras-das-emendas-da-reforma-trabalhista/

indicated that the anti-riot squad abandoned the cantonal government building and rushed to protect a private hotel instead.

Figure 14: Spatial /split-screen montage and reconstruction of events based on metadata.
Pro2pre screenshot. Full clip can be accessed here: https://pro2pre.com/attack-on-emporium-hotel/

These kinds of media forensics are similar to those that Errol Morris employed in his documentary *Standard Operating Procedure* (2008), in which he used photographs and video recorded by the U.S. military police and surveillance cameras to reconstruct the gruesome events of torture in Abu Ghraib prison. I contend that montage and reconstruction based on data analysis has deep implications for the confluence of archive and interactive documentary as a practice. It seems that, increasingly, the labor performed by the contemporary documentarian is the labor of collecting and augmenting data sets. In this new paradigm, partially contradicting what Cox and Huyssen see as a problem, there is no such thing as too much data. Creating and augmenting large data sets harbors a

promise of both present and future reiterations, reinterpretations, and deeper insight into something that may have been deliberately or unintentionally obscured at the moment of inception. The past, as the examples above show, is increasingly re-calibrated by the present. In other words, some truths about power sharing and exclusion can now come to light when the right algorithm or analytic tool comes along.

3.3 Metadata: a voice, currency of power, and an Achilles' heel

I wish to reiterate that metadata, in the context of interactive documentary, is integral to the polyphonic modality of the work. Metadata is both *a trace* and *a voice*. As a record entry, that voice is inherently asymmetrical and can respond to a myriad of different inquiries; calls and requests by the API (Application Programming Interface), for example, to present itself in an infinite number of different configurations and remixes. First and foremost, this voice functions as a vehicle of meaning and a source of aesthetic veneration:

> The voice is something which points toward meaning, it is as if there is an arrow in it which raises the expectation of meaning, the voice is an opening toward meaning. (Dolar, 2006, p. 14)

Metadata voice, however, is curiously different in that it also transcends those two levels. In his philosophically grounded theory of the voice, Mladen Dolar (2006, p.4) proposes a third level:

> An object voice which does not go up in smoke in the conveyance of meaning, and does not solidify in an object of fetish reverence, but an object which functions as a blind spot in the call and as a disturbance of aesthetic appreciation.

Often obscured and possessing qualities that can invert the appearance, metadata exemplifies Dolar's proposed third use as an object voice. Since there is no voice without a body, the metadata

speaks the biography of its own body (the archival object) and thereby relays critical information that shapes the grand narrative. Whether its recorded automatically when, for example, GPS data gets captured by the camera, or manually when a location is typed in as the file's name, metadata lies in wait as a coded message and a broader apprehension of given circumstances. To draw from Foucault, it is through these and other material traces that one can come to understand the *historical a priori*, the episteme of the given period (Foucault, 1972, p.127).

With the arrival of the 21st century and greater sophistication of personal communication devices, metadata moved into the center of debates about cognitive capital and power. Take, for example, Facebook and Google's enormous indexing operations that depend on metadata to extract particulars about people, markets, commodities, communications, etc. Unlike traditional archives, where indexed information is offered freely, Google and Facebook keep things under a heavy lock to outmaneuver their market competitors. Furthermore, they apply algorithmic analysis to map, identify patterns, interpret and forecast a host of different tendencies. The potential of these kinds of knowledge production is truly momentous[52] and often challenging to comprehend. Bizarrely, much of what transpires in our world today is processed, stored and scrutinized in nondescript rectangular suburban buildings popularly known as data centers (or server farms). In contrast to what Castells has termed "space flow" (Castells, 2015, p.57), which referred to horizontal distribution of knowledge in a networked society, data centers made manifest the vertical ordering and accumulation of metadata as a form of power; political, economic, etc. In this regard, one could argue that the owners of those same centers hold the key to the episteme of our time. As Neilson,

[52] Take, for example, Google's Flu Trends (GFT) web service that used a purposefully developed algorithm and aggregated search queries to predict flu outbreaks with 97% accuracy when it was first introduced. This, in turn, challenged and changed the way U.S. CDC (Center for Disease Control) prepared its prediction reports.

Rossiter and Notley remind us: "Without data centres, today's world stops. Flights are grounded, Wall Street closes, and the internet grinds to a halt" (The Conversation, 2018).

The novel power infrastructures and deeper implications of data mining have compelled artists, activists and documentarians to fiddle with digital storage and data analysis[55]. As both software and hardware became cheaper and more accessible, and various automation and quantification tools easier to learn and employ, they increasingly looked toward archives to explore the new dynamic possibilities of knowledge production and preservation. In doing so, many adopted a methodical approach to metadata that is largely informed by the ethics of the open source model, denoting a credo that rests on the idea that data must flow transparently and freely to help promote equitable balances of power and democratic forms of knowledge. This approach is reflected in countless declarations, manifestos[56] and protocols developed in an attempt to reclaim the digital commons. *The Open Source Initiative*, the organization at the helm of evaluating and approving licenses as Open Source Definition (OSD) conformant, provides five criteria that an open standard is expected to satisfy. The first one says:

> No Intentional Secrets: The standard must not withhold any detail necessary for interoperable implementation. As flaws are inevitable, the standard must define a process for fixing flaws identified during implementation and interoperability testing and to incorporate said changes into a revised version or superseding version of the standard to be released under terms that do not violate the OSR. (OSI webpage, 2020)

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[55] Good examples in this context are the works by artist Trevor Paglen and, earlier, filmmaker Harun Farocki's investigations of visual data systems in commerce and military.

[56] See, for example, the GNU Manifesto, written by Richard Stallman in 1985: https://www.gnu.org/gnu/manifesto.en.html

This obsession with full transparency permeates a great many discussions about data, software and democratic governance. The application of that ethic, however, is anything but straightforward. For, at the same time, many activists and open source enthusiasts insist on keeping some data off limits, legally protected and handled with utmost sensitivity. And for a good reason. The NSA scandal of 2013[57], for example, was a grave reminder of the reach and ubiquity of state sponsored digital surveillance and vulnerabilities of our communication networks. In that same vein, there are many reasons to keep activist archives sealed and private. This is perhaps most evident with recent records of social movements such as Occupy Wall Street, Black Lives Matter, or the Dakota Access Pipeline protests in the US. One closer look at the content of these records reveals a host of legal and personal vulnerabilities of those who could be identified as organizers and active participants.

I have faced exactly the same issues during my production of *Pro2Pre*. A few months after the 2014 unrest, as the Bosnian law enforcement officials moved to identify, summon and interrogate those who participated in the protests, I had to reevaluate much of the collected material. This involved a painstaking review process with a number of activists to remove and encrypt images and videos that could potentially trigger legal action against those who appear in them. The possibility of persecution, however, is not the only concern in this kind of practice and the sole reason to reject the open-to-all method. Alluding to the knowledge produced in indigenous and native communities, Kimberly Christen (2015) reminds us that calls for an 'open access for all' cannot be applied universally. She warns that exposing and dispersion of knowledge that has ceremonial or spiritual significance for some communities threatens to extend colonial tendencies and perpetuate further cultural violence (Christen, 2015, p.6). Regardless of subject, it is critical to acknowledge and

[57] The scandal broke out after whistleblower Edward Snowden released a report that showed how the US National Security Agency (NSA) secretly spies on citizens by tracking and recording communication metadata. See more here: https://www.theguardian.com/world/2013/jun/10/nsa-spying-scandal-what-we-have-learned

understand the power dynamics at play before making a decision on what and how to make something accessible to a wider public. The present-day activist archival impulse then must be about asserting the ownership and claiming the polyvocal narratives away from neoliberal agenda and towards sensitive communalities. In that context, metadata is particularly vulnerable and revelatory - a critical voice, but also an Achilles' heel, it can harbor damaging information which, if leaked, puts vulnerable populations under scrutiny. Faced with these conundrums, the documentarian-cum-archivist must straddle the fine line between an imperative to collect a lot of data and a moral obligation to keep much of it silent. It is a peculiar paradox to reckon with, and a stark reminder that "the archivization produces as much as it records the event" (Derrida, 1996, p.17). I will later address these predicaments in *Pro2Pre* , namely how the curated sequences and nodal cross-linking of media serve to filter the archive and enable recontextualization.

3.4 Counter-archive

Over the last three decades, concepts such as 'counter-achive' and 'anarchive' became more common in the domains of art and media production. Apart from questioning the existing exclusion and inclusion systems, counter-archive as a practice offers a compelling historical perspective on the very debates surrounding archives, memory, and media. More specifically, a counter-archive refers to archival practices that are political, community-based and grounded in critique and remediation.

> To counter-archive is to counter-act, to rewrite, to animate over. Consider it a take-and-give thing… a negotiation. Against the un-Commons. (Kashmere, 2010)

Incorporating practice-based knowledge driven by community interests, self-professed counter-archivists seek to resist the hegemonic discourse of larger and institutional archives that either

circumvent or marginalize stories of those who are situated on the periphery of political power. In short, a counter-archive is a form of intervention that historicizes differently and horizontally. Systematic exclusion of the LGBTQ community, for example, prompted the founding in 1974 of New York City's *Lesbian Herstory Archives,* one of the first and longest running counter-archives in the world. Almost entirely run by volunteers, the LHA sought to construct collective memory by assembling and preserving a complex record of queer experience. This, in the first place, included items that the official record keepers ignored or deemed unworthy, banal and too transgressive. Posters, cultural artefacts, clothing, letters, flyers, zines and a great variety of other ephemera found their home at the LHA. This, in turn, enables a much more granular reading of community history and life (Danbolt, 2009). As it continues to grow, this counter-archive affirms the living history of feminism and, at the same time, challenges the exclusive traditions and methodologies of state-licensed archives. LHA is not only an alternative to the conventional structuring of archives but a decisive move towards a new value system and standard of inclusion/exclusion as well as forms of representing history.

Foundations for this practice in the field of audiovisual media were laid by the art and video collectives of the late 1960s and early 70s. The advent of Sony Corporation's self-contained Portapak video camcorder led to the formation of groups such as *TVTV*, *Raindance* and *Videofreex* who freely blended content, context and form to produce and exhibit "tapes" that focus on larger social issues (Boyle, 1997; Drew, 2007). Their activities gave rise to an unprecedented type of cultural production that prioritized group action over individual pursuits. This involved establishing neighborhood art and media workshops in order to get art and history out of the museums and corporate media institutions, and into the streets and communities. The tapes of the early video collectives were genuine records of a communal experience, emerging from below. Driven by

utopian ideals, the work drew attention to the struggles of the dispossessed and marginalized, and sought to dismantle the existing hierarchies in both art and politics.

> Not only a systemic but also a utopian critique was implicit in video's early use, for the effort was not to enter the system but to transform every aspect of it and – legacy of the revolutionary avant-garde project – to define the system out of existence by merging art with social life and making audience and producer interchangeable. (Martha Rosler in Jesse Drew, 2007, p.100)

The resulting blend of documentary form, community activism, and radical archival practices evolved with both technological innovation and changes in institutional politics. Greater mobility of recording equipment, longer capture times, and a lower price made video camcorders an essential tool for counter-archiving. In the 1980s and the beginning of 1990s, for example, the work by *DIVA (Damn Interfering Video Artists)* and *WAVE (Women's Aids Video Enterprise)* is now seen as critical in changing the public's perception of the AIDS health during the '90s. The tapes that these collectives produced, now a part of Royal S. Marks AIDS Activist Video Collection at the New York Public Library, are a vital record of the crisis. Commenting on their significance in relation to documentary, Jim Hubbard (2001, p.183) adds:

> They are important for their largely unrecognized innovativeness in documentary form. Not only do they record the events of the crisis as they happened, but they were made by people participating in these events, not by outside observers analyzing or judging the past. The tapes convey, in an unmediated way, what it was like to take part in these events.

Fast forward another 15 years, a whole new crop of works sustains the tradition of counter-archiving as both practice and method. Due to greater accessibility of production tools and storage technologies, counter-archiving as a method is increasingly used in interactive documentaries and various other kinds of non-fiction works in the digital domain (podcasts, etc). In contrast to the video collectives of previous decades who had to overcome a host of limitations to capture something, the volume of recordable and deemed-usable material now grows incessantly day by day, minute by minute. The internet, mobile devices, social media and a host of other devices produce an overwhelming amount of data difficult to contain and organize. Everything is an archive and vice versa. In other words, to paraphrase Mike Featherstone, everything takes place in the "shadow of the archive" (Featherstone, 2006, p.591). As the lines between archive and everyday life continue to blur, the intrinsic instability of archive also comes into view. A quarter of a century after it was first published, Derrida's (1995, p.90) assertion that "Nothing is less reliable, nothing is less clear today than the word *archive*" rings particularly true today.

Regardless of our ponderings about what constitutes an archive today, the sheer amount of data and the unstable bounds have turned any digital collection of data into a potential playground for algorithmic analysis experiments and automation (Cook and Schwartz, 2002). For many contemporary artists and activists who engage with archives, this technomathematical turn shifted the focus away from recording and collecting and towards curating and organizing. I can also confirm that this was the case in my own practice working on *Pro2Pre*. While it took some effort to locate physical objects such as photographs, posters, newspapers and documents, there was an abundance of digital material flowing in my direction. Thus, I became preoccupied with devising a meaningful method to sift through and decide what should be included and what can go away. With the addition of augmenting existing records and digitizing older/analog materials such as

photographs and pamphlets, the task at hand was extremely time-consuming and difficult to do without significant funding and trained personnel.

3.4 *Pro2Pre:* An interactive counter-archive

Pro2Pre employs a custom-created archiving system that can be used by activists, researchers, and curators. It aims to provide an archival space for the community not only to reflect on the events of 2014 or look back at the industrial past, but to discover and document deeper discords and help articulate new politics of resistance. Using a simple and intuitive interface, participants can organize their contributions to specific collections and visualize the archive as presentation and performance (exhibition, screening, etc). It also allows the public to interact with the database and bring in other artifacts and collections to be added to the project[58]. Furthermore, this process of contributing one's own archive makes individual or group participation in a living archive visible. Aiming for horizontal access, *Pro2Pre* moves away from the traditional archival architectures, which rarely serve the needs of community that seeks to partake and articulate social and political realities both past and present. It intervenes to counter the exclusion and connect the community to archive in a manner that is engaging, interactive and aesthetically pleasing.

Even though web-based, it departs from the temporal disposition of data on the web by allowing users to draw connections between the past and the present, promoting an ongoing engagement with the archive. To borrow from Mike Featherstone again, *Pro2Pre* "takes the form of a database in which, depending on the access coding, knowledge becomes freer to flow through decentered

[58] In the current iteration of the project, this can be done only via invitation and correspondence with one of the designated editors-administrators.

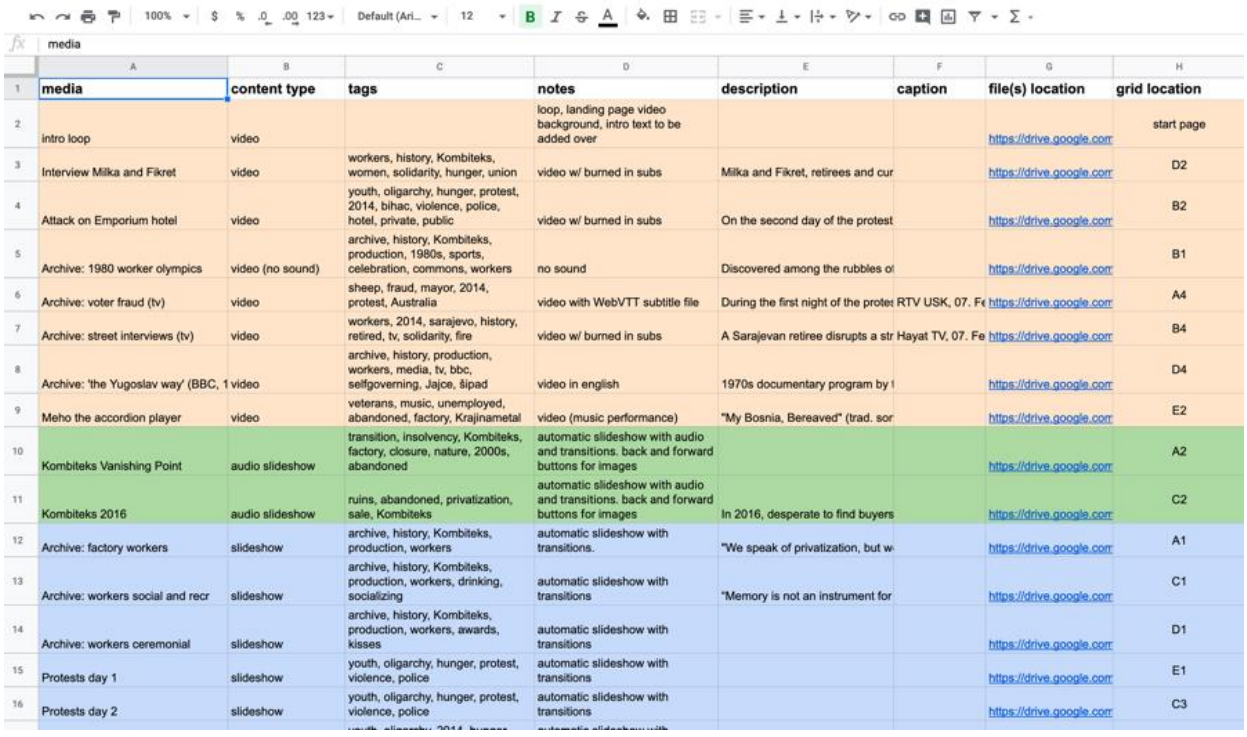
networks" (Featherstone, 2006, p.595). To a traditional archivist this decentralization may seem daunting at first as it rejects the authority of a central archive. But after Foucault dismantled the myths of objectivity and neutrality of the archive, and the digital era all but dissolved the concept of the archive as a physical space, it may be necessary to look toward archive as a collective tool and an "aspiration rather than a recollection" (Appadurai, 2003, p.16).

> The archive, as an institution, is surely a site of memory. But as a tool, it is an instrument for the refinement of desire. Seen from the collective point of view, and keeping the sociality of memory and the imagination in mind, such desire has everything to do with the capacity to aspire. (Appadurai, 2003, p.24-25)

In that vein, more than just being a repository of the past or another manifestation of present day retromania, *Pro2Pre* allows the public to dynamically codify the display of the records and reconfigure the topology of documents over and over again. The events of 2014 can be recontextualized, reconstructed and examined in greater detail, and the database is virtually limitless as it can be expanded and codified over time. One also has the liberty to bypass the uprising of 2014 (as a frame of reference) and engage with other records in isolation. I hold that facilitating this kind of interaction and flexibility with the material upends the perception of the archive as static, engages new kinds of civic action and, more broadly, augments the experience the public can have with the archive.

4. Tools and Technologies

Pro2Pre is built using Wordpress content management system and GraphQL API (Application Programming Interface) as backend, and Vue.js, an open source JavaScript framework for user interfaces; and Apollo client, a script management library as frontend. Video content is uploaded directly to the server and also uses a Vimeo fallback in case of the server is down. Subtitles use a searchable WebVTT standard. From a practical standpoint, the curation occurs via administrative (backend) portal that can be used by contributors, editors and administrators. In this present iteration, contributions can occur in two ways: via Wordpress content management system and/or using a spreadsheet application like Google Sheets (Fig. 15).



media	content type	tags	notes	description	caption	file(s) location	grid location
intro loop	video		loop, landing page video background, intro text to be added over			https://drive.google.com	start page
Interview Milka and Fikret	video	workers, history, Kombiteks, women, solidarity, hunger, union	video w/ burned in subs	Milka and Fikret, retirees and cur		https://drive.google.com	D2
Attack on Emporium hotel	video	youth, oligarchy, hunger, protest, 2014, bihac, violence, police, hotel, private, public	video w/ burned in subs	On the second day of the protest		https://drive.google.com	B2
Archive: 1980 worker olympics	video (no sound)	archive, history, Kombiteks, production, 1980s, sports, celebration, commons, workers	no sound	Discovered among the rubbles of		https://drive.google.com	B1
Archive: voter fraud (tv)	video	sheep, fraud, mayor, 2014, protest, Australia	video with WebVTT subtitle file	During the first night of the protes	RTV USK, 07. Fe	https://drive.google.com	A4
Archive: street interviews (tv)	video	workers, 2014, sarajevo, history, retired, tv, solidarity, fire	video w/ burned in subs	A Sarajevan retiree disrupts a str	Hayat TV, 07. Fe	https://drive.google.com	B4
Archive: 'the Yugoslav way' (BBC, 1	video	archive, history, production, workers, media, tv, bbc, selfgoverning, Jajce, šipad	video in english	1970s documentary program by t		https://drive.google.com	D4
Meho the accordion player	video	veterans, music, unemployed, abandoned, factory, Krajinametal	video (music performance)	"My Bosnia, Bereaved" (trad. sor		https://drive.google.com	E2
Kombiteks Vanishing Point	audio slideshow	transition, insolvency, Kombiteks, factory, closure, nature, 2000s, abandoned	automatic slideshow with audio and transitions. back and forward buttons for images			https://drive.google.com	A2
Kombiteks 2016	audio slideshow	ruins, abandoned, privatization, sale, Kombiteks	automatic slideshow with audio and transitions. back and forward buttons for images	In 2016, desperate to find buyers		https://drive.google.com	C2
Archive: factory workers	slideshow	archive, history, Kombiteks, production, workers	automatic slideshow with transitions.	"We speak of privatization, but w		https://drive.google.com	A1
Archive: workers social and recr	slideshow	archive, history, Kombiteks, production, workers, drinking, socializing	automatic slideshow with transitions	"Memory is not an instrument for		https://drive.google.com	C1
Archive: workers ceremonial	slideshow	archive, history, Kombiteks, production, workers, awards, kisses	automatic slideshow with transitions			https://drive.google.com	D1
Protests day 1	slideshow	youth, oligarchy, hunger, protest, violence, police	automatic slideshow with transitions			https://drive.google.com	E1
Protests day 2	slideshow	youth, oligarchy, hunger, protest, violence, police	automatic slideshow with transitions			https://drive.google.com	C3

Figure 15: *Pro2Pre* database management and curation via spreadsheets.

Before deciding on this set of applications, a host of other tools and platforms – both proprietary and open source - were considered. Klynt, a widely used and interactive editing and publishing application, was tested but deemed not suitable because it did not offer any possibilities for guest terminals and nodal linking. Similar issues were faced with other applications such as Korsakow and Racontr; in order to contribute and curate sequences, guests would have to download the software, learn how to use it and then work with the administrator to keep the central database and design elements intact during updates. Interface design options were limited as well. Furthermore, with Korsakow, it would have been nearly impossible to manage automated slideshows and an interface that changes significantly with each new contribution. It was important to ensure that guest curators and, later, the general public can have a portal to log into and contribute. The system also had to offer content and user management, providing control over privileges, access to database, etc. Both key applications in *Pro2Pre* - Google Sheets and Wordpress - are widely used and require minimal training, which is an important consideration when working with interlocutors who have limited experience with computer applications. Further, the formats allow for easy backups and distribution of the archive across different systems and locations. For example, one can copy the entire project database[59] and content to a micro SD card, which can then be installed on a stand-alone system such as a kiosk, desktop computer or local server. Multiple copies can exist at the same time as a safe way of preserving. Similarly, Wordpress terminal can be easily redesigned and expanded as the project evolves. Thinking of future adaptions and iterations of the archive, one of the *Pro2Pre* prototypes includes a customized 7" touch-screen system powered by a Raspberry Pi single-board computer that can operate offline and without web dependencies (Fig. 16). This kind of archive as a self-

[59] Uses an open-source relational database management system MySQL.

contained device can be produced at a relatively low cost and provide tactile gestures that reflect one's interaction with physical artifacts while remaining accessible via common navigation interfaces. It could be particularly useful for situations where access to web or electricity is limited and greater mobility is required.

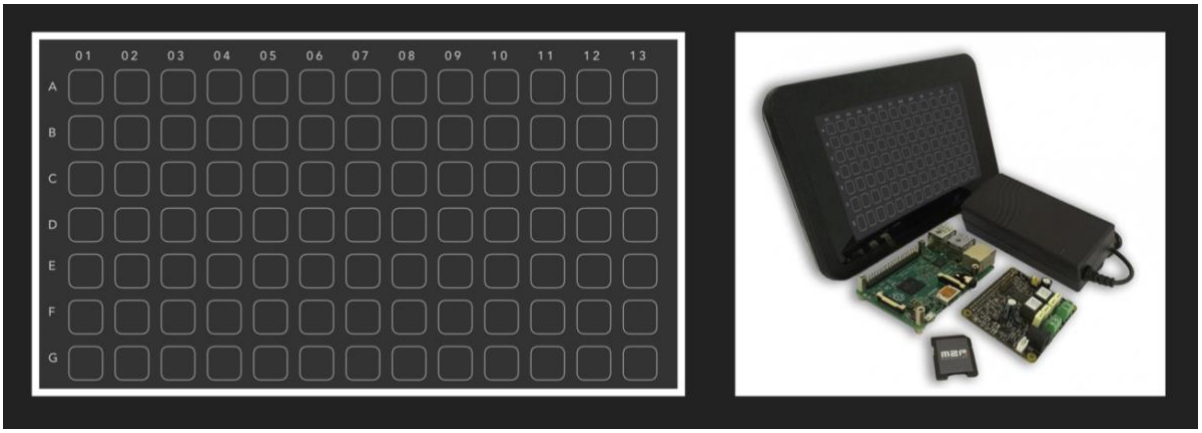


Figure 16: Portable *Pro2Pre* touch-screen system. Prototype based on Raspberry Pi single-board computer.

There exist different digital archiving systems[60] that are used by institutions such as libraries and museums to preserve and catalog digital artifacts. However, in giving priority to indexing standards and metadata ordering over user interaction, they are rarely accessible to the public and fail to motivate engagement with the archive itself. Especially when it comes to audiovisual records, possibilities of curating and creating stories in digital archives are severely limited. Apart from traditional and contemporary archiving solutions, there are also various hosting and media management services that allow publishing on the web. While they encourage participation and

[60] Like the open source Stanford University's LOCKSS ("Lots of Copies Keeps Stuff Safe") and ArchivesSpace systems, or Preservica, which is becoming increasingly popular with government and state archives.

make distribution via the internet easy, they offer surprisingly little for the public to catalog and contextualize the materials they create, collect and upload. *Pro2Pre* contrasts these systems by foregrounding content, curation, immersion and exploration-centered design. The project follows two of Dieter Ram's *10 Principles of Good Design* (2017), namely: 5) "Good design is unobtrusive" and 10) "Good design is as little design as possible" (Rams in De Jong, 2017, p.93). In that vein, the project maintains a balanced, minimal interface to allow for greater interaction with the content.

4.1 ***Pro2Pre:*** **Content and categories**

The content can be divided into three major collections:

- "The 2014 Uprising" – consists of records that document the protest, related events, conversations and media coverage during and shortly after the uprising. In addition to more specific keywords and metadata entries, all of these records carry the "2014" keyword/tag and can be easily accessed using the Keyword filter (Fig. 17).
- "The Socialist State" – features items that refer to the period between the end of the Second World War and the breakup of Yugoslavia. In its present arrangement, most of this collection revolves around the once mighty regional industries and worker collectives. It includes found objects, photographs, interviews, posters and pamphlets.
- "Transition" - are records of life in the period of the so-called transition, which started in the 1990s after the collapse of state socialism and accelerated after the end of the war. This collection documents the devastating political and economic shift to market economy and features interviews, citizen observations, photographic surveys and short videos.

There are five format categories: video, audio, stills, text and other. Users can also filter the content by format category. Each object contains a metadata information box that can be opened and closed via the "i" icon (Fig. 18). To avoid clutter and make the experience more immersive, the information box appears as a semi-transparent overlay and shows only a fragment of metadata. In the present iteration that includes item description and associated keywords/tags. This helps with navigation and keeps the interface fluid but at the cost of displaying more metadata and providing the user with additional sequencing options.

4.2 Curation

Curated section (Fig. 19) features themed sequences prepared by invited curators and interlocutors. Sequences consist of a horizontal 'chain' of archive objects; a montage that autoplays in a linear way like a playlist. In a sequence mode, navigation is only possible horizontally (left/reverse, right/forward). At the time of this writing, only invited curation of content is possible. In one of the next updates, users will be able to 'bookmark' objects directly in the project and add their own sequences to the database.

4.3 "Related node" cue points

Pro2Pre's time-based media can be further augmented with cue points, which allow events to be triggered at specific times in the video. Curators can create cue points at a specific time in the video and cross-link them to another object in the archive. The current interface displays a cue point (a "Related Node") link for 5 seconds, giving the user a chance to 'jump' to related content (Fig. 20).

4.4 Keyboard grid navigation

When an object is selected and viewed in a full page mode, user can remain in the view mode and move through the grid with keyboard arrows: up, down, left and right.

4.5 Figures 17-24

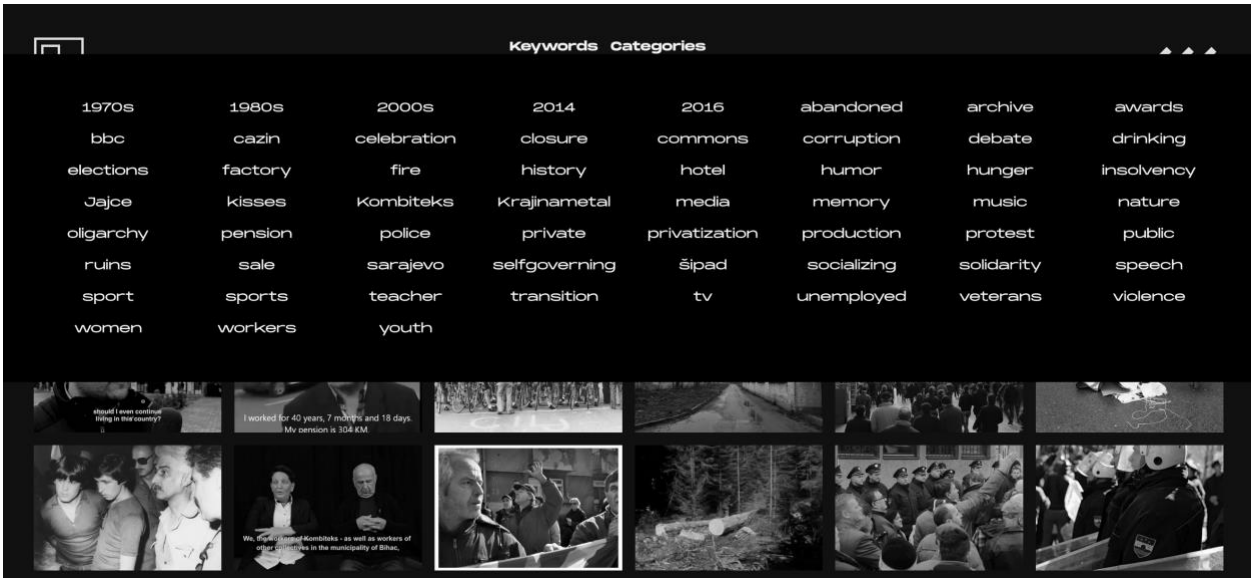


Figure 17 – Keyword / Category filtering system. *Pro2Pre* screenshot.

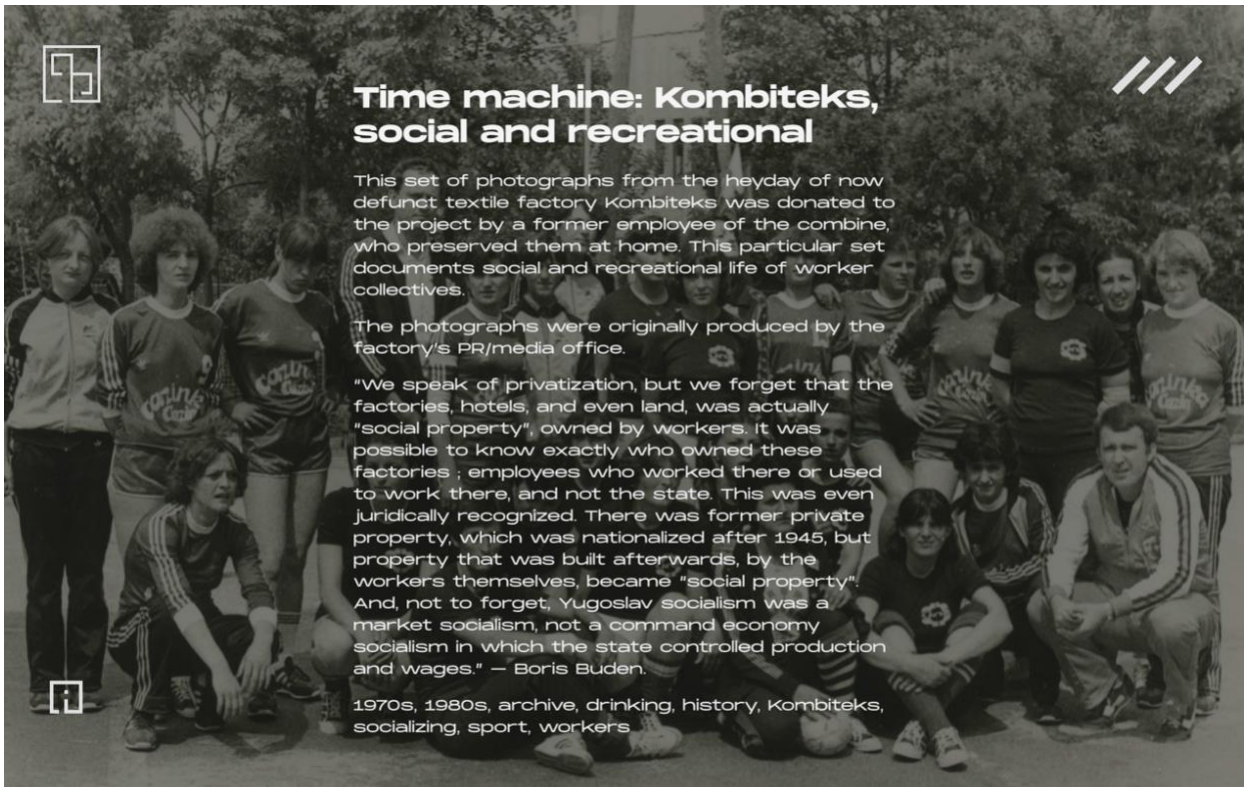


Figure 18 – "Info box" metadata semi-transparent overlay. *Pro2Pre* screenshot.

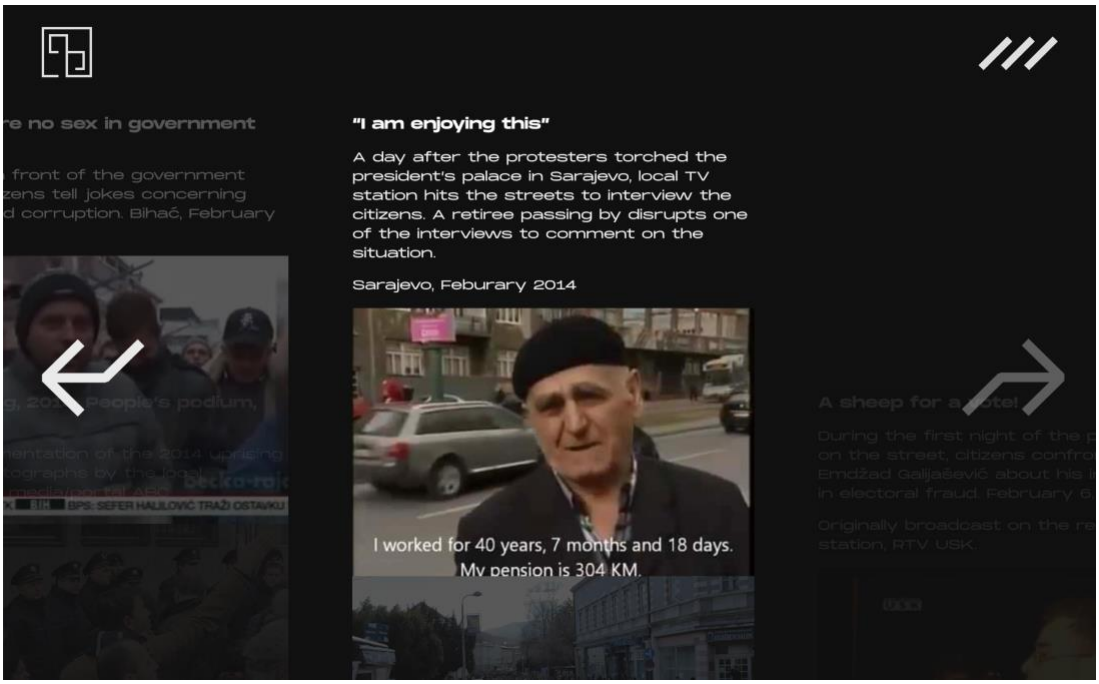


Figure 19 – "Curated" sequence navigation. *Pro2Pre* screenshot.

Figure 20 – "Related node" cue point system (bottom right). *Pro2Pre* screenshot.

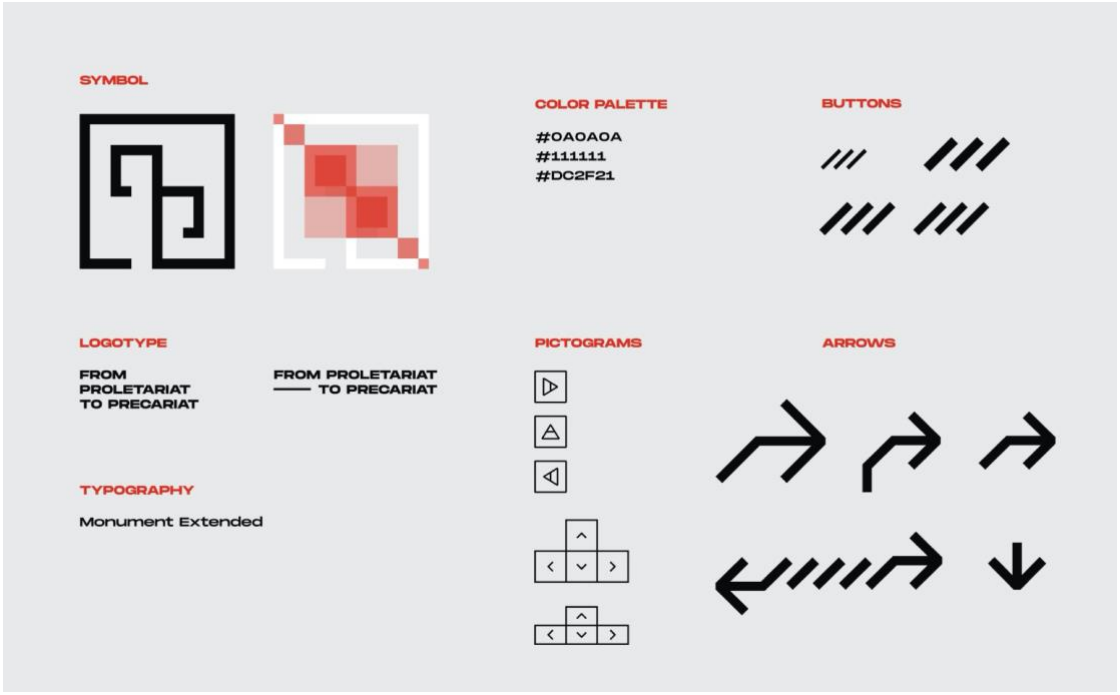


Fig. 21: Design guidelines. Concept and development: Amir Husak and Adi Dizdarević

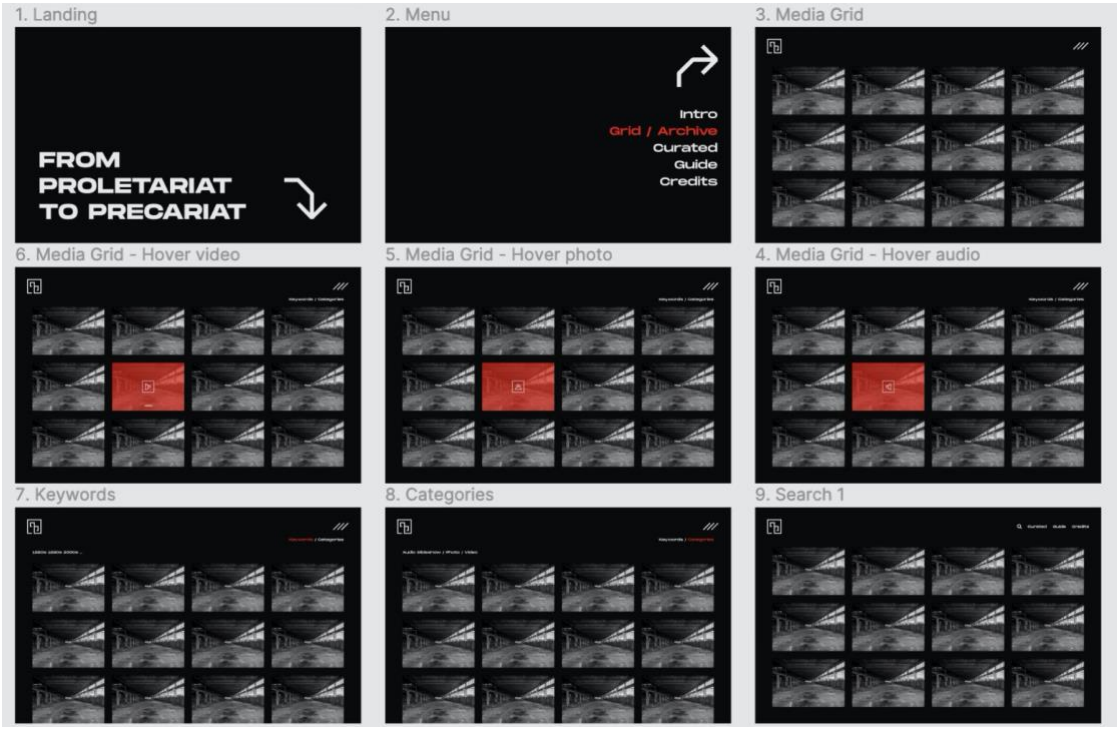


Figure 22: Design guidelines #2. Concept and development: Amir Husak and Adi Dizdarević

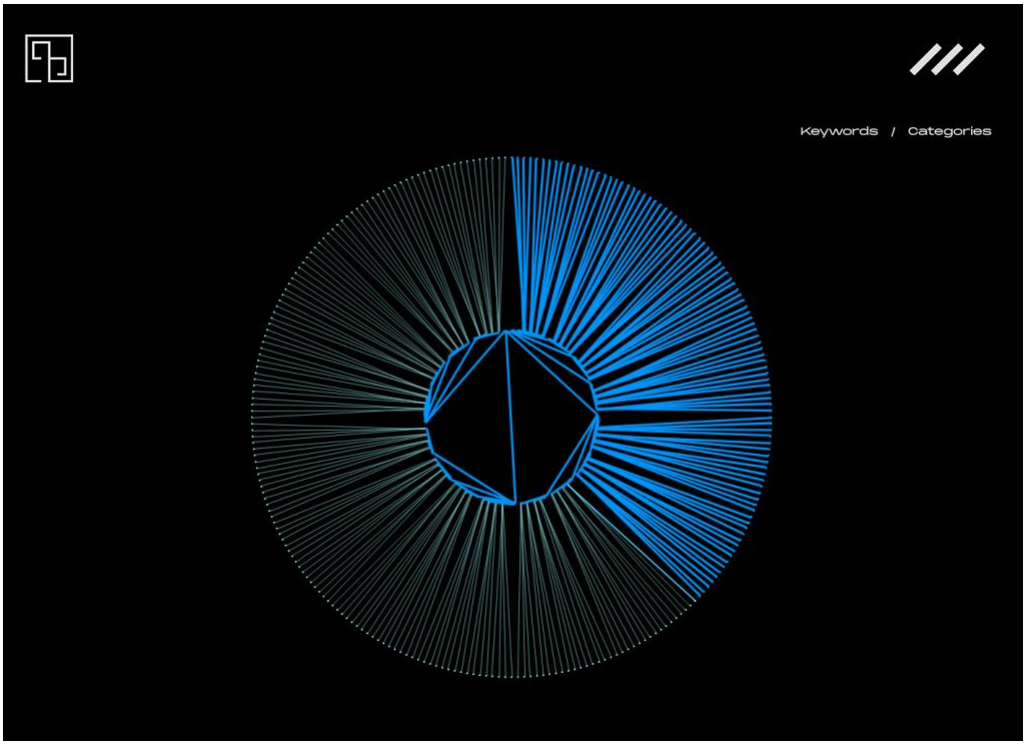


Figure 23 & 24: Design prototypes. Circular navigation interface. Sourced from Codepen.io

Conclusion

This conclusion is an opportunity for me to reflect on my doctoral project and discuss the success of the presented arguments, with attention to the process. Furthermore, it is also a chance to outline the limitations of my intervention and identify areas of further research and development. This practice-based PhD set out to contribute to the emerging discipline of interactive documentary in two ways: employing it as an archiving practice that serves the needs of a community in distress, and proposing a new theoretical framework for interactive documentary as a counter-archive; one that calls attention to different software modalities and foregrounds site-based work/encounters. This thesis, the associated practice[61] and the related activities and outputs provide a substantial amount of evidence to support the claim that these contributions have been made. The arguments that were put forth in this thesis have been 'tried out' at different events including academic conferences, activist workshops and in situ public (inter)actions. The various research and production collaborations which developed as a direct result of these engagements simultaneously attest to the impact they achieved (see sections 2.2 and 2.4).

The contingencies and fieldwork experiences discussed in Chapter 2 illustrate the range of concerns that helped shape the theoretical framework. Considerations regarding sequencing and the use of metadata are discussed in relation to polyphonic modalities of the work. The resulting interactive documentary *Pro2Pre* not only affirms this PhD as a practice-based undertaking in which the exploration and implementation of tools and technologies were critical elements of the research design, it also suggests new ways of extending the practice of counter-archiving through polyphonic digital forms and "relational antagonisms" (Bishop, 2004). Furthermore, the polyphonic and

[61] http://www.pro2pre.com

curatorial methods developed as part of *Pro2Pre* can be integrated into other archiving, exhibition and research projects, thus suggesting that they might constitute a worthwhile methodological contribution beyond this particular inquiry. In that regard, the source code, layout and the entire database configuration can be copied and used with other content and/or adapted to different platforms. Granted that this practice-based PhD aimed to make methodological and theoretical contributions pertinent to interactive documentary, the degree to which those contributions can be applied within other fields of academic practice might be one of its most interesting and promising areas for further research.

The practice associated with this PhD emerged out of sheer necessity to preserve and articulate an unprecedented moment of collective political action. Aside from assembling and indexing a significant amount of media, *Pro2Pre* employed digital tools and interactive design to enable narrativization and performance with the created archive. As shown in this thesis, early iterations of the project have already been used at the site to collectively reconstruct events, keep the critical discourse alive and address the ongoing loss of commons (see sections 1.3.3, 2.4, and 3.2). Throughout this thesis, illustrations and links to practical examples document some of the ways in which the knowledge and political memories of both the protests and socialist past have come to shape and steer new political projects. These issues pertain directly to the first research question of epistemological and political implications of this practice.

Taking into account that the Bosnian political present remains controlled by the ethno-capitalist class, this practice-based PhD shows that independently produced interactive documentaries of action-inspired collectivism may be studied as a form of counter-narrative, or even an act of political subversion. My doctoral work, however, does not aim to replace official archives. Rather, it implicates their failure and serves as a means of reclaiming the commons and enabling knowledge circulation via novel modes of documentary expression.

An important lesson learned from this inquiry was that it became complicated to assign value to the archive outside of participant interactions with and within *Pro2Pre*; not only as users, but also across the discourse. This also complicated the application of methods that corresponded to the sentiment and calls for radical change. Over and over again, my interlocutors suggested that technology is worthless without human propulsion and direct involvement, which they felt was manifested in different mapping activities. This, in turn, motivated greater correlation between the online and on-site components of the practice and led to conscious and purposeful incorporation of the varying methods of "emplaced interaction" (Aston, 2017), "political mimesis" (Juhasz, 2014), and "designed encounter" (Zimmerman, 2018). Conceptualizing and involving metadata as both trace and voice (see section 3.3), this thesis both describes and prescribes such approaches as a direct response to the second research question concerning the use of digital tools to document and catalyze surprising, unlived forms of social relationality.

While artists-curators can play a critical role in working with the archive and exposing archival limitations, both political and practical, the questions of accountability, curation and ownership will continue to loom large. In *Pro2Pre*, I have pushed certain bounds of my responsibilities as a curator and artist creating new records and arranging them in a particular way. My partisanship is not always explicit, but undoubtedly permeates both structure and selection of content. The current version of the project holds a growing number of media clips, carefully sorted and catalogued, and provides an interface that gives guest curators access and ability to arrange subcollections and sequences as well as to contribute to the existing database. Ideally, however, future iterations would need to expand on both access and co-curation capacities to become a truly open, public project that adheres to Raphael Samuel's idea of history becoming "the work of a thousand different hands" (Samuel, 1994, p.59). Such augmentations, on the other hand, also raise questions about database management and hierarchies of power embedded in the system of assembling, categorizing, and preserving. There is

also the possibility of ideologically problematic reconfigurations of the archive by certain members of the public, state and private interest actors. That, however, is one of the peculiar trade-offs with any project that is open and widely accessible; certain levels of authorial control must and will be ceded over time. Misinterpretations and misappropriations are practically unavoidable for any work that is made public. Still, it would be virtually impossible to reconfigure the project to that extent that it only speaks in favor of the opposite, neoliberal and nationalist agendas. For the project is decentralized and its database can be copied infinitely and exist in many different locations at the same time. Its metadata can be copied, compared and traced to reveal potential bias, interference and inconsistency. For that very reason, I believe, the true value of interactive documentary as a counter-archive lies in its deeper discursive powers, which help articulate politics of dissent, but also put what is being presented into question: where did the clip (or sequence) come from, who made it, how does it transmit certain kinds of ideas, and what knowledge about the subject does it purport to have? These inquiries should not be limited to discourse and content, but also attempt to reimagine more sustainable software practices centered on inclusion and power sharing. As an artist and expatriate with strong connections to the community portrayed, I have operated from a specific vantage point, delineated by specific inclinations and certain kinds of privilege including access to technology, college education, and social mobility. That information must and should be folded into the fabric of the project's future iterations – both as a trace and one of its many voices, further enriching its polyphonies over time.

Moving forward, I am well aware that finding a suitable home for *Pro2Pre* will require researching various avenues of funding and support to transfer it into public ownership. I have already started a conversation with the locally based cultural organization *Fondacija Revizor* and the public library in Bihać as two potential partners in preserving, safeguarding and expanding access to the project. Taking into account that other state and public institutions of similar stature have all but failed to

adequately respond to community needs, this potential partnership with the public library underscores - somewhat paradoxically - the importance of public institutions in preservation and distribution of knowledge. Alas, it is worth reiterating here that the project does not seek to replace existing archives, but draws attention to their porousness and accentuates the need for the commons.

The examples featured in this PhD continue to probe the utopian imaginary of the online sphere as archive, yet affirm the desire to adopt interactive documentary methods to different social, political, and preservation goals. Understanding my documentary intervention as a political work of memory, I can confidently assert that *Pro2Pre* has become a unique and valuable record of the 2014 Uprising in northwest Bosnia-Herzegovina and the concomitant discourse.

The expertise I have acquired producing my doctoral work is a comprehension of the underlying theoretical problems that relate to the dynamics of the counter-archive, and the way in which interactive documentary methods become tools for intervention, collaboration, and investigation. I have turned to different works of similar register for insights on design and process of reasoning, and I affixed my intervention to actions and conversations with my interlocutors in order to investigate the project's research questions. Throughout the process, no firm boundaries existed between research and production. Furthermore, the lines were blurred between collaboration, interviews, collecting, screening, public and online interactions, and documentation; each of these elements being regarded as critical for conceptual intermediation.

Herein - pertaining to my third research question concerning infrastructures, class and economic circumstances – the limitations of the participatory model are clearly delineated. As argued in this thesis, the horizontal, seemingly more democratic forms of digital media production are subject to what Markus Miessen (2012) has termed a "nightmare of participation" (see section 2.5). That nightmare, however, is only a part of the problem. There are also other questions that emerge in this

rapidly changing field of practice, and which revolve around issues of digital literacy, data transparency, access and the ongoing shift of politics to a digital realm. As I have come to learn through practice, despite all the integration efforts on behalf of the principal researcher, technologies maintain most of their inherent biases and leave a significant number of 'participants' on the margins. Polemics and mobilizations that transpire on Twitter, for example, are increasingly shaping political battlegrounds and require certain kinds of tools, access and know-how in order to navigate and participate. Similarly, a digital counter-archive is of no great use if it cannot be accessed and adequately activated. In this PhD, I have proposed solutions to some of those issues by applying principles of design to break the digital divide, and purposeful curation and narrativization to minimize cacophony and amplify polyphony (see section 4.1). Acknowledging the significance of material conditions of production and participation, my research also employed "cartographies of controversy" (Latour, 2005; Venturini, 2009. See section 2.2) as a method that – on a meta level - can pull into view both human (the community) and non-human factors (policies, protocols and software) to help visualize deeper fissures and the underlying antagonisms.

As a result of these interventions, *Pro2Pre* oscillates between the idea of archival activation through interaction, and the more conventional safeguarding that subscribes to preservation as protraction of politics and material life. As the work evolved, something else became more evident: the tensions gradually dissipated between material and ephemeral; offline and online; real and virtual as qualities and locations of the archive.

Lastly, it should be noted that this thesis does not delve deeper into problems of digital preservation and concerns regarding longevity of both data and platforms that sustain projects such as *Pro2Pre*. Although I propose a model for easy duplication and dissemination of both the archive and the system's source code for further perusal and preservation, no full guarantees can be given about future legibility and compatibility of the work. This requires a separate study of project use and long-

term community impacts as well as further exploration of sustainable models that can ensure both preservation and activation of a counter-archive.

While it remains to be seen how local activists, researchers and artists will use and refashion *Pro2Pre*, I consider his work to be a decisive step in the struggle for the commons, and a *bona fide* exploration of "cognitive mapping" (Jameson, 1988); an aesthetic that can help us make sense of the increasingly treacherous political realities of present day. My hope is to bring the knowledge from these years of inquiry, production and research into my future work in the field of socially engaged documentary and community archive building.

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