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Professional MA: Preservation & Presentation of the Moving Image

**Preserving amateur digital records of
public demonstrations in 2013/2014 in Rio de Janeiro**

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Amsterdam, 13th March 2014

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Introduction

0.1. Problem and urgency

In June 2013, Brazilians in a few cities mobilised in demonstrations against a rise in bus fare. Soon after they rallied on a national scale, against federal and local government, for better health, education and transport systems. In response, the government met some of the demands, but violently attempted to dissolve the protests. Police brutality then became a major issue during the following demonstrations and “the aggressions perpetrated by state agents served as fuel for the demographic explosion of street protests” (Bezerra and Grillo, 2014: 9¹). The demonstrations continued throughout the year until July 2014 and were given increasing attention by national and international media².

Digital media profoundly changed the dynamics in the demonstrations in Brazil. From the first demonstrations in June 2013, participants created records with video, photographic and smartphone cameras, images were streamed live on the Internet, and later photos and videos were uploaded and spread via social networks, becoming a crucial instrument of mobilisation. As a result of the digital component of those demonstrations, massive records were produced and shared, with most of them stored on privately-owned hard disks³. These images can be described as amateur footage by mostly independent individuals who, throughout the year, would gather in media groups or collectives created or consolidated in 2013 and 2014. The images made by protesters played an important role in legitimising the demonstrators’ claims, as a tool of mobilisation and as evidence against institutionalised brutality. Nevertheless, both recording media and sharing platforms are susceptible to rapidly changing technology and obsolescence, engendering the problem of data preservation, which will be examined in the following paragraphs.

¹ Unless otherwise indicated translations are mine.

² For instance, in UK newsgroups: <http://www.theguardian.com/world/2013/jun/21/brazil-police-crowds-rio-protest>, <http://www.independent.co.uk/news/world/americas/rio-de-janeiro-riots-turn-deadly-after-protests-at-killing-of-professional-tv-dancer-in-city-slum-9277230.html>, <http://www.theguardian.com/world/2013/oct/16/violence-rio-de-janeiro-protests>; French newsgroups: http://www.lemonde.fr/ameriques/article/2014/04/23/bresil-emeutes-a-rio-de-janeiro_4405521_3222.html; in US: <http://www.nytimes.com/2013/06/18/world/americas/thousands-gather-for-protests-in-brazils-largest-cities.html>, http://www.washingtonpost.com/world/protesters-out-again-in-brazilian-cities/2013/06/19/2f788d80-d919-11e2-9df4-895344c13c30_story.html, <http://www.economist.com/blogs/americasview/2013/06/protests-brazil?spc=score&spv=xm&ah=9d7f7ab945510a56fa6d37c30b6f1709>, last accessed on 16th June 2014.

³ Information obtained by interview with a member of CMI-Rio, on 10th June 2014, interview with members of NINJA, on 20th August 2014, by Skype (with interviewers’ permission), and questionnaire “Operation of media activists in Brazil” (Appendices 5), on 20th August 2014.

The preservation of the digital medium is a matter stressed by numerous organisations and scholars. These scholarly investigations explored several different aspects of the digital field such as digitised collections, digital born, physical carrier, metadata, copyright, risk management, among many others. Yet amateur collective creation – from a digital preservation viewpoint – is an under-explored topic, which can be proven by the so-far small number of publications⁴. Digital preservation is a fragile subject, mostly due to its commonly known issues such as the obsolescence of hardware, media and software deterioration, rapidly changing file formats, migration, information disappearance, and metadata (Besser, 2001: 4; Cloonan, Sanett, 2005: 228; Fossati, 2009: 65).

The records of the amateur collective, due to its peculiarities, are even more fragile when it comes to preservation: firstly, the urge to record the demonstrations at any costs without consistent planning can compromise previously recorded images; secondly, there is a lack of preservation concerns towards the abundant records or indeed any systematic preservation practices; thirdly, the profusion of data on the Internet is not a guarantee that those images will remain accessible over time – especially in this case because, eventually, videos are censored and removed. Moreover, the authorship of the images is a debatable topic – and this has two effects to be investigated: no clear owner to monitor the use of the data, and the copyright issue. Also connected to preservation are the notions of *integrity* and *originality* that will be examined later. These two concepts are key in assuring the merit of audiovisual materials, and in the Brazilian case, the images can be subjected to reuse and manipulation after they become accessible online. Lastly, personal equipment and documents have been seized by political actors and other public authorities.

Therefore, among the moving images in danger of vanishing from Brazilian heritage are those of the amateur collective records of protests. Taking a brief look at the Brazilian background on audiovisual preservation, it is possible to garner a sense of the fragility of the documentation of current events and the digital medium. Overall, the challenges of digital preservation and the aforementioned particularities of the preservation of amateur collective records, show a clear need for a strong preservation model – one that addresses the peculiarities of the collective records while reflecting the importance of these records for the Brazilian audiovisual heritage as a matter of scholarly investigation, and for Brazilian political process at large. This thesis

⁴ The literature on digital preservation of amateur collective is still incipient. As one of indicative, the extensive research of film scholars Karen F. Gracy and Miriam B. Kahn in the *Preservation in the Digital Age - A Review of Preservation Literature, 2009–10* (2011), that “identifies key contributions to the field in periodicals, monographs, and research reports, and provides a guide to the changing landscape of preservation in the digital age”. Amateur collective creation is not among the subjects analysed.

addresses how to preserve amateur digital records of the public demonstrations of 2013 and 2014 within the context of media activism in Rio de Janeiro.

0.2. Background on Brazilian and Rio de Janeiro demonstrations

Brazil is a democratic republic with a presidential system. Since 1985, after more than two decades of military dictatorship, the country is in a re-democratisation process. In the meantime, mass claims and demonstrations in urban areas with national reverberation have been unusual in Brazilian political culture⁵. This makes the 2013 and 2014 demonstrations a critical turnaround that engaged thousands in their first public massive demonstration. The catalyst for the massive protests throughout the country was backlash against an increase in bus fares. The first demonstrations garnered little national attention, but in June 2013 protests spread to about 100 cities, peaking on June 20 when more than one million people protested all over the country⁶. At this point, the protesters addressed several other issues, such as the demand for better health and education systems, and a condemnation of government corruption, racial discrimination, and the high costs of big sporting events hosted by Brazil. Like other uprisings around the world, the movement was perceived as leaderless. The Brazilian protests mirrored those of Tunisia, in which “there was no longstanding revolutionary figurehead, traditional opposition leader, or charismatic speechmaker to radicalize the public” (Howard and Hussain, 2011: 37). In this context, cameras wielded by protesters became one of the protest’s icons.

In Brazil, most of the coverage presented by the mass media demeaned the demonstrations by focusing on vandalism and incriminating protesters. Thus, the mainstream media became a target for demonstrators in the following protests, and boosted the work of media activism groups. Media activists aim to produce narratives about social events that clash, oppose, and hack the versions presented by mainstream media newspapers, TV channels and radio stations (Poell and Borra, 2012, Bezerra and Grillo, 2014). Mostly autonomous and independent, those media activist groups use new technologies of information and communication to create their narratives, dodging the mainstream media hierarchies and hegemonic narratives, but nonetheless

⁵ In the rural area, the Movimento dos Trabalhadores Rurais Sem Terra - MST, or Landless Workers Movement, in English, has been active nationwide since 1980 for land reform in Brazil, and for a long time, indigenous tribes has been fighting for their rights, for expanding the indigenous territories and against invasions from agribusiness. In urban areas, the great national previous demonstrations were *Diretas Já*, the movement for direct presidential elections in 1984, and demonstrations in 1992 pro-impeachment of Fernando Collor de Mello, the first democratically elected president of Brazil, after the military government. Both episodes gathered more than one million people in public demonstrations. Many public demonstrations connected with groups rights, such as women, gay, teachers, black people have been occurring occasionally.

⁶ See <http://www.reuters.com/article/2013/06/21/us-brazil-protests-idUSBRE95J15020130621> and <http://www.bbc.com/news/world-latin-america-22992410>, last accessed on 16th June 2014.

creating narratives that display partiality, not unlike the mainstream media. The attempt to use commercial social networks like YouTube, Twitter and Facebook as an alternative means of communication takes shape now after a long time of effort to establish alternative means of communication (Poell and Borra, 2012: 696). Although mainstream media eventually used images made by media activists, most mainstream news outlets do not recognise media activists as news producers, but as advocates with neither a journalism degree nor any professional objectivity. As media scholars Thomas Poell and Erik Borra claim, “media researchers have argued that social activism is systematically signified by the mainstream press as illegitimate” (Poell and Borra, 2012: 697).

The significance and the practical usage of the images by demonstrators varies. Paradoxically, the records from protests have been used as evidence in court, both *against* demonstrators, in lawsuits accusing vandalism, or *by* demonstrators, as proof of police abuse and as a defence against arbitrary political persecutions⁷. The use of data collected by eyewitness and used in criminal cases was arguably most famously first seen in the footage of the beating of Rodney King by Los Angeles Police Department officers in 1991. The video, recorded by a civilian, and used in court both by the defence and the prosecution, was later scrutinised by documentary scholar Bill Nichols in *Blurred Boundaries: Questions of Meaning in Contemporary Culture* (Indiana University Press, 1995).

The records from protests became an important portion of the audiovisual legacy of a significant Brazilian historical moment, the first national demonstrations in the recently re-established democratic system. Therefore, the images can be seen as a tool for the development of the democratic process that started in Brazil in the 1980s.

0.3. Case studies and scope of the object

“The streets are all directed to global viewers via social networks. All kinds of police abuse is responded with ostensibly peaceful gestures, shouts of ‘no violence’ [...], always using the greatest weapon: cameras of mobile phones” (Losso, 2013: 1).

In order to explore how digital records of public demonstrations could be preserved, I examine the practices of two initiatives in the collective production of images, within the media activism context in Rio de Janeiro: CMI-Rio, and Mídia NINJA. CMI-Rio is an abbreviation for *Centro de Mídia Independente*, an independent media organisation based in Rio de Janeiro. Although it is a stand-alone entity, CMI-Rio has ties with the networks CMI-Brasil - CMI and the global IMC - Independent Media Center. IMC, also known as Indymedia, “was established by various independent and

⁷ In some cases the same footage. Interview with Priscila Neri, from WITNESS, on 4th June 2014, by Skype (with interviewer’s permission).

alternative media organizations and activists in 1999 for the purpose of providing grassroots coverage of the WTO protests in Seattle”⁸. CMI-Rio was established in 2001 and presents itself as “an international network of independent artists and media producers, which create, share and facilitate the circulation of information for alternative and critical way, without any corporate interest”⁹.

The second case study, Mídia NINJA, became the most notorious Brazilian group in the media activist context in 2013 and 2014¹⁰. In their own words, “a decentralized communication network that produces and disseminate content based on collaborative work and online sharing”, which “produce news stories, documentaries and investigative journalism in Brazil and abroad”¹¹.

Mindful of Losso’s words, these particular cases can be said to be relevant to and representative of this investigation due to their constant presence in demonstrations, the transformation of the camera from a recording device into a weapon against police abuse, and the active role in recording and sharing. Also, both groups have an important part in the mobilisation of social networks by means of the images they own or distribute. CMI-Rio on its own is also a relevant case study for this thesis due to the historical role of Indymedia in media activism, as described by Poell and Borra, which “can rightfully make a claim for the title of main global online network for alternative journalism of the past decade” (Poell and Borra, 2012: 698). On the other hand, NINJA took shape in the heat of the demonstrations, and can be perceived as a by-product of the demonstrations themselves. Lastly, these two case studies are relevant because they run counter to each other both historically and in their work methodology. Although both are open collectives, CMI-Rio has a small but steady members and full control of their media production, while NINJA has a large but irregular membership base and loose control over combined media productions. Also, CMI-Rio had prior significance as the main counter-media body since the beginning of the 2000s; while NINJA was created during the demonstrations and had more notoriety.

Along with two case studies on the production of images in media activism in Rio de Janeiro, I will examine Human Rights Videos WITNESS advocacy and preservation practices as a key example. This is due to the organisation’s significant work in the recording, preservation and dissemination of protest images, particularly as they affect human-rights cases and issues. I will also discuss the current global

⁸ *About Indymedia*. Indymedia. 11th August 2014. <<http://www.indymedia.org/or/static/about.shtml>>.

⁹ *Sobre o CMI-Rio*. 2013. CMI-Rio. 20th May 2014. <<https://cmirio.milharal.org/cmi-rio>>. (in Portuguese).

¹⁰ See <http://www.theguardian.com/world/2013/aug/29/brazil-ninja-reporters-stories-streets>, and <http://www.dw.de/ascens%C3%A3o-da-m%C3%ADia-ninja-p%C3%B5e-em-quest%C3%A3o-imprensa-tradicional-no-brasil/a-16989948>, last accessed on 16th June 2014.

¹¹ *Who We Are*. 2014. NINJA. 20th May 2014. <<https://ninja.oximity.com/partner/ninja/about>>.

uprising wave that started in Iran in 2009 then Tunisia in 2010, that spread to many countries in the next year.

In response to demonstrators recording the police action, military police made their own recordings of demonstrators with video and smart phone cameras¹². Although this research recognises the images made by the police as a key element of the demonstrations' dynamics and as a part of Brazilian audiovisual heritage, this investigation does not include the images made by police forces, mostly because they are included in the scope of military institutions, where the access for academic research is not easily granted¹³.

0.4. Theoretical framework, methodology and structure

“The precise mixture of causes [of uprisings] may have varied from country to country, but the one consistent component has been digital media” (Howard and Hussain, 2011: 41).

“[P]eople have used digital media to build a political response to a local experience of unjust rule. They were not inspired by Facebook, they were inspired by the real tragedies *documented* on Facebook” (Howard and Hussain, 2011: 48, emphasis by the authors).

Digital media, the “consistent component” evoked by communication scholars Philip N. Howard and Muzammil M. Hussain in their analysis of the Arab uprisings is also pertinent in the Brazilian case. Demonstrators exhaustively recorded the protests, streaming live and disseminating images via social networks. The presence of the camera and the circulation of the images on social networks played a crucial role in the dynamics of the Brazilian demonstrations. This is what media theorist Henry Jenkins has described in his new media theory as ‘prosumer’, a contraction of ‘producer’ and ‘consumer’, relating individuals that step out of the consumer function and embrace the tools of production, like media activists who create their own narrative after official representations in mainstream media. In this sense, the production of media activists could relate to the way Jenkins describes the concept of participatory culture:

¹² The purpose was identified as a way of intimidation and criminalization of protesters. Human rights agencies considers this practice as a violation of the right to privacy and the freedom of speech, since its main function was the inventory of the demonstrators, and was not used to control irregularities in police action. See http://artigo19.org/wp-content/uploads/2014/06/Protestos_no_Brasil_2013-versão-final.pdf, last accessed on 15th November 2014.

¹³ News reported that the military forces did not reply on formal requests to access those images, even though there is an active law in Brazil, *Lei de Acesso à Informação*, which could be translated as *Law on Access to Information*, which regulates the constitutional right of citizens to access information produced or held by the state within twenty days after its formal request. Law 12.527 of 18th November 2011. See <http://www.cartacapital.com.br/blogs/caixa-preta/pm-finge-que-filmagens-de-protestos-feitas-por-policiais-nao-existem-3192.html>, last accessed on 15th November 2014.

“culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing creations, and some type of informal mentorship whereby experienced participants pass along knowledge to natives. In a participatory culture, members also believe their contributions matter and feel some degree of connection to one another (at the very least, members care about others’ opinions of what they have created)” (Jenkins et al, 2009: XI).

Amateur records of public demonstrations can be historical and political documents which are relevant in many different ways. Initially, considering the clash with state forces and the mainstream media, the records from protests can be perceived as documents that question official history. The role of amateur images of the demonstrations in conflict with the official history invokes an analysis of these images using philosopher Michel Foucault’s notion of Counterhistory; a concept connected to a narrative of history, experiences and memories that were not integrated in official histories. The production of images by anonymous individuals engage with an unofficial narrative in opposition to the official one; in rough terms, the *status quo* that was opposed during the demonstrations. Here the Counterhistory perspective describes the empowerment of those narratives against one specific official version written by the institutions that hold power.

Among the institutions in power, the state archives stands as both the creator of official history, and its disseminator. US media scholar William Uricchio describes this as a situation in which “evidence related to marginalized social formations is often simply missing from the historical record since period archivists deemed it unworthy of preservation” (Uricchio, 1995: 260). This also reflects a classic function of the historical state archive as defined by the historians Francis X. Blouin Jr. and William G. Rosenberg:

“The documents they contained were not direct links to any random elements of the past, but to the functions and actions of the dominant political authorities whose transactions they reflected and whose interests and needs were served by their preservation. These logically became the agents to which scientific history assigned primary historical purpose.” (Blouin and Rosenberg, 2011: 26)

Although it describes the power of state archives in 19th century, Blouin and Rosenberg’s analysis can be used to understand the Brazilian case, mostly due to the recent re-democratisation period. Additionally the slew of big sports events¹⁴ will also interfere in the way state archives operate. The mainstream media can also be considered a stakeholder of power, with private interests that shape the official version of story. In short, official forces struggle to banish the images from protesters and mainstream media struggle to disqualify them.

¹⁴ 2013 Confederations Cup, in six different cities; 2014 World Cup, in twelve different cities; and the 2016 Summer Olympics, in Rio de Janeiro.

Another issue connected with amateur records of demonstrations is the social memory from people's perspectives. Here, I use the concept of Microhistory by Italian historian Carlo Ginzburg, which constructs a model of history through the narrative of everyday life, in contrast with the history created and taught by official institutions. The study of this smaller data set is not in the scope of the national institutions in Brazil; in other words those institutions neglect the kind of sources that lie at the core of Microhistory (Ginzburg, 1993, Magnússon, 2006). Parallel with the analyses from the 27th G8 summit protests in Genoa, the individual static photos and video testimonials must speak not of history, "but of histories, of micro-stories within macro-histories and of individual and collective memories" (Niwot, 2011: 86)¹⁵. Both Microhistory and Counterhistory are auxiliary and yet fundamental concepts to understand the importance of preserving the digital records of demonstrations in 2013 and 2014, to ensure that these parts of history will remain throughout time, despite the stakeholders of power, mostly the state archives and mainstream media.

The importance of a mundane and prosaic layer outside of official narratives proposed by Ginzburg can be connected to amateur audiovisual production that until recently, was not regarded as a valuable source of history. The film and new media scholar Patricia R. Zimmermann in her arrant work *Reel Families: A Social History of Amateur Film* (Indiana University Press, 1995) locates a primary definition of amateurism connected with its Latin root *amare*, denoting production for pleasure and love, instead of economic or professional reasons. Production of this type would be an activity performed in leisure time and in private spaces, contrasting with the practice of a profession. Later she proposes, "the difference between professional and amateur film [...] marks a social distance sustained through the specialization of the technique" (Zimmermann, 1995: 2). The difficulties inherent in defining amateur film was stressed by media scholar Eva Hielscher, whereby the definitions according to its makers, production circumstances, presentation form, technique, subject or aesthetics do not survive a close examination (Hielscher, 2007: 1-2). In other words, no definition can accurately encompass the complexity of amateur film, and Hielscher proposes "originality, uniqueness and aura are characteristic traits of amateur film" (Hielscher, 2007: 40). Both Zimmermann and Hielscher's discussions focus on analogue formats, while the definition of amateur film in digital format is examined by media scholar Broderick Fox in *Rethinking the Amateur* (2004): Fox argues that new technologies and its use blurs the conceptions of amateurism and professionalism. However, Fox ends the article by reinforcing the connotation referred to by Zimmermann, of doing something with love and freedom (Fox, 2004: 5, 16).

¹⁵ Although Niwot does use the term "micro-stories", this author believes the meaning of "microhistory" is applied here.

Some of the definitions of amateur film can be applied in the Brazilian scenario. Throughout the months, the distance between professionalism and amateurism would lessen, as media activists invested in better recording equipment and would think more about production techniques¹⁶. Freedom, as a directive of amateur film, here encounters impediment, prohibition or censorship, moving these images from simple record of demonstrations to records of human rights abuses and therefore its framework will be further referred. The products of this media activism sit somewhere between professional and amateur production; more specialised than amateur less equipped or trained than the professional, but still circumscribed in Participatory Culture, as mentioned earlier. Considering the Brazilian case, this thesis will address as its object “amateur collective records” as both amateur individual production and media activists’ production.

Moreover, regarding the production of the images, this investigation will rely on documentary theory, in order to understand the significance of the constitution of the images. Also, regarding the preservation proposal, this thesis will be based on archive theory, especially digital archive theory and Participatory Archiving’s framework.

The subject investigated in this thesis, its location, context and time-frame – public demonstrations in 2013/2014 in Rio de Janeiro – will be outlined in the first chapter, as well as an overview of the role of media activism and collective records globally. I will also examine tension between media activism and mainstream media in Rio de Janeiro. In the second chapter the Brazilian audiovisual preservation context will be discussed, the current practices of digital preservation of images from protests in other countries, the problems of preserving the records from Rio de Janeiro demonstrations, and an overview of current digital preservation practices. In the third and last chapter, this thesis develops a proposal for preservation of digital records of demonstrations.

As the objective of this thesis is to explore how best to preserve digital records of demonstrations and why, I have also based my research on interviews personally conducted with significant personalities in the sphere of the demonstrations in Rio de Janeiro, Madrid and Cairo¹⁷. Questions focus mainly on the role of the images by demonstrators in the demonstration itself, technical dynamics in the recording and sharing of images, the role of social networks and preservation concerns and practices.

¹⁶ Interview with a member of CMI-Rio, on 10th June 2014, by Skype (with interviewer’s permission).

¹⁷ I made a total of six interviews, whereas four interviews through Skype in Portuguese, and two in English, through email and face-to-face. The interviewees are listed in Appendix 4.

Also, I created two technical surveys on the preservation practices in Brazil, and media activism groups' operations¹⁸.

¹⁸ The survey *The use of LTO as archival medium in audiovisual institutions in Brazil* was sent to the mailing list of Brazilian Audiovisual Preservation Association - ABPA, and had 12 responses. Considering the number of audiovisual institutions with digital media in Brazil, I found the amount of responses satisfactory. The survey *Operation of media collectives in Brazil*, I sent through Facebook messages to more than 30 media collectives, mostly in Rio de Janeiro, and only had 6 responses back. I found this quite disappointing at first, but later I realized that some groups were reluctant to share their information for security reasons. Also, I chose Google Forms as the platform for the survey, which displeased some activists due to Google's privacy policy. The surveys are listed in Appendix 5.

Chapter 1. Collective records and media activism

1.0. Introduction, or “for a life without turnstiles”

“Social media have become the scaffolding upon which civil society can build, and new information technologies give activists things that they did not have before: information networks not easily controlled by the state and coordination tools that are already embedded in trusted networks of family and friends” (Howard and Hussain, 2011: 48).

Like other uprisings, the Brazilian demonstrations found attention in the media nationally and internationally and became a topic for feature documentaries and media artwork. Academia looked closely at the movement, producing articles and books on the theme. Within academia, the most relevant Brazilian research of the recent demonstrations can be found in the dossier *Redes, Ruas, Mídias: Revolta e Reação* (*Networks, Streets, Media: Revolt and Reaction*), published in the Liinc Journal¹⁹, with contributions from scholars who also acted in media activist collectives. The dossier was an important source of information for this thesis, as were many news sources, most importantly The Guardian, BBC and The New York Times, owing to the availability of articles in English, and their consistency and reliability.

In order to understand the preservation challenges and practices of collective records from demonstrations, this chapter aims to investigate the role of media activism and collective records globally. Firstly, it will address the global uprising wave and the role of the digital media in those uprisings. Secondly, it will investigate how images from past demonstrations became part of an audiovisual history of the last century, viewing amateur footage as archival documents, and documentaries created using images from demonstrations. The social and historical context of the Brazilian demonstrations will also be described, with an emphasis on the country’s mega sports events. Finally, it will investigate the interplay of mainstream and counter media (i.e. media activism), in particular the role of two groups in Rio de Janeiro.



Fig. 1 - Banner in a 2015 MPL demonstration in São Paulo: “por uma vida sem catracas” (for a life without turnstiles, in English).

¹⁹ Liinc is the Interdisciplinary Laboratory for the Study of Information and Knowledge, an initiative by two Brazilian academia institutions: Federal University of Rio de Janeiro - UFRJ and the Brazilian Institute for Information in Science and Technology - IBICT. See <http://revista.ibict.br/liinc/index.php/liinc/issue/view/44>, last accessed on 9th November 2014.

1.1. Overview of the role of media activism and collective records globally

“One of the hallmarks of this revolution is that it has been filmed by its people”
(Khalid Abdalla about Egyptian uprising²⁰).

Since 2010 a new wave of protests, with large-scale public demonstrations and uprisings has been occurring in several countries²¹. This protest wave and the peculiarities of each country have been investigated from varied perspectives by scholars²² and also scrutinised by many journalists like Malcolm Gladwell, from *The New Yorker*, and Paul Mason, from the *BBC*, author of *Why it's Kicking Off Everywhere: The New Global Revolutions* (Verso, 2012), an essential book to understand the global political and cultural context of the backlash.

Each country has its own specific dynamics that spark the demonstrations, but they share several features in common. Notably, the omnipresence of cameras handled by protesters and the immediate profusion of the images in social networks, both trumpeting the demonstration in the media, as well as boosting the number of people in the streets. Moreover, social networks are a key factor of mobilisation and were occasionally used to designate them – such as ‘Twitter’, ‘Facebook’ or ‘YouTube’, in addition to the terms ‘Revolution’ or ‘Uprising’²³. Another common feature is the opposition of the discourses of the mainstream press to those of the demonstrators and media activists. Furthermore, most of the countries were marked by violent clashes, under both dictatorships and democratic governments. In some of the countries, such as Ukraine, the outcry has been identified as a movement without leaders. In other words, as the digital culture scholar Paolo Gerbaudo defined, some of the movements were characterised by “the rejection of formal structures of organising with official leaders or spokespersons” (Gerbaudo, 2013: 90). Gerbaudo also interestingly identified a “revolutionary domino effect” and investigated the protest movements in 2011, comparing it to other recent moments in history, such as 1848, 1968 and 1989²⁴.

The digital medium is key to the protest’s dynamics. In some of the uprisings and demonstrations the role of media activists extended to the role of mobiliser. In the

²⁰ See <http://www.egyptindependent.com/news/tahrir-cinema-displays-revolutionary-power-archives>, last accessed on 9th November 2014.

²¹ Notably Canada, China – Hong Kong, Egypt, Greece, Spain, Syria, Tunisia, Turkey, Ukraine, US and Venezuela, among others.

²² Such as media and culture studies, like John Postill (2013), Paolo Gerbaudo (2012, 2013), and Tim Markham, communication studies, as an example, Philip N. Howard, political science, such as Anita Breuer, and David M. Faris, public affairs, economics, for example A. F. Salam (2013), and the subject has been.

²³ Alternatively, the political scientist David M. Faris alerts to the danger of labeling movements, as those abridgements would be simplistic and reductionist, just as happened with the 2009 Iranian Green Movement, labelled as “The Twitter Revolution” (Faris, 2012: 2-3).

²⁴ This most recent revolutionary spreading would not have the same power and speed as those previous moments (Gerbaudo, 2013: 93).

same way the protests' operation changes with the presence of the camera, usage of the images interferes with the protests procedures. In this sense, the state used images to criminalise protesters²⁵, inhibiting others protesters. This inhibition was illustrated by the wave of signs asking for “no photos” that became common in 2014 Hong Kong protests to avoid the demonstrators' incrimination (fig. 2). Another symptom of the connection between digital media and the global protest wave is the *Digital Activism Research Project*, “investigating the global impact of digital media on political contention” by the University of Washington in Seattle²⁶.



Fig. 2 - “No photos” signs compilation in 2014 Hong Kong protests.

The uprising in Egypt is an interesting case regarding the heritage of its demonstrations, resulting in numerous initiatives for the documentation, preservation and a body of critical review of the movement such as academic conferences, articles, and books. Both feature films *Al midan (The Square)*, (Dir. Jehane Noujaim, 2013, 95 min.) and *The Uprising* (Dir. Peter Snowden, 2013, 78 min.) provides a complex and close examination of the movement through massive footage compiled from months of demonstrations and interviews. Also, *Alone, Together..., In Media Res* (Lara Baladi, 2012, 42 min.) can be seen as one of most notable artistic audiovisual interpretations²⁷. Furthermore, the book *Walls of Freedom - Street Art of The Egyptian Revolution* (From Here to Fame, 2014), collected street art interpretations

²⁵ Interview with Priscila Neri, from WITNESS, on 4th June 2014, by Skype (with interviewer's permission).

²⁶ See <http://digital-activism.org/about/about-the-project>, last accessed on 12th December 2014.

²⁷ It consists in a three-channel video installation, of collages of images from the uprising with other footage – fictional, animation, newsreel and documentary. It is presented by its author as “a narrative that weaves video excerpts together to reflect on many of the questions raised during the Arab uprisings”. See <http://creativetimereports.org/2013/01/25/tahrir-revolution-in-media-res>, last accessed on 3th December 2014.

about the uprising, and an interactive map gathered information about the street art and its historical connection to current events²⁸. Additionally, the Tahrir Documents are “an ongoing effort to archive and translate activist papers from the 2011 Egyptian uprising and its aftermath, [...] published in complete English translation alongside scans of the original documents”²⁹. An important initiative by the Egyptian National Archive was a call for documenting the uprising: *Commission for Documenting the January 25th Revolution*³⁰. Although not active, this is a laudable exception to the hegemony represented by state archives towards protest against the ruling power. Lastly, the Mosireen media activism collective that during the demonstrations recorded and shared numerous short reports, and now have more than 5,7 million views³¹. Currently Mosireen is supported by crowdfunding and hosts an extensive archive of footage of the uprising, with part of them available for free download and streaming in high resolution.³² This requires a part-time staff member to organise the archive and to respond to footage requests. They are also responsible for Tahrir Cinema, which screened Mosireen archival footage and other works by various groups in Tahrir Square³³.

The extensive and multifaceted production of the Egyptian case, especially Mosireen’s preservation practices, are significant to this thesis in order to demonstrate the breadth of cultural areas affected by the uprising. As shown by Mosireen, there is a long tradition of using collective filmmaking of demonstrations, as explained in the following section.

1.2. Amateur footage as archival document and documentaries

“To give the power of speech to people who don’t have it, and, when it’s possible, to help them find their own means of expression” (Chris Marker, about SLON, referred by Stark, 2012: 119)

In the visual story of the twentieth century, images from past demonstrations are among the most iconic: the 1963 March on Washington for Jobs and Freedom in the US (fig. 3), many demonstrations between 1964 and 1973 against the war in Vietnam (fig. 4), 1968 in France (fig. 5), and the Unknown Protester in front of military tanks

²⁸ See <http://muftah.org/telling-story-arab-spring-interactive-graffiti-map/#.VH7nZPldXT0>, last accessed on 3th December 2014.

²⁹ “The project is not affiliated with any political organization, Egyptian or otherwise”. See <http://www.tahrirdocuments.org/about>, last accessed on 3th December 2014.

³⁰ The website of the commission is no longer available, and I could not find any recent news about it. The proposal of the commission can be accessed at <http://www.tahrirdocuments.org/2011/06/the-national-archives-commission-for-documenting-the-january-25th-revolution>, last accessed on 20th January 2015.

³¹ See <https://www.youtube.com/user/Mosireen/about>, last accessed on 3th December 2014.

³² See <http://vimeo.com/mosireen>, last accessed on 3th December 2014.

³³ See <http://www.bbc.com/news/world-middle-east-17277156>, last accessed on 3th December 2014.

in 1989 in China (fig. 6). Footage from those episodes are available on YouTube and can be identified both as professional and amateur footage. Today, the amateur footage can be considered an archival object with historical relevance due to the work of the home-movie community in past decades. In parallel, a landmark of reframing amateur formats as archival objects is the Zapruder footage, and its use as legal evidence that enhanced its indexical historical significance.



Fig. 3 - March on Washington for Jobs and Freedom, 1963.



Fig. 4 - Vietnam demonstration in US, 1967.



Fig. 5 - 1968 demonstration in France, 1968.



Fig. 6 - Unknown Protester, China, 1989.

The filmmaker and documentary scholar Wilma de Jong analyses the use of amateur footage as legal and historical evidence, such as the Zapruder footage (fig. 7) and the Rodney King episode (fig. 8):

“Documentary footage [...] provides an indexical link to past events which can be allowed to be used in some court cases. Well-known sequences include the Zapruder films or the footage of the beating of Rodney King. Both were shot by amateur filmmakers who happened to be at the scene of events. [... The Zapruder footage] became one of the most studied pieces of footage in history and played a crucial role in subsequent legal hearings and in many debates about the angle of the footage and the missing frames of crucial moments during the events” (de Jong, 2012: 237).



Fig. 7 - Zapruder footage, 16mm, 1963.



Fig. 8 - Videotape of Rodney King's beating, 1991.

de Jong asserts that the Zapruder footage³⁴ is a landmark in reframing amateur formats into archival objects. Its use as legal evidence enhances its indexical historical meanings. Also, as mentioned earlier, documentary scholar Bill Nichols demonstrates in his analysis of Rodney King's footage that the image of past events is connected to its framing and contextualisation, and can be considered a representation of the past³⁵.

Images recorded on 16mm and 35mm film would lead to political documentary landmarks by prominent directors: *Black Panther* (Dir. Agnès Varda, 1968, 46 min.); *La batalla de Chile (The Battle of Chile)*, Dir. Patricio Guzmán, 1975-76-79, 320 min.); *Le fond de l'air est rouge (Grin Without a Cat)*, Dir. Chris Marker, 1977, 240 min.) to name only a few. Yet another, also as a milestone of collective filmmaking, is *Loin du Vietnam (Far from Vietnam)*, 1967, 120 min.), the first documentary by SLON³⁶, headed by Chris Marker. Marker's aforementioned description of SLON's operating mode can also be a good illustration for works in the electronic medium. Video and digital media that became landmarks of the usage of demonstration images as its guiding thread, such as *Showdown in Seattle: Five Days That Shook the WTO* (IMC - Independent Media Center, 1999, 150 min.), and *This is What Democracy Looks Like* (Dir. Jill Friedberg, Rick Rowley, 2000, 75 min.).

In recent years, demonstration images became a noticeable element among works screened in documentary film festivals, and some of the films reached a commercial theatrical circuit and festivals awards beyond the documentary circuit. Also, throughout last decades, an emergent number of film festivals focused on human rights issues around the world³⁷. The portrait of the Arab uprising, *The Square* is an outstanding illustration, with the accumulation of numerous relevant awards and acclamations³⁸. On the other hand, *Burma VJ: Reporter i et lukket land (Burma VJ: Reporting from a Closed Country)*, Dir. Anders Østergaard, 2008, 84 min.), a groundbreaking work of political documentary about recording and sharing images of

³⁴ "In 1963, the amateur filmmaker Zapruder stood at an elevated position in relation to the presidential parade and was able to film the killing of President J.F. Kennedy when his limousine was driving past in Dallas" (de Jong, 2012: 237).

³⁵ The documentary footage as an indexical link to past events evoked by de Jong and Nichols was also appropriated as a reality component by the narrative fiction cinema. As an example of this, the images of demonstrations used to reinforce the historical and 'real' component in films such as *Forrest Gump* (Dir. Robert Zemeckis, 1994), and *Argo* (Dir. Ben Affleck, 2012).

³⁶ SLON stands for Société pour le lancement des oeuvres nouvelles, or Society for Launching New Works in English, headed by Chris Marker, with Joris Ivens, William Klein, Claude Lelouch, Agnès Varda and Jean-Luc Godard as collaborators.

³⁷ Today the Human Rights Film Network - HRFN consists of a partnership of 38 independent festivals. See <http://www.humanrightsfilmnetwork.org/about>, last accessed on 10th November 2014.

³⁸ Among the awards and nominations are: Nomination to Best Documentary on the Oscar 2014, Audience Award for World Cinema Documentary on Sundance Film Festival 2013, and People's Choice Award on Toronto International Film Festival 2013. Today is a top attraction at Netflix. See <http://www.imdb.com/title/tt2486682/awards>, last accessed on 10th November 2014.

demonstrations under a dictatorship, is freely available online via the director's Vimeo account³⁹.

Up to now, two productions by foreigners in some way discuss the demonstrations and the image production in the Brazilian case. The documentary *Rio 50°* (Dir. Julien Temple, 2014, 93 min.) paints a portrait of the city of Rio de Janeiro, emphasising its historical evolution especially regarding its music culture and social violence⁴⁰. Yet another, *Copa Para Quem?* (Maryse Williquet, 2014), a webdocumentary focusing on the impact of the World Cup in the city of Fortaleza, one of the twelve host cities, highlighted forced evictions and local demonstrations⁴¹. In Brazil, a number of documentaries focusing on the demonstrations were created: In São Paulo, *Junho - O Mês que Abalou o Brasil* (*June: The Riots in Brazil*, Dir. João Wainer, 2014, 72 min.), a high production-value film presenting day-by-day demonstrations in chronological order, interviews with well-known philosophers, journalists and demonstrators, was released in a few theatres in Brazil and in video-on-demand on iTunes⁴². In contrast, but also focusing in São Paulo with Rio de Janeiro and Brasília images, *20 Centavos* (Dir. Tiago Tambelli, 2014, 53 min.) is the result of about 70 hours of material made by 30 crew members after a call from the director⁴³. *Sob Vinte Centavos* (*Beneath Twenty Cents*, Dir. Gustavo Canzian e Marco Guasti, 2013, 44 min.) was uploaded on YouTube⁴⁴ at the end of August 2013. Its emphasis is on interviews and symposiums about urban issues connected with the demonstrations. Also, *Rio em Chamas* (2014, 109 min.), a 'movie-demonstration'

³⁹ See <http://vimeo.com/33160416>, last accessed on 10th November 2014.

⁴⁰ The demonstrations are focused in the end of the movie, as an outcome of social gap, inequality, police brutality and corruption throughout the decades. There is no narrator, instead Rio de Janeiro's inhabitants, anonymous and famous individuals, express their opinions – in the same scale the Mayor of the city and students. See <http://www.idfa.nl/industry/tags/project.aspx?id=099A933E-0FE2-4EFD-A5C8-E26CB2E46BC9>, last accessed on 10th December 2014.

⁴¹ Also as main topics sex tourism and street children. See <http://www.copaparaquem.com>, last accessed on 5th December 2014.

⁴² *Junho - O Mês que Abalou o Brasil* is the first feature film produced by Folha de São Paulo, one of the biggest newsgroup in São Paulo and in Brazil, and it was shot by "TV Folha" crew, a web channel from the newsgroup, which was awarded as the best press coverage of 2013. Since the beginning, the director planned to create a feature documentary format. The film was created with images made by the crew of the film, with additional images archival material, such as government speeches and football matches. The first credit of the film indicates that was not made with public funds, but with the extension of the ending credits, with clearance, drivers, color grading crew, becomes evident the high production value. It was release in June 2014, one year after the June demonstrations. See <https://itunes.apple.com/us/movie/june-the-riots-in-brazil/id876348918>, <http://www.oesquema.com.br/trabalhosujo/tag/joao-wainer>, <http://www1.folha.uol.com.br/ilustrada/2014/10/1524866-filme-junho-e-exibido-gratuitamente-na-web.shtml>, last accessed on 10th November 2014.

⁴³ *20 Centavos* focus on images made in the streets, not in chronological order, with eventual discourse by demonstrators. It was created in six months, and its debut was in It's All True - Documentary Film Festival, the most notorious documentary film festival in Brazil. See <http://20centavosfilme.wordpress.com>, last accessed on 10th November 2014.

⁴⁴ See https://www.youtube.com/watch?v=6F_GgdaETEE, last accessed on 10th November 2014.

made of episodes directed by twelve directors from Rio de Janeiro's independent cinema scene⁴⁵.

While the Brazilian documentaries differ in production value and aesthetics, these examples are relevant because they are all an attempt to reflect and redirect the images from the demonstrations to something new, drawing a narrative or a new perspective out of them. This is accomplished through contextual information and interviews with scholars, philosophers, journalists and demonstrators. It is also as a way to allow the images to circulate elsewhere than the social network sphere. In the following section contextual information on the demonstrations in Brazil will be provided.

1.3. Demonstrations in Brazil in 2013 and 2014

The Brazilian population is made up of a confluence of people of several different origins, spread over multiple economic groups. In recent years, 36 million Brazilians' standard of living was raised above the poverty line⁴⁶, but the country still has severe social and infrastructural problems such as a low education rate, ineffective health services and insufficient welfare benefits. Dissatisfaction with the precarious public transport system was the catalyst for the demonstrations in Brazil in 2013 and 2014, which were multiple and complex in terms of participants and party affiliation and where new actors, issues and claims emerged throughout the months, repeating some of the aforementioned characteristics.

At first, small demonstrations against an increase in public transportation fares emerged with little national repercussion⁴⁷. On 2nd June 2013 the municipal government of São Paulo announced an increase of about €0.06 on bus fares⁴⁸. Four

⁴⁵ The episodes does not have identification of its authorship and differs radically from each other in aesthetic proposals – footage from demonstrations, interviews, humorous sketches, conversations and performative fiction. The movie is available for free online access in Vimeo. Directed by Daniel Caetano, Vinicius Reis, Clara Linhart, André Sampaio, Cavi Borges, Eduardo Souza Lima, Diego Felipe Souza, Luiz Claudio Lima, Ana Costa Ribeiro, Ricardo Rodrigues, Vítor Gracciano, Luiz Giban. See <http://vimeo.com/88130053>, last accessed on 10th November 2014.

⁴⁶ With welfare programs responsible for the decrease in inequality of income distribution, such as *Bolsa Família*, a welfare project implemented in 2003 that benefits families making under half the minimum wage per capita. See <http://www.sae.gov.br/site/?p=24899>, <http://www.theguardian.com/global-development/2013/dec/17/brazil-bolsa-familia-decade-anniversary-poverty-relief>, last accessed on 10th December 2014. The 2013 Brazilian population was estimated in 201,032,714 by the Brazilian Institute of Geography and Statistics – IBGE. See ftp://ftp.ibge.gov.br/Estimativas_de_Populacao/Estimativas_2013/populacoes_estimativas_BR_UF_TCU_31_10_2013.pdf, last accessed on 10th December 2014.

⁴⁷ In August 2012 in Natal, then in 2013, in March in Porto Alegre, in May in Goiânia.

⁴⁸ From R\$3.00 to R\$3.20, a raise of R\$0.20, that corresponds to about €0.06, in 9th November 2014 rate, where €1 equals R\$3.19. São Paulo is the largest city in Brazil with endemic congestion and problems of transport, with an outdated bus fleet. For comparison sake, the population of the metropolitan area of São Paulo is 20,284,891, that is higher than the population of The Netherlands in the whole, 16,912,640. See

days later, *MPL - Movimento Passe Livre*, Free Fare Movement in English, a grassroots association that advocates for free public transportation, organised demonstrations⁴⁹. MPL's sole grievance was the increased bus fare, and they promoted peaceful demonstrations. The first large protest was held on June 6 on São Paulo's main avenue⁵⁰. After this protest, editorial in the two main São Paulo newspapers condemned the demonstrations and demanded more repression from the police⁵¹. This was seen as a challenge, and the protestors once again took to the streets⁵². On June 13, in the fourth major act by MPL, the police used disproportionate force, beating and arresting demonstrators and journalists. The reaction of the press and the public opinion was to initially disapprove of the protests and then, after much violent repression, to support them, and eventually to become divided.

The police brutality boosted the popularity of demonstrations, calling participants with diffuse political agendas, overwhelming the original agenda of MPL, and also inciting small groups to use Black Block tactics. Black Block tactics were originally used as a mean of protection by demonstrators against police repression, and were characterised by anti-systemic and anarchist inspiration from the late 1990s demonstrations in the anti-globalisation movement⁵³.

On June 15 in Brasilia, prior to the opening ceremony of the 2013 Confederations Cup, around 500 people protested against improper expenditures on stadiums for the 2014 World Cup. This was the first of several protests during the Confederations Cup, and they served as a test for the upcoming 2014 World Cup, logistics-wise, but also for the development of special police tactics for big events. In the following days, protests spread to about 100 cities, with climaxing on June 20 when more than one million people protested all over the country⁵⁴. The demonstrations continued throughout 2013, as well as in 2014, mostly in Rio de Janeiro and some capital cities. In late July 2013, Rio de Janeiro's demonstrations would become national protagonists. At this point, the public transportation fare

http://en.wikipedia.org/wiki/S%C3%A3o_Paulo, and <http://en.wikipedia.org/wiki/Netherlands>, last accessed on 10th January 2015.

⁴⁹ MPL is an horizontal and non-partisanship movement for good public transport, founded during the Worldwide Social Forum in 2005, in Porto Alegre, and was created at the World Social Forum in 2005 in Porto Alegre. See <http://tarifazero.org>, last accessed on 20th December 2014.

⁵⁰ See <http://g1.globo.com/sao-paulo/noticia/2013/06/manifestantes-reocupam-avenida-paulista-apos-confronto-com-pm.html>, last accessed on 10th March 2014 (in Portuguese).

⁵¹ See <http://opinio.estado.com.br/noticias/geral,chevou-a-hora-do-basta-imp-,1041814>, and <http://www1.folha.uol.com.br/opinio/2013/06/1294185-editorial-retomar-a-paulista.shtml>, last accessed on 20th November 2014.

⁵² Journalist and media activist Bruno Torturra, in *June: The Riots in Brazil*, last accessed on 20th November 2014.

⁵³ About the Black Block's tactics see Dupuis-Déri, Francis. "The Black Blocs Ten Years after Seattle." *Journal for the Study of Radicalism*. 4.2 (2010): 45-82.

⁵⁴ See <http://www.reuters.com/article/2013/06/21/us-brazil-protests-idUSBRE95J15020130621> and <http://www.bbc.com/news/world-latin-america-22992410>, last accessed on 16th June 2014.

increase was revoked in several cities, and the agenda of the protesters embraced other issues such as a better health system, denouncement of government corruption, racial discrimination, the combined costs of the Confederations Cup and the World Cup, and, later, for a better education system. On some occasions the demonstrations would have a single cause, such as the teacher's demonstrations against changes in salaries, in August and September 2013 in Rio de Janeiro, and street-sweeper, for better work conditions and salaries. Also, social analysts identified a refusal of the classic forms of social and political representation, such as political parties and traditional media⁵⁵.

The majority of demonstrators were in their twenties and early thirties, students or with a degree⁵⁶, in their first major national demonstrations. A group would discourage the presence of demonstrators with historical engagement of public demonstrations affiliated to left political parties. This conflict signals both the aforementioned crisis in political representation, but mostly the presence of right-wing demonstrators that would beat those militants' affiliation with parties⁵⁷. In October 2014, after the re-election of Dilma Rousseff, demonstrators called for her impeachment, and far-right groups stood for the return of military dictatorship⁵⁸.

As in other countries, the wave of demonstrations was nicknamed after one of its icons, *V for Vinegar*, connecting the vinegar carried by demonstrators as it is believed to alleviate the teargas effect⁵⁹ with *V for Vendetta*, the dystopian graphic novel written by Alan Moore iconically characterised by the Guy Fawkes mask, later adopted by the Anonymous group⁶⁰ as their symbol. The Anonymous group was present in some demonstrations, but in the first wave, many others *not* connected with

⁵⁵ See <http://depoisdejunho.com/?portfolio=marcelo-freixo>, last accessed on 16th August 2014.

⁵⁶ Neri, Marcelo. Innovations for Poverty Alleviation and Social Mobility. Presented at CEDLA Jubilee Seminar: Brazil as Innovator on 28th November 2014. See http://www.compasso.com.br/docs/DIS_Neri_SAE_CEDLA_UvA_1PP.pdf, last accessed on 10th December 2014.

⁵⁷ Right-wing would also be depicted through the discontentment with recent economic and social changes and the uprising of a new middle class, that would oppose to *Bolsa Família* program, and against corruptions case in Worker's Party, in presidential power since 2003. The corruption cases were many, but at the same time the administration implemented Lei da Transparência, Transparent Law, in English, and make public though a web portal the expending and government salaries, even of the president, among others actions to tackle corruption. See <http://www.portaltransparencia.gov.br>, last accessed on 20th November 2014.

⁵⁸ See <http://www.cartacapital.com.br/blogs/parlatorio/500-pessoas-pedem-golpe-militar-ou-impeachment-em-sp-315.html>, last accessed on 20th November 2014.

⁵⁹ See <http://www.nytimes.com/2013/06/22/opinion/brazils-vinegar-uprising.html>, last accessed on 16th November 2014.

⁶⁰ "International network of activist and hacktivist entities. The group became known for a series of well-publicized publicity stunts and distributed denial-of-service (DDoS) attacks on government, religious, and corporate websites". See http://en.wikipedia.org/wiki/Anonymous_%28group%29, last accessed on 20th December 2014.

Anonymous also used the Fawkes' mask to cover their faces. The Brazilian wave of demonstrations was also called the *Brazilian Spring* and *June Journeys*⁶¹.

Mega sport events

The 2014 World Cup took place in twelve Brazilian capital cities throughout June and July. Despite great efforts by the police to block any rallies, many demonstrations occurred⁶². On those occasions demonstrations focused on claims of corruption and financial scandals, against misuse of public funds and over-budgeted stadiums, against forced evictions, lack of investments in social services, and the disproportionate World Cup investments when compared to local standard of living. In total, the World Cup cost the Brazilian public about 2,62 billion euros⁶³, many stadiums were delivered late, and many urban mobility projects were incomplete or abandoned. During the 2014 World Cup the state of exception was implemented⁶⁴, and the arbitrariness of FIFA regarding local policies⁶⁵ would also affect also police action⁶⁶, to a point where even journalists were beaten⁶⁷. Furthermore, the World Cup

⁶¹ The author do not consider any of those labels, since they are connected only with one segment of the movement – the vinegar was used mostly in the beginning, *June Journeys* locates the demonstrations only in its first month, while the demonstrations occurred throughout several months.

⁶² See <http://www.theguardian.com/football/2014/jun/12/anti-world-cup-protests-brazilian-cities-sao-paulo-rio-de-janeiro>, and <https://www.youtube.com/watch?v=fTW1ePYoV7Q>, last accessed on 16th June 2014.

⁶³ R\$8,44 billion, on 10th December 2014 rate, where €1 equals R\$3.22. See <http://br.reuters.com/article/sportsNews/idBRKCN0JI2AG20141204?pageNumber=2&virtualBrandChannel=0>, last accessed on 10th December 2014. In November 2007 when Brazil was announced as the country to host the 2014 World Cup, the president of Brazilian Football Confederation announced that Brazil government would not invest in the construction of the World Cup and the private companies would invest instead. See <http://veja.abril.com.br/141107/entrevista.shtml>, last accessed on 6th December 2014.

⁶⁴ After German philosopher Carl Schmitt's concept of *ausnahmestandard*. At first, differentiated rules for bid, and later the *Lei Geral da Copa*, or *World Cup General Law*, would allow tax exemption for FIFA and its service providers, as well as disregard consumers' code to protect FIFA's brand and restriction to social rights previously displayed in Brazilian Law. See <http://www.theguardian.com/commentisfree/2014/mar/27/brazil-world-cup-army-favellas>, last accessed on 20th November 2014.

⁶⁵ Andrew Jennings is the most notorious author that denounces FIFA's misfeasance through books and articles, such as *FOUL! The Secret World of FIFA: Bribes, Vote-Rigging and Ticket Scandals* (Harpersport, 2006), and *How FIFA Corruption Empowers Global Capital* (2010). The 2014 World Cup and FIFA was the topic of a HBO weekly talk show that became an YouTube phenomenon with more than 8 million views since its publication on 8th June: *Last Week Tonight with John Oliver: FIFA and the World Cup* (HBO), available at <https://www.youtube.com/watch?v=DIJEt2KU33I>, last accessed on 18th August 2014. Also, it was the theme of scholarly articles.

⁶⁶ Through a massive spending with equipment to contain masses, and even stronger force was used to contain demonstrators. See <http://www.dailymail.co.uk/news/article-2628665/Rio-bocop-armed-ready-World-Cup-Elite-troops-carrying-rifle-stun-grenades-combat-knife-tackle-fans-cause-trouble.html>, last accessed on 30th November 2014.

⁶⁷ See <http://www.theguardian.com/media/greenslade/2014/jul/15/brazil-journalist-safety>, <http://www.dailymail.co.uk/sport/worldcup2014/article-2656362/Brazil-World-Cup-opener-marred-chaos-protestors-clash-police-Sao-Paulo.html>, and <http://latino.foxnews.com/latino/politics/2014/07/14/brazil-cops-injure-15-reporters-in-last-world-cup-protest>, last accessed on 22nd July 2014.

protocol called for an entire city to be reserved for the attendees of this event, and the same is envisioned for the 2016 Olympics⁶⁸.

By the end of 2012, the International Olympic Committee promoted the workshop 'Building the Legacy of Knowledge of the Olympic and Paralympic Games Rio 2016' for members of federal, state and municipal institutions⁶⁹. The workshop proposed a mobilisation among those institutions to help construct the Olympic legacy at an urban level and at an intellectual one, gathering and imparting knowledge by and from academia and business, among others. A group work was created⁷⁰ to systematise the Olympic legacy, and to create the Museum of the Olympics. The creation of a narrative about the Olympics by public institutions according to a protocol dictated by an international committee and its Brazilian affiliated committee invites me to use the sovereignty identified by Foucault:

“Up to this point, history had never been anything more than the history of power as told by power itself, or the history of power that power had made people tell: it was the history of power, as recounted by power” (Foucault, 2003: 133).

Altogether, the effort expended by power stakeholders to build the official history of the Olympics is remarkable. Also, its protocol for legacy can be violent, disregarding local and national heritage not directly connected with those events, which becomes subjected to destruction or ostracism⁷¹. Since there is a widespread discontent with big events, amateur records from demonstrations engender an important counter-history aspect. The preservation of those records becomes an act of avoiding historical review that omits oppositional viewpoints.

The right to demonstrate and police practices

The right to publicly protest is guaranteed by the Brazilian Constitution⁷². Certain protests were punctuated with acts of vandalism, but they were mainly non-

⁶⁸ The tickets for these events are quite expensive and attendance for average or poor inhabitants is not affordable, consequently eclipsing once again a large part of the Brazilian population from an event of global importance in their own country.

⁶⁹ I took part of the workshop since at that time I was working in a municipal institution in Rio de Janeiro.

⁷⁰ The Brazilian Olympic Committee-COB, the National Archive, the Public State Archive from Rio de Janeiro, and the General Archive of the City of Rio de Janeiro comprise the group.

⁷¹ The most famous case is Aldeia Maracanã, a 1860s palace that once served as government office and as Indigenous Museum, and became neglected regarding government investments, and served as a home for indigenous people in Rio de Janeiro. Although the attempt of the violent forced eviction and demolition occurred before the World Cup, the urban changes for Maracanã area is part of the Olympics' urbanization plan. See <http://www.nytimes.com/2014/06/14/sports/soccer/in-shadow-of-brazil-world-cups-premier-stadium-a-hulking-ruin.html>, last accessed on 3th November 2014. The forced evictions due to World Cup's and Olympics' constructions were denounced by independent agencies and were streamed in news articles. See <http://www.amnesty.org/en/news/brazil-forced-evictions-must-not-mar-rio-olympics-2011-11-14>, and <http://www.theguardian.com/global-development/2013/jun/18/brazil-protests-peoples-cup-evictions>, last accessed on 5th December 2014.

⁷² Through a combination of three parts of the Article 5: IV - Freedom of Speech; XVI - Freedom of Reunion, and XVII - Freedom of Association. See http://www.artigo19.org/protestos/Protestos_no_Brasil_2013.pdf,

violent demonstrations. Notwithstanding, the counter reaction by official forces was brutal and became a crucial matter for the demonstrations' dynamics. In the only official pronouncement by the president about the demonstrations, it was stated the government stands for the right to demonstrate, condemned wreckage, but would not recriminate the police brutality⁷³.

The police used excessive force, with extensive use of tear gas, rubber bullets in a technically inappropriate use, pointing to the head⁷⁴ instead of legs (fig. 9), and even firearms. The police would stay in contentious positions and react to any perfervid acts of confrontation from demonstrators, but there are several accounts of undercover policemen among the protesters who would start fights to provoke police reaction⁷⁵. Police cracked down on peaceful demonstrations, in which demonstrators shouting and claiming “no violence” were beaten up⁷⁶. Eventually, tear gas was thrown into hospitals and restaurants, and forces would not allow the work of many advocacy groups⁷⁷ supporting demonstrators. There were also episodes of falsified evidence⁷⁸. Although the regulation of military police obliges the use of identification on the uniforms, police officers would routinely disregard this norm⁷⁹.



Fig. 9 - Police using rubber bullet guns inappropriately.

and http://www.planalto.gov.br/ccivil_03/constituicao/ConstituicaoCompilado.htm, last accessed on 10th December 2014.

⁷³ See <https://www.youtube.com/watch?v=ahEY59WxWRE>, last accessed on 10th December 2014.

⁷⁴ At least 40 protesters became blinded of one eye – which was not reported by international agencies, but that can be verified in Brazilian news and video. See <http://g1.globo.com/sao-paulo/noticia/2013/11/quero-meu-olho-diz-garota-que-acusa-pm-de-usar-bala-de-borracha.html>, <http://vimeo.com/76769715>, last accessed on 20th June 2014.

⁷⁵ Conjecture proposed by some news groups, I highlight two articles on The New York Times. See <http://thelede.blogs.nytimes.com/2013/07/24/video-of-clashes-in-brazil-appears-to-show-police-infiltrators-among-the-protesters>, and <http://thelede.blogs.nytimes.com/2013/07/29/protesters-in-rio-keep-asking-who-threw-the-molotov-and-where-is-amarildo>, last accessed on 2nd June 2014.

⁷⁶ See <https://itunes.apple.com/us/movie/june-the-riots-in-brazil/id876348918>, last accessed on 5th November 2014.

⁷⁷ Groups such as Advogados Ativistas (Lawyers Activists), Associação Brasileira dos Advogados do Povo (Brazilian Association of People's Lawyers), Justiça Global (Global Justice), and Rede de Comunidades e Movimentos contra a Violência (Communities and Movements against Violence Network).

⁷⁸ Forged evictions incidents were not reported by international agencies, but that can be verified in Brazilian news and video. See <http://oglobo.globo.com/rio/video-jovem-detido-apos-policial-forjar-posse-de-morteiro-em-protesto-no-centro-10232090>, and <https://www.youtube.com/watch?v=WKUUm2yrzo8E>, last accessed on 6th June 2014.

⁷⁹ See http://www.artigo19.org/protostos/Protostos_no_Brasil_2013, last accessed on 15th November 2014.



Fig. 10 - Banner “-bombas +diálogo” (less bombs, more dialogue, in English).

Escalation of police violence can often be regarded as a direct consequence of inefficiency, which, obviously, is a symptom of a lack of public service quality in general. The simple containment of demonstrations proved too difficult a task and showed how unprepared the police were⁸⁰. The draconian methods and measures of the police force are also to be considered an inheritance of the military dictatorship, as stated by Maria do Rosário, Brazilian Secretary for Human Rights until April 2014: “we continue with a model of policing that we inherited from the dictatorship – and manuals with which police officers are trained, as well as the practical approach of the people in the demonstrations and streets are remnants of that regime”⁸¹. As a result of these practices and many others episodes, the police force has been accused of human rights violations by independent agencies⁸², and police brutality became then a major target for the protesters⁸³.

The purpose and type of records made by the protesters changed over time. At first, they testimonial records of the unexpected extent of the protests at that time. Later, with mainstream media de-legitimising the demonstrations, individuals would gather in media collectives. And after the spike in number of cases of psychological and physical harassment by police, demonstrators would record the protests to gather evidence police brutality and to protect themselves from false accusations. At one point journalists, media activists or anyone with a camera would become a target for police during demonstrations⁸⁴. In other, contrasting, instances the presence of a

⁸⁰ The salary of an individual police agent is relatively low and work conditions are hard and dangerous, which adds to the frustration of the police force and hence facilitates escalation.

⁸¹ See <http://noticias.uol.com.br/politica/ultimas-noticias/2013/10/15/violencia-da-pm-em-protostos-e-resquicio-da-ditadura-diz-ministra-de-dilma.htm>, last accessed on 20th December 2014.

⁸² 2013 report of Brazil by Human Rights Watch: <http://www.hrw.org/world-report/2013/country-chapters/brazil>, last accessed on 3rd June 2014, press release of Amnesty International on 11th April 2014: <http://www.amnesty.org/en/for-media/press-releases/brazil-human-rights-under-threat-ahead-world-cup-2014-04-11>, last accessed on 3rd June 2014, and UNPAN’s - United Nations Public Administration Network’s Blog post on <http://unpan3.un.org/paconnect/Blogs/ID/9/Brazilian-public-manifestations-under-political-persecution-and-police-repression-threatens-the-Democratic-State-of-Law>, last accessed on 23rd June 2014.

⁸³ Police abuses were also target for laughingstock memes: after the US Pepper Spray Cop <<http://peppersprayingcop.tumblr.com>>, the Brazilian versions were Polissa <<http://polissa.tumblr.com>> and Polícia Pacífica <<http://policiapacifica.tumblr.com>>, last accessed on 5th December 2014.

⁸⁴ As United Nations Public Administration Network - UNPAN reported: “Journalists covering manifestations are generally assaulted with rubber bullets in the head and any other part of the body, are arrested with weapons pointed at them and menaced with use of force to delete files in their cameras containing images

camera would deter violence by police forces. Most of the times when someone was arrested, that person is alone, with no camera nearby⁸⁵, and eventually media activists would pretend they were livestreaming or recording to shield themselves from the police⁸⁶. In either scenario, the act of recording changed the protests' dynamic and as a result there was an increase in the number of persons recording, leading to an upsurge in the volume of recorded materials.

Rio de Janeiro

Brazil is a continental country, the fifth largest in the world, with twenty-six federal states, all of which differ significantly from each other in historical, social, cultural and political terms. To make this investigation feasible, it will focus on the case of the city of Rio de Janeiro. Although the demonstrations occurred on a national scale, and besides my personal motivation in this choice⁸⁷, Rio de Janeiro is among the cities where protests lasted for the longest periods of time. It is where the audiovisual production was quite intense, with a marked upswing in the number of media collectives.

Rio de Janeiro is what can be called a "broken city"⁸⁸ as approximately one third of the total population permanently dwells in favelas⁸⁹. The population of the favelas is out of reach of welfare programs, and news about it finds its way into the mainstream media, and hence into public awareness, only when bullets, or any other kind of violence, reaches and affects the upper classes⁹⁰. Although cases of power

showing police abuse". See <http://unpan3.un.org/paconnect/Blogs/ID/9/Brazilian-public-manifestations-under-political-persecution-and-police-repression-threatens-the-Democratic-State-of-Law>, last accessed on 8th June 2014.

⁸⁵ Interview with a member of CMI-Rio, on 10th June 2014, by Skype (with interviewer's permission).

⁸⁶ Interview with members of NINJA, on 20th August 2014, by Skype (with interviewers' permission).

⁸⁷ Rio de Janeiro is the city in which I was born and lived for 30 years of my life.

⁸⁸ After journalist Zuenir Ventura's book *Cidade Partida* (Companhia das Letras, 1994).

⁸⁹ The favelas emerged in end of 19th century, and developed thought the years. After slavery was officially ended in 1888, economic integration of the black community was entirely neglected and a huge social gap is the outcome, lasting up to today. According to *Jovem Negro Vivo* campaign, that can be translated as *Live Black Youth* from Amnesty International, "in 2012, 56,000 people were murdered in Brazil. Of these, 30,000 are young people between 15-29 years and of those, 77% are black. Less than 8% of cases are being tried". See <https://anistia.org.br/campanhas/jovemnegrovivo>, last accessed on 5th December 2014.

⁹⁰ For decades until recently there was a complete absence of government, which results in "self-regulation". Because of that, drug dealers occupied many favelas in the city of Rio de Janeiro, and warfare became constant. In 2008 was employed the Unidade de Polícia Pacificadora, in English Pacifying Police Unit, or just UPP, with the express goal to reclaim the favelas back from drug dealers, after they were completely left to their own for decades. The program was implemented in some low-income communities, generating the migration of drug dealers to small communities without drug trade. The local population in pacified communities could benefit from welfare programs implemented after the UPP. But the UPP turned to be highly problematic, as the units are replete with corruption. Extortion, theft and even killings carried out by these units are commonplace, which only results in a moving around of the problems but not in their elimination. See *Crime, House Prices, and Inequality: The Effect of UPPs in Rio*, http://www.newyorkfed.org/research/staff_reports/sr542.pdf, last accessed on 10th December 2014.

abuse and arbitrariness by the police resulting in the death of citizens are outrageously common in the everyday life in favelas, two episodes were embraced in demonstrations held locally or in the centre of the city, becoming a symbol of the social gap and the impunity for crimes committed by the police, with the slogan “the police that represses in the streets is the same that kills in the favela”⁹¹.

1.4. Background on Rio de Janeiro mass media context

In order to understand the role of the images created by media activists, it is crucial to understand the mainstream media context. The company *Globo Comunicação e Participações S.A.* is the biggest conglomerate of media companies in Latin America, and is based in Rio de Janeiro. Globo runs *Jornal O Globo*, the major printed newspaper in Rio de Janeiro, and *Rede Globo*, the biggest television network in operation in Brazil. They own so many media outlets in fact that “speaking of television in Brazil necessarily means we are speaking of Globo” (Lima, 1990: 35, referred by Sousa, Helena, 1998: 1)⁹². Both *Jornal O Globo* and *Rede Globo* are notoriously biased media channels, committed to their own policies and economic interests. Globo supported the military coup d’état in 1964 and the Brazilian military government until 1985 (Haubrich, 2011), where “the number of deaths probably measures in the hundreds [about 400 people]⁹³, but more than 50,000 people were detained [and tortured] and 10,000 forced to go into exile” (Coelho Filho, 2012). Moreover, in one of the key examples of the use of media according to its own interest, Globo avoided broadcasting the 1984 demonstrations calling for direct presidential elections and the democratisation movement. In a 2013 editorial⁹⁴, the *Jornal O Globo* apologised for supporting military forces. Despite this surprising turnaround by Globo, 50 years after taking its anti-democratic position in the military coup d’état, since June 2013 both the newspaper and the television network once again openly positioned themselves in an anti-democratic stance, condemning and

⁹¹ In June 2013, the police killed nine people after a local protest in the Complexo da Maré. In October 2013 in Rocinha, the largest favela in Rio de Janeiro, Amarildo de Souza, a worker was tortured and killed by agents of UPP. His death became a symbol of police brutality and impunity. See <http://www.theguardian.com/world/2013/jun/25/shoot-out-rio-favela-protest>, <http://www.theguardian.com/world/2013/oct/03/brazil-rio-police-charged-death-missing-man>, and <http://www.bbc.com/news/world-latin-america-24362311>, last accessed on 9th June 2014.

⁹² Although is a statement from 1990 and new broadcast networks gained ground, this still can be applied today.

⁹³ The Brazilian Truth Commission released in December 2014 an investigation into murder, torture and other human rights violations carried by military dictatorship: 191 people were killed and 243 “disappeared”, of which more than 200 have never been found. See http://www.theguardian.com/world/2014/dec/10/brazil-president-weeps-report-military-dictatorship-abuses?CMP=edit_2221, last accessed on 14th December 2014.

⁹⁴ See <http://oglobo.globo.com/brasil/apoio-editorial-ao-golpe-de-64-foi-um-erro-9771604>, last accessed on 25th June 2014 (in Portuguese). The episode was commented on UK and US newspapers. See <http://www.independent.co.uk/news/world/americas/globo-media-organisation-apologises-for-supporting-brazils-dictatorship-8795277.html>, and <http://articles.latimes.com/2013/sep/04/world/la-fg-wn-brazil-globo-network-military-20130904>, last accessed on 25th June 2014.

downplaying the purpose of the demonstrations. The coverage throughout the months mainly focused on vandalism, incriminating demonstrators and defaming politicians that stood for the rights to demonstrate⁹⁵, with some problematical episodes, as follows:

The day following one of the largest demonstrations in Brazil in June 2013, Globo News broadcast live the press conference of the governor of Rio de Janeiro. It was estimated about 300,000 people had demonstrated in Rio de Janeiro for about five hours, with problematic behaviour coming from less than one hundred people and occurring only during the last hour. During the governor's speech, the screen was divided into two (fig. 11): on one side the image of the governor, on the other images of the protest, of which 87% were images of violence by demonstrators, and 13% were peaceful images⁹⁶, creating an uneven portrait of the demonstration, its participants and duration, suggesting to the spectator that violence was central in the demonstration, even though the protest was actually predominantly peaceful (Durão, 2013).



Fig. 11 - Live broadcast of governor's speech and images from protest by Globo News, 2013.

In the newspaper, Globo repeatedly refer to demonstrators as 'vandals', as referred by the case study *Protesters or Vandals? How the traditional media approached Brazilian protests in June 2013*⁹⁷. This skewed position would culminate in Globo's front page from October 17, 2013 titled 'Hardest Law takes 70 vandals to prison' in a massive heading. On the following day, all except one of the detained protesters were released at the request of public prosecutors for lack of evidence. Brazilian journalists condemned Globo's coverage due to its direct unsubstantiated accusations and pre-judgement of people that were arrested in what was seen later as

⁹⁵ See <http://www.cartacapital.com.br/politica/o-papel-higienico-do-jornal-7210.html>, last accessed on 28th July 2014.

⁹⁶ My counting. See <http://g1.globo.com/rio-de-janeiro/noticia/2013/06/nao-vamos-protoger-policia-nem-vamos-protoger-vandalos-diz-cabral.html>, last accessed on 12th June 2014

⁹⁷ See <http://blog.pageonex.com/2013/08/21/protesters-or-vandals-how-the-traditional-media-approached-brazilian-protests-in-june-2013>, last accessed on 25th June 2014.

an illegal police operation. Moreover, Globo's reporting would influence the course of a criminal investigation against demonstrators, like the *Firewall 2* operation that incriminated 28 activists the day before the World Cup's final match, many of them members of media activism groups⁹⁸.

After several similar cases of inaccurate and tendentious news coverage, delegitimising demonstrations and frequently picturing all demonstrators as violent, Globo became a target in the subsequent protests⁹⁹. Although these brief analyses focused on Globo only due to the fact that it is Rio de Janeiro's main media company, mistrust of the mainstream media became a general feeling after several anti-democratic coverages. In conclusion, the 2013 and 2014 demonstrations in Brazil exposed a polarisation in the media, placing the mainstream media and media activists at opposing angles. Media activists then had the urge to create their own version of the story. This eventually enhanced the work of media activists, affecting the dynamics of the demonstrations themselves, and this will be investigated in the next section.

1.5. Media activism in demonstrations in Rio de Janeiro

“[Today] you do not trust the media in general, you rely on organized people or institutions. Autonomous communication means that I get to decide who to trust, and no one else. I can distinguish the honesty from manipulation, the opacity from transparency. That is the point of the new social media communication.” (Levy, 2013)¹⁰⁰

At first, independent individuals would record the demonstrations as a cultural and social act, as a “networking locality” (Gordon and Silva, 2011), but soon after the images started to play a more significant role: a self-legitimation by demonstrators and as extensive network mobilisation tools. The iconic Indymedia slogan “don't hate the media, be the media” became an underground driving force, and soon after the recording of protests began to be a major part of the demonstrations' dynamic in Rio de Janeiro. Non-professional individuals joined, created or strengthened already-formed media groups. In other words, they became articulated ‘prosumers’, and

⁹⁸ See <http://www1.folha.uol.com.br/internacional/en/brazil/2014/07/1489436-human-rights-lawyer-flees-after-uruguay-refuses-asylum-request.shtml>, last accessed on 26th July 2014.

⁹⁹ And would create a mass cancellation of the newspaper subscription. See <http://jornalggn.com.br/blog/implacavel/mal-estar-no-globo-manifestacoes-chegam-a-redacao>, <http://www.cartacapital.com.br/politica/o-papel-higienico-do-jornal-7210.html>, last accessed on 25th June 2014 (in Portuguese). The only international news coverage found about the demonstrators attacking Globo, criticizes the demonstrators. See <http://www.forbes.com/sites/andersonantunes/2013/08/01/why-brazilians-oddly-blame-the-globo-media-empire-for-the-countrys-misfortunes>, last accessed on 25th June 2014.

¹⁰⁰ The declaration was addressed in a twitter interview to Globo. See <http://oglobo.globo.com/cultura/pierre-levy-comenta-os-protestos-no-brasil-uma-consciencia-surgiu-seus- frutos-virao-longo-prazo-8809714>, last accessed on 16th June 2014 (in Portuguese). Notably the original tweets are no longer available in Pierre Lévy's account, see <http://twitter.com/plevy>, last accessed on 16th June 2014.

became a reference in content production and reflection on protests¹⁰¹. That is the context described by the French culture and media scholar Pierre Lévy in an interview about the demonstrations in Brazil, where the bias of mainstream media becomes clear in contrast with other narratives that were formed during the time.

In Rio de Janeiro, media activists groups displayed as much plurality and complexity as the demonstrations itself. Some of the groups embraced humour as a feature of their activism, noticeably Rafucko, a journalist and one-man show who creates web videos parodies and hosts a humorous talk show. Also, *Coletivo Vinhetando*, which streamed the demonstrations live, and created articles and webvideos with political content¹⁰². Some groups would create artistic intervention, in particular *Coletivo Projetação*¹⁰³, and *Los Vânda*, a music group¹⁰⁴.

The work and opinions of the media activism groups were (and are) occasionally dissonant; nevertheless they support and share each other's works. In June 2014 a network of media activist groups was created, *Agrega.la*, "a tool for gathering content from independent media, an interface that displays the output of various groups and collectives on one platform. The platform was initiated by groups and individuals acting in the streets of Rio"¹⁰⁵. The website works as a feed of other collectives' data, and promoted weekly meetings between the groups. NINJA and CMI-Rio, both case studies of this research, are part of *Agrega.la*. Even when the demonstrations ceased to happen, many of the above-mentioned groups continued their activities.

The records from the demonstrations were taken by amateur photographic and video cameras, professional photographic and video cameras, smartphones, smartphones for live streaming, and GoPro cameras¹⁰⁶. The images were shot from the street, contrasting with the aerial images created by mainstream media and government security camera images. The eventual clash with police would not entirely cause the cameras to be put away, and the recording and transmission would

¹⁰¹ See <http://www.theguardian.com/world/2014/apr/27/social-media-gives-new-voice-to-brazil-protests>, last accessed on 19th June 2014.

¹⁰² Horizontal group open to external contributions, with about nine activists, some of which are scholars. Because of the large number of participants with different backgrounds, Vinhetando managed to create a massive amount of articles, analyses and news connected with the protest.

¹⁰³ 'Projetação' is a combination of the words 'projetação' (projection) and 'ação' (action) that would project slogans like 'less bombs, more dialog', 'demonstration is not a crime' and 'where is Amarildo?' onto buildings during demonstrations with small beamers.

¹⁰⁴ Los Vânda defines themselves as 'vandalismo', a combination of 'vandalismo' (vandalism) and 'lirismo' (lyricism), a group of five masked musicians, creating parody versions of famous Brazilian songs, mocking politicians and police abuse in demonstrations.

¹⁰⁵ See <http://www.agrega.la/us-2>, last accessed on 19th July 2014.

¹⁰⁶ GoPro is a camera brand, firstly largely used in extreme sports such as ski and surf, due to its high-definition image, small size, lightweight and because is attachable in different surfaces. Lately, it has been used to record conflicts and demonstrations due to technical performance and portability, eventually attached to helmets, item that became common in Brazilian demonstrations.

keep going from the midst of the conflict (fig. 12). While many uprisings globally have had social networking as a defining element of their movements, one of the strongest characteristics of the Brazilian demonstrations was the live streaming, a feature that was possible due to mobile connection and highly functional live streaming platforms, as well as the viral nature of the images in social networks. The working system of two case studies will be described as follows.



Fig. 12 - Media activist from Coletivo Mariachi being pepper-sprayed in the face, 2013.

MÍDIA NINJA

“As amateur content creators, the NINJAs are leaving the mainstream in their wake, fearless in the face of being teargassed, beaten, and shot. This, together with their staunch commitment to neither cutting nor censoring their footage, has promoted deep respect for the group and gained them a devout following.” (Vv.Aa., 2014: 45)

Mídia NINJA has its origins in an alternative broadcast channel *Pós TV*¹⁰⁷, noted for its cultural programs and news coverage, including events in the favelas and small protests without media attention, such as São Paulo’s Critical Mass. The peak of *Pós TV*’s live transmission activity was its coverage of the freedom march on May 28, 2011 in São Paulo¹⁰⁸. In March 2013, after new members joined *Fora do Eixo/Pós TV*, *Mídia NINJA* was created. The name is an acronym for *Narrativas Independentes, Jornalismo e Ação*, or Independent Narratives, Journalism and Action but is also a deliberate use of ‘ninja’, a word so widely used in pop culture that it is almost

¹⁰⁷ Pós TV was created by Fora do Eixo participants, that is a group of collectives that organizes cultural events since 2001 in Cuiabá, which later spread to more than 200 cities, and has grown to comprehend a network of artists, a university, and a political party, with its own financial system. See <https://ninja.oximity.com/partner/ninja/history>, and <http://revistatrip.uol.com.br/revista/199/reportagens/ministerio-da-cultura.html>, last accessed on 16th November July 2014.

¹⁰⁸ The freedom march was organized as a response to a police crackdown, which had occurred in the marijuana march a week before. The live transmission was held before the widely available access to speed mobile connection, through video cameras and Internet connection cables. During the five hours of transmission, it had about 90,000 viewers, a positive number that encouraged its organizers for more live coverage. Interview with members of NINJA, on 20th August 2014, by Skype (with interviewers’ permission).

international slang for ‘skillful’¹⁰⁹. The first news coverage is the World Social Forum in Tunisia. In June 2013, Bruno Torturra, one of its founders, publicised an article about mass layoffs on media groups and the upsurge of NINJA¹¹⁰. Soon after, when the demonstrations in São Paulo took shape, NINJA pointed their cameras at the streets. Today *Pós TV* is an active cultural channel, independent from NINJA and vice versa, and NINJA now has its official website, paying special attention to photographic news coverage and articles also in English and Spanish.

Although NINJA was not the first alternative media group to cover the demonstrations, it became the most notorious one, and would also act as a mainspring in the creation of other media activism groups. NINJA “ended up being the protagonist of a necessary media breakdown”¹¹¹. The group has regional coordination in a diagonal hierarchy aspiring to horizontal structuring and is an open group that, during the months of the demonstrations, had 2,000 collaborators in 100 cities. The core regional groups had no control over the contributions nationwide. At this point, numerous people with no connection to professional media practices or journalism¹¹² would start to broadcast live under a variation of the NINJA name, such as ‘Mídia Ninja 3 RJ’, ‘Rapadura Ninja’, and ‘NINJA CE’, turning the ‘mass media into media from the mass’. Those individuals or groups have no connection with the core group of NINJA, turning the group into a collection of multifaceted narratives. Participants in the core group kept a close eye on NINJA’s channels and would ask all spinoff participants to avoid copyright infringement or hate speech. In short, the operating mode of NINJA lead to open questions about the scope of its production, being related to the Participatory Culture concept. The multiplicity, oscillation and eventual the anonymity of NINJA’s participants suggests a difficulty in establishing provenance and authorship of the images. The lack of authorship makes problematic or even nullifies traditional cataloguing models.

Much of the reportage was broadcast live from mobile phones. Other material was gathered from images posted online or sent to the group. Some of NINJA’s participants had formal and informal audiovisual preparation, among both its core group and its collaborators. Therefore NINJA production is an assortment of amateur and semi-professional production. NINJA footage was eventually used for aiding arrested demonstrators, providing material to be used by lawyers and in ad-hoc defense at the moment of arrest. On the other hand, NINJA reported undergoing

¹⁰⁹ The best the best indicator of ninja term force in popular culture is the Wiki page of “Ninja in popular culture”. See http://en.wikipedia.org/wiki/Ninja_in_popular_culture, last accessed on 20th November 2014.

¹¹⁰ See <http://cascadebesouro.com/2013/06/05/o-ficaralho>, last accessed on 20th May 2014 (in Portuguese).

¹¹¹ Interview with members of NINJA, on 20th August 2014, by Skype (with interviewers’ permission).

¹¹² Like an owner of a bicycle shop, a nurse or a businessman. Interview with members of NINJA, on 20th August 2014, by Skype (with interviewers’ permission).

several forms of censorship and seizure, such as prohibition of filming during demonstrations, video camera seizure during protest, seizure of equipment at homes – with and without legal search warrants – arrest of NINJA members, and removal of posts on Facebook and YouTube.

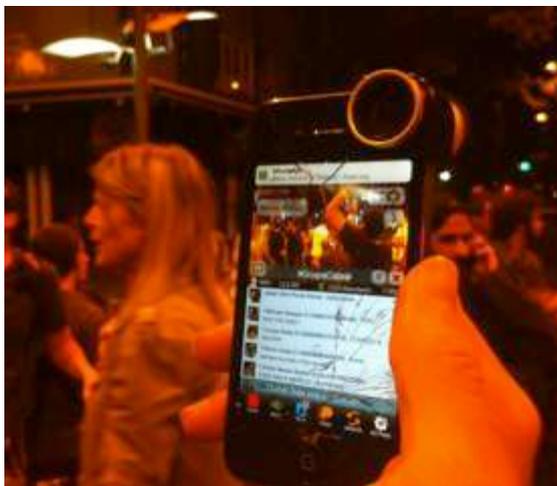


Fig. 13 - Live transmission by NINJA in Rio de Janeiro, 2013.

One episode that conferred upon NINJA a greater reputation is that of a plain-clothes police infiltrator who threw a homemade firebomb into a police squad, allowing them to set off a violent counter-reaction. The police denied the claim of an infiltrator starting the attack, but NINJA's images were self-evident¹¹³. The video spread out through social networks, and eventually the traditional media broadcast it. The images were fundamental for the defense of a demonstrator accused of having thrown the bomb, and to show that mainstream media often over-rely on police briefings for their news. This episode made the traditional media reaches out to media activists. After this episode, the images from media activists would be eventually incorporated into the mainstream media agenda.

Although media activists have aptly presented their own versions of protests opposed to the mainstream media's bad delivery, eventually they too were partial. The criticised incitement of violence by mainstream media would be occasionally reproduced in some of NINJA's discourses, reproducing Poell and Borra's analyses where the versions "were dominated by the violence that accompanied the protests", where "the attention is drawn away from the original issues at stake in the protests" (Poell and Borra, 2012: 709). NINJA's discourse praises non-commercial values, and decries journalism as a profession, dismissing it as purely a function of an academic diploma, detonating the counter-history as an essential feature. 'Journalism' is a word used in the NINJA acronym, and eventually some professional journalist clashed with

¹¹³ Where the crowd would be protesting without attacking the police, and one man threw the bomb and in a while joined the police troop. See <http://thelede.blogs.nytimes.com/2013/07/29/protesters-in-rio-keep-asking-who-threw-the-molotov-and-where-is-amarildo>, last accessed on 18th June 2014.

NINJA's perspective¹¹⁴. Some journalists heavily criticised NINJA¹¹⁵ because it would claim multiple biases instead of defending one viewpoint. Eventually, the lack of objectivity by mainstream media would be reproduced in some of NINJA's coverage.

CMI-Rio

CMI-Rio is a horizontal organisation, open to external contributions, supported by volunteers that “seek to contribute to the end of all forms of oppression through the dissemination and decentralization of information”¹¹⁶. It is the local independent media center in Rio de Janeiro, linked to the networks CMI-Brasil and the global IMC. CMI-Rio was created in 2001, and historically had an important role as a local hub for media activists. Around 2009, CMI-Rio was intensively active in the media activism sphere, especially regarding security of communication and how to fight online surveillance.

Since 2010, CMI-Rio was not very operational, with very few active participants. During the first demonstrations in 2013, some of its participants recorded and streamed the demonstrations, although merely as demonstrators with amateur equipment rather than CMI-Rio representatives. Around January 2014 CMI-Rio became active again, and created its Facebook page in the following month. In August 2014 CMI-Rio had six steady members, four of whom streamed live using smartphones like iPhone and Samsung Galaxy¹¹⁷, and with professional cameras such as 5D cameras, Canon T4i Rebel, and GoPro in helmets. The images were streamed live from the demonstrations through Twitcasting, and later the CMI-Rio members uploaded and photos and videos to YouTube and Facebook¹¹⁸. Usually one CMI-Rio member would take pictures, another would do the live streaming and a third would record with GoPro, but eventually the same person could do all three things alone. The photos created by CMI-Rio members would be evaluated, improved and uploaded, and videos with a summary of the demonstration would be uploaded to YouTube in the same day.

¹¹⁴ See <http://tvcultura.cmais.com.br/rodaviva/roda-viva-recebe-idealizadores-do-grupo-midia-ninja>, last accessed on 20th November 2014 (in Portuguese).

¹¹⁵ See <http://opinio.estado.com.br/noticias/geral,media-ninja-e-o-futuro-desfocado-imp-,1064592>, last accessed on 12th November 2014 (in Portuguese). Also, Fora do Eixo has a strong persona, that eventually would clash with other social movements. Later, NINJA was also criticised by other media collectives for the link to PT - Partido dos Trabalhadores, the political party of the current administration.

¹¹⁶ See <http://cmirio.tk/sobre-o-cmi>, last accessed on 15th November 2014.

¹¹⁷ Information obtained through the questionnaire “Operation of media activists in Brazil” (Appendices 5), on 20th August 2014.

¹¹⁸ Links available in Appendix 3.



Fig. 14 - Live transmission by a CMI member via smart phone; image made by a GoPro camera attached to a helmet.

Besides activities directly connected with recording the demonstrations, CMI-Rio also created parallel projects, notably the *Mortos e Feridos nos Protestos* (fig. 15), a collaborative website that quantify cases of dead and injured in protests in demonstrations since June 2013, and *Tem Boi na Linha?*¹¹⁹, a guide to combatting surveillance on the Internet from private institutions and the state. During the months with demonstrations, Internet became heavily monitored by police, military forces, and the Brazilian Intelligence Agency - ABIN, the civilian intelligence service in Brazil¹²⁰. The control was considered a threat to personal privacy, a fundamental right that complements the right to freedom of speech. As CMI-Rio advocates for freedom of speech and for the right to demonstrate, they secure platforms in their activities such as Tor Browser, Telegram for mobile communication and Riseup.net for email communication.

¹¹⁹ Its name refers to an untranslatable popular phrase that denotates a third part or spy in a telephone conversation. See <https://temboinalinha.org>, last accessed on 15th November 2014.

¹²⁰ Established in 1999, the agency investigates potential threats, defends the democratic state and national sovereignty, and part of the staff is formed by preceded intelligence agencies especially SNI, created during the military dictatorship. See <http://www.estadao.com.br/noticias/cidades,abin-monta-rede-para-monitorarinternet,1044500,0.htm>, last accessed on 15th November 2014.



Fig. 15 - Mortos e Feridos nos Protestos (Dead and Injured in Protests, in English) collaborative website.

In the past, CMI-Rio members created *A20 - Não Começou em Seattle, Não Vai Terminar em Quebec* (*A20 - It didn't start in Seattle, it won't end in Québec*, CMI, 2001, 22 min.)¹²¹, a pioneer short film with images from a demonstration that had occurred during the Free Trade Association of the Americas first summit in April 2001 in Québec City and São Paulo. The film was shown at film festivals and it can be seen as a Brazilian pioneer among films made from images of demonstrations.

1.6. Conclusion

The digital medium is a constant element in demonstrations globally in different forms, mostly in the means of its recording and distribution. Regarding the distribution, different social media platforms perform different roles in every country, also according to local and political restrictions. In the Brazilian case, cameras were ever-present in every demonstration, and social networks were flooded by images of demonstrations in the same day. Among one of the strong elements from Brazilian demonstrations was the live streaming.

¹²¹ Video available in four parts in <https://www.youtube.com/watch?v=9c6ZwAD8naA>, last accessed on 15th November 2014.

NINJA and CMI-Rio were presented as case studies relevant to this investigation due to their constant presence in demonstrations and the active role in recording and sharing. At the same time, they engender different issues, mostly regarding their methodology and consequently the scope of their production. On the whole, NINJA comprises regional core groups with autonomous followers and collaborators. Therefore, NINJA's audiovisual production must be understood in the same way. Although the Brazilian demonstrations had no leaders or spokesperson, due to the massive attention of NINJA's coverage and the clash with mainstream media, NINJA was positioned in the front line and became an icon of the demonstrations. On the other hand, CMI-Rio has a solid role in the creation of images of the demonstrations in Rio de Janeiro in 2013 and 2014, and can in some ways be seen as an opposite to NINJA. While NINJA started to stream from the beginning of the demonstrations and have blurred authorship issues, CMI-Rio would only present material in the beginning of 2014 and therefore with a smaller reach¹²², but in a concise way.

Each of the working procedures of these media collectives engenders different preservation problems, such as the definition of the scope of materials to be preserved, and its authorship, among others. These will be investigated in the following chapter. Also to be examined are digital preservation practices today, with particular regards to the archival institutions of Brazil.

¹²² As indicated by the few numbers of likes in CMI-Rio Facebook page: 1,603. See <https://www.facebook.com/indymediario>, last accessed on 10th December 2014.

Chapter 2. Preservation practices and collective records

2.0. Introduction, or “New media always becomes old”¹²³

The iconic images from the twentieth century presented in the previous chapter were created in the film medium – most frequently 8mm and 16mm, while after the advent of videotape the iconic image of the Unknown Protester in front of military tanks in 1989 in China was created in video. Footage from demonstrations are available on YouTube in a range of image quality, whereas materials in high-resolution, i.e. from 720p, are mostly digitised version made accessible by stock footage libraries, or large-size audiovisual institutions, including newsreel footage. Amateur records from those demonstrations are few in number, since the digitisation of the content is an impediment, as demonstrated by the amateur video “Vietnam War Protest - Nov. 15, 1969 - Washington, DC” (fig. 16), where the images reached YouTube through a “home-grown conversion of an original 8mm home movie”¹²⁴, resulting in a blurred dark low-quality image. On the other hand, switching to home-movie organisations, few records of demonstrations are available with a proper digital conversion in the online archives of three institutions that collects amateur footage in the US¹²⁵. As seen earlier, the work of the home-movie community propelled amateur footage to the status of an archival object with historical relevance.

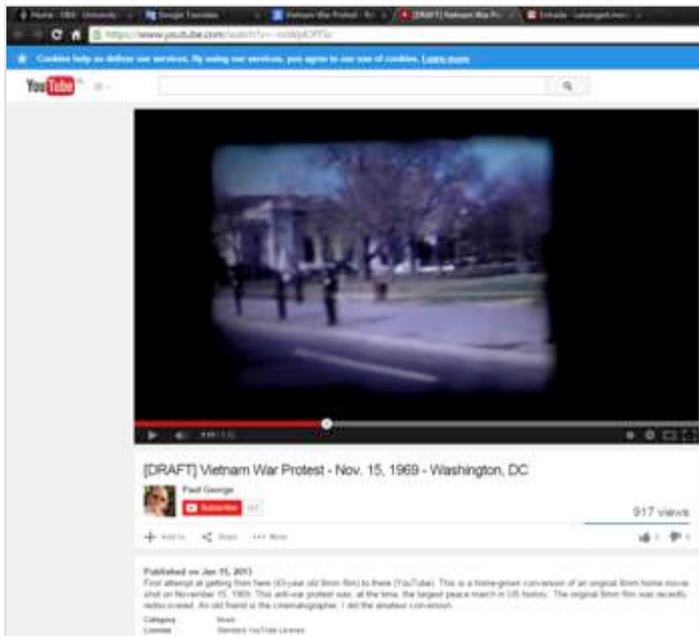


Fig. 16 - YouTube page of a homemade telecine.

¹²³ Hertz, Garnet and Jussi Parikka. “Zombie Media: Circuit Bending Media Archaeology into an Art Method.” *Leonardo*. Vol. 45. Number. 5 (October 2012): 425.

¹²⁴ See <https://www.youtube.com/watch?v=-nsWplOfTSc>, last accessed on 20th December 2014.

¹²⁵ Namely Northeast Historic Film, Chicago Film Archives, and Texas Archive of the Moving Image. See <http://www.centerforhomemovies.org/archives>, last accessed on 20th December 2014.

The difference of the formats demonstrates a crucial difference between the analogue registrations, film and video, and digital media regarding its registration, preservation, organisational models, and access routes. The imagery of the twentieth century is comprised of films and video media, and can be accessed today through *digitisation* and access strategies. Digital archives can be comprised of *digitised* materials, as just described, and/or *digital born* materials, which will be detailed in the following section, since amateur digital records of public demonstrations in 2013 and 2014 in Rio de Janeiro consist of *digital born* materials.

As shown earlier, the act of recording demonstrations became part of the demonstrations' dynamics and as result also became a vast and multiform production that ought to be preserved. The current chapter will investigate: the digital preservation field today, especially in Brazil; how other countries are dealing with the production about their uprisings and demonstrations; and finally, a background section where I identify the particularities of collective records from demonstrations in Rio de Janeiro in 2013 and 2014 from a preservation viewpoint.

2.1. Digital preservation field and practices

Digital preservation studies emerged along with the first data archives, back in the 1960s. Two decades later, personal computers and the Internet exponentially increased the use of digital information, particularly with the introduction of Web 2.0 in the beginning of this century. The boom of digital information was matched by the awareness of a need for preservation of digital heritage, one that can be demonstrated by a joint statement on the archiving and preservation of digital information, entitled "Preserving the Memory of the World in Perpetuity" (IFLA/IPA Steering Group 2002), [and] in the following year, UNESCO adopted a "Charter on the Preservation of Digital Heritage" (Lor, 2012: 2153). Today, "digital preservation is the focus of an enormously vibrant, active and collaborative community [..., and] as with any merging discipline, two strands of activity are required to progress: the development of strong theoretical underpinnings and standards, and the establishment of a diverse and active pool of practitioners, who can advance and expand the theory through practical application" (Brown, 2013: 9-10).

Standards documents, such as the seminal OAIS Reference Model, practical guides, publications tracing the historicity of digital preservation, and the theoretical bibliography became largely available in the last decades. Scholars of moving image archiving and preservation Karen F. Gracy and Miriam B. Kahn, in "Preservation in the Digital Age - A Review of Preservation Literature, 2009–10" (2011) identified five major areas of digital preservation: tensions in preservation work as libraries

embrace digital resources, mass digitisation and its effects on collections, risk management and disaster response, digital preservation and curation, and education for preservation in the digital age. These are straightforward indicators of the complexity of digital media.

A *digital born* resource deals with an immaterial master; therefore the content is independent from the carrier. Its *authenticity* is met according to its integrity in bytes, and it “requires combinations of software and hardware in order to be stored, retrieved, and rendered” (Malssen, 2011: 72). In other words, *authenticity* is “the quality of trustworthiness of a digital object, [which] provides the assurance that a record is what it purports to be and has demonstrably not been tampered with or otherwise corrupted. Authenticity arises from the reliability, integrity and usability of the record”, whereas *integrity* is “the aspect of an information object’s authenticity that depends on it being protected against unauthorised or accidental alteration” (Brown, 2013: XI, XIII).

Preservation plans have to deal with critical drawbacks of digital media such as rapidly changing technology, software and hardware obsolescence, high costs of management and storage, and the lack of standardisation in container formats. The ongoing technological development point out that *migration*, “copying or transfer of content from one carrier to another” (Edmondson, 2004: 45), is a continuous process, dealing with the challenge of incorporating emerging technology and maintaining residual media.

Digital born encompasses a broad range of materials: audio files, text files, databases, still images, moving images, graphics, software, and Internet-generated content: websites, social networks, forums, communities, and wikis. Each of these materials is transient in terms of format, and engenders different preservation practices.

Nowadays in archival institutions, audiovisual collections are comprised of

“data storages [that] are usually a mixture of digital tapes and hard disks where the former are used for high resolution data and back-up and are not readily accessible, whereas the latter are used for lower resolution copies of the same data to be accessed in real-time” (Fossati, 2009: 67).

The dominant format for back-up in a not readily-accessible form cited by Fossati is the LTO - Linear Tape-Open. The cartridge of the sixth and current generation can hold 2.5 TB of data – or up to 6.25 TB capacity with data compression¹²⁶. And, according to one of its manufacturers, it has up to 30 years archival capacity, but the

¹²⁶ Unstable Media and the New Living Media Art Foundation - LIMA in Amsterdam reported tests that a LTO-6 tape only has a storage capacity of about 4 TB. See http://www.dca-project.eu/images/uploads/banners/DCA_D62_Best_practices_for_a_digital_storage_infrastructure_20130506_Version1.pdf, last accessed on 23rd December 2014.

tape durability is actually linked to cartridge loads and full file passes. The content can be managed manually or in automated robotics libraries. The cartridges can have their content deleted and overwritten, or protected by WORM - Write Once Read Many. Every two years, a new generation of LTO is available with about double the capacity of the previous generation, but the drive reads data only from a cartridge in its own generation and at least the past two generations, i.e., LTO-6 player cannot read LTO-1, 2 or 3. For that reason, the LTO demands a continual medium and long term upgrade plans. These plans ought to include software and hardware upgrade, acquiring new cartridges, migrating the content, creating and managing metadata, and generating the necessary back up in different buildings, cities and countries. Also, when possible, creating a quality checking program, manually and automatically, and monitoring the files, through an alert system. Considering the rapid rate of technological progress even the state-of-the-art next and 7th generation of LTO, with about 6.4 TB of storage, will be considered insignificant and out-dated within ten years¹²⁷.

The manual *Best practices for a digital storage infrastructure for the long-term preservation of digital files* (DCA, 2013)¹²⁸ offers a detailed investigation based on practical experience, and lists the pros and cons of LTO. Among the advantages are the low prices, scalability, energy savings, relatively high transfer rates, low error rates, a long life span of about 30 years and the possibility of internal file index for faster access to the right data. It also supports compression, encryption and WORM. Among the drawbacks are that LTO writes in a linear way, meaning that excessive accessing is not recommended in order to not wear it out, access times are long, the reader/writer equipment is not compatible with future generations and needs to be updated, risk of the tape being damaged while being played especially if the tape is read often, and the manual handling unless connected via autoloader, an expensive solution if robotic autoloaders are needed. The tapes are sensitive to handling, climate conditions such as high temperature and humidity, and also to magnetic fields and electromagnetic pulses (12-13).

Because of the risks related to using LTO it is recommended to use hard disk drives (HDDs) for content that is frequently accessed as the lower resolution copies above mentioned by Fossati. HDDs make access more immediate and improve the durability of LTO. The life cycle of HDDs is unknown, and the standard warranty for

¹²⁷ This is this author's estimative based on the ever evolving technology and the storage space of previous carriers that seemed vast at their release year, such as floppy disks. See <http://dpworkshop.org/dpm-eng/timeline/viewall.html>, last accessed on 12th November 2014.

¹²⁸ Article part of Digitising Contemporary Art - DCA project, one of the latest publications on digital preservation. See <http://www.dca-project.eu>, and http://www.dca-project.eu/images/uploads/banners/DCA_D62_Best_practices_for_a_digital_storage_infrastructure_20130506_Version1.pdf, last accessed on 23rd December 2014.

non-professional drives is about one year, whereas the professional formats warranty is about three to five years¹²⁹. Hard disk drives are known for the low reliability due to errors and corruptibility. The DCA manual listed as advantages the “random and quick access, contains file index managed by file index systems, multiple files can be opened and used at once by multiple users, portable across platforms and operating systems, and scalable”, and as drawbacks, “for scaling content it can be an expensive solution, energy costly, SATA HDD systems have been proved to have higher error rates than magnetic tapes, and life span of only five years and an initial infant failure risk” (18). As a way of avoiding information loss, data checking systems must be implemented, or *RAID* (Redundant Array of Independent Disks). A server is an option for collections that need to be accessed by multiple networked users, but is possibly less secure as the server is all the time one, and is less portable than HDDs. Due to their unpredictability and short life span, storing data in external hard disk drives cannot be seen a long or medium preservation practice, but as an extremely-short-term preservation practice and prompt access form. “Data migration is a never-ending process”, and constant maintenance of a digital library is required for the endurance of audiovisual material, while funding for maintaining the viability of the archive is mandatory (Fossati, 2009: 67). Another option for small and medium collections is cloud storage; mostly outsourced remote storage usually accessed through an online interface. While ideal for content that needs to be accessed from different locations, cloud storage has the disadvantage of dependency on high-speed Internet access, the risk that the outsourced service can cease, and no control over the integrity of its own collection.

Switching to digital born still images, *authenticity* and *integrity* are similarly a major preservation issue. Numerous articles and guides are available online on how to preserve personal archives, as well as cloud services such as Flickr, Google+, 500 Pixels, and Dropbox. Those options are suitable for individuals users, wherein the free option is up to 1TB of storage space, but, although unlikely, any of these services can be dropped¹³⁰.

A widely used solution in libraries is the concept of spreading as many copies as possible as far as possible, with programs like LOCKSS, “an open-source, library-led digital preservation system built on the principle that “lots of copies keep stuff safe. The LOCKSS system is the first and only mechanism to apply the traditional

¹²⁹ Occasionally the warranty for non-professional drives is not even stated. In other cases the short period of three years as warranty is sold as “peace of mind” as product features. See <http://www.toshiba.com/us/accessories/Portable/500GB/Connect/HDKC605CK3A1>, <http://www.wdc.com/en/products/internal/enterprise>, last accessed on 15th December 2014.

¹³⁰ Google already dropped some of its services, such as Reader, Buzz, and Wave. Old social networks well established for many years were dropped, such as Orkut discontinued in 2014 after 10 years of operation.

purchase-and-own library model to electronic materials”¹³¹, and similar, such as MetaArchive¹³².

Internet-based information and social network content that can be seen as valuable data (Uricchio, 2007) are out of the scope of traditional archival institutions, as the US media scholar William Uricchio argues:

“social media such as blogs, wikis, massively multi-player role playing games, and various on-line social spaces that lack any homologies to traditional archival objects face a far more difficult situation [regarding preservation of digital objects]. In the case of social media, there are neither pre-existing archival categories nor memory institutes charged with collection, selection, restoration, preservation and access. [...] They fall outside of the familiar limits of our cultural habits and expectations, and since memory institutions are largely involved in the business of creating and maintaining tradition, it’s easy to see why these new forms are so awkward” (Uricchio, 2007: 16).

Actually, few institutions include amateur digital records in their collection of archival objects, such as The Nederlands Instituut voor Beeld en Geluid in The Netherlands which every year archives YouTube videos with high numbers of views¹³³. Throughout the years, archiving web content became more noticeable, with rigorous studies such as *Web Archiving* (Julien Masanès, Springer, 2006), and new and accessible tools to preserve Internet-based information, such as Wayback Machine¹³⁴, Archive-It¹³⁵, Digital Library’s Web Archiving¹³⁶, and Web Curator Tool¹³⁷. Furthermore, TubeKit¹³⁸ allows capturing both videos in YouTube and related metadata, such as description, comments, number of views, viewing numbers. Archiving Internet-based information and social network content is also not in the scope of Brazilian archival institutions, as identified in the following subsection.

Although the digital preservation field is vast, digital preservation of *amateur collective records* has not had much academic attention to date. In addition to not being mentioned in Gracy’s and Kahn’s 2011 publication, it is not among online digital or audiovisual preservation platforms, such as *De Kennisbank Audiovisuele Archivering*¹³⁹ or *The Signal - Digital Preservation*¹⁴⁰, a blog from the Library of

¹³¹ See <http://www.lockss.org>, last accessed on 22nd December 2014.

¹³² See <http://www.metaarchive.org>, last accessed on 22nd December 2014.

¹³³ Information from Bas Agterberg’s class on The Nederlands Instituut voor Beeld en Geluid for Preservation & Presentation of the Moving Image’s students in second semester of 2013.

¹³⁴ See <https://archive.org>, last accessed on 22nd December 2014.

¹³⁵ See <http://www.archive-it.org>, last accessed on 22nd December 2014.

¹³⁶ See <http://webarchives.cdlib.org>, last accessed on 22nd December 2014.

¹³⁷ See <http://webcurator.sourceforge.net>, last accessed on 22nd December 2014.

¹³⁸ See <http://www.tubekit.org>, last accessed on 22nd December 2014.

¹³⁹ See <http://www.avarchivering.nl>, last accessed on 22nd December 2014.

¹⁴⁰ See <http://blogs.loc.gov/digitalpreservation>, last accessed on 22nd December 2014.

Congress, and *Digital Preservation Coalition*¹⁴¹. Considering those publications, and numerous others on digital preservation¹⁴², this thesis will not address a historiography of the digital preservation field, but will focus on the existing problems as regards preservation directly connected with this thesis' objective. The legacy of the amateur records of demonstrations in Rio de Janeiro in 2013 and 2014 comprises audiovisual material, still images and related Internet pages – such as Facebook events and articles, as well as YouTube video pages. Therefore, this is the scope of practices to be investigated below – *digital born* audiovisual material, still images, and Internet-generated content. Before this, I think is relevant to look at the audiovisual preservation background in Brazil, especially regarding the digital area, as follows.

2.2. Audiovisual preservation background in Brazil

Maria Laura Souza Alves Bezerra Lindner, the president of the recently established Brazilian Audiovisual Preservation Association - ABPA¹⁴³ in her doctorate thesis, says:

“[a]t the present time, the field of audiovisual preservation goes through a period of maturation and transformation[;] on the other hand, institutions holding collections of moving images spread throughout Brazil have a history marked by a lack of resources and institutional weakness.” (Lindner, 2014: 9)

The period of maturation and transformation of the audiovisual preservation field mentioned above by Lindner is explained by the creation of ABPA, the increase in the number of film restorations, the inclusion of audiovisual preservation in bachelor film studies courses, and the increasing works in Brazilian academia. These are the results of many years of individual and institutional struggle throughout the years.

Today film and broadcast production and distribution have prolific funding opportunities, resulting in the marked growth of theatrical releases per year. From 2001 to 2005 the average number of releases was 38,4 movies per year, whereas from 2009 to 2013, the average per year was 92,2 movies¹⁴⁴. In contrast to this fruitful period of audiovisual production, minor amounts are invested in audiovisual preservation¹⁴⁵. The struggle of the Brazilian audiovisual preservation institutions to

¹⁴¹ See <http://www.dpconline.org>, last accessed on 22nd December 2014.

¹⁴² In the audiovisual domain, the digital archive of digitized collections was thoroughly investigated by Giovanna Fossati in *From Grain to Pixel: The Archival Life of Film in Transition* (AUP - Framing Film, 2009). Adrian Brown made a comprehensive but also lean historiography of digital preservation in *Practical digital preservation - A how-to guide for organizations of any size* (Facet Publishing, 2013).

¹⁴³ ABPA is an association of preservation professionals that aims to implement a specific policy for the Brazil's audiovisual heritage, and education, among others, Lindner's administration is for the biennial 2013-2015.

¹⁴⁴ See <http://www.filmebr.com.br/revista/201409>, last accessed on 10th October 2014 (in Portuguese).

¹⁴⁵ By way of illustration, through the main audiovisual federal fund in Brazil, the FSA - Fundo Setorial do Audiovisual (*Federal Audiovisual Fund*), from 2008 to 2013 were invested in film and broadcast production

overcome the long period of “a lack of resources and institutional weakness” abovementioned by Lindner, now also have to compete with the growing numbers of productions per year – not to mention the vast amount of independent production that do not reach commercial screens. In addition, those institutions have to face a common challenge regarding the audiovisual preservation around the world: digital media.

The 2006 FIAF Congress was held in São Paulo where “The future of film archives in a digital cinema world: Film Archives in Transition” was discussed. However, the digital shift in presentation only started around 2012 in Brazil¹⁴⁶, whereas in the US and Europe the process began around 2005, when DCI announced technical specifications of digital cinema distribution¹⁴⁷. Today 70% of European screens¹⁴⁸ and more than 85% of US screens¹⁴⁹ are digital, while only 50,5% of Brazilian screens¹⁵⁰ are digital. These screen numbers reflects preservation practices, where to date only four of about 15 institutions’ audiovisual preservation uses LTO tapes for data storage¹⁵¹. Moreover, digital preservation is still a topic with little study by Brazilian academia. For instance, the article *Digital Preservation: Mapping of the Brazilian scientific production of a Decade (2001-2010)*¹⁵² published 120 articles in these ten years. This is the sum total of all abstracts and books among bachelor projects, master thesis and doctoral dissertation, a very low number considering the vast Brazilian academia. In addition, although amateur production is within the scope of many public and private Brazilian institutions, most of those deal with documents from the far past. Although some academic institutions in Brazil have well-established

and distribution about R\$357 million, corresponding to about €117 million – 10th May 2014 rate, where €1 equals R\$3.05. See <http://fsa.ancine.gov.br/resultados/investimentos/valores-investidos>, last accessed on 10th May 2014 (in Portuguese). At the same time, the Cinemateca Brasileira, the main institute for audiovisual preservation in Brazil and the major federal funds receiver, had investments about R\$11 million in the same period. See <http://www.cinemateca.gov.br/page.php?id=1>, last accessed on 10th May 2014 (in Portuguese).

¹⁴⁶ As evidenced by the autumn 2012’ edition of *Revista Filme B*, the most relevant magazine on distribution and exhibition in Brazil, which has “welcome to the digital cinema” as main topic. See <http://www.filmeb.com.br/revista/201204.pdf>, last accessed on 11th May 2014.

¹⁴⁷ See http://www.dcmovies.com/archives/spec_v1/DCI_Digital_Cinema_System_Spec_v1.pdf, last accessed on 24th October 2014.

¹⁴⁸ See <http://euromediaaudiovisuel.net/Files/2013/06/27/1372318200299.pdf>, last accessed on 24th October 2014.

¹⁴⁹ Data from mid-2013. See <http://www.hollywoodreporter.com/behind-screen/nab-75-percent-theaters-are-434290>, last accessed on 20th October 2014.

¹⁵⁰ 2013 data. See http://oca.ancine.gov.br/media/SAM/DadosMercado/Dados_gerais_do_mercado_brasileiro_2013.pdf, last accessed on 4th July 2014.

¹⁵¹ Information obtained through the questionnaire “The use of LTO as archival medium in audiovisual institutions in Brazil” (Appendices 5), on 20th October 2014.

¹⁵² See http://www.liber.ufpe.br/ctcm/anais/anais_ctcm/4_Preserv_mapeamento.pdf, last accessed on 4th August 2014. On 2010 a Blog has listed 16 master thesis and doctoral dissertation on audiovisual preservation, being the first one on 1996. See <https://nitratooacetatopoliester.wordpress.com/2010/12/02/teses-e-dissertacoes>, last accessed on 4th August 2014.

digital repositories (Finquelievich and Rodríguez, 2012: 318), they do not address audiovisual material.

In conclusion, audiovisual preservation practices in Brazil are not updated in the digital preservation sphere, and it already has to face the challenge of dealing with the incessant commercial production and non-commercial authorial production, and documentaries, traditionally recognised in that country as heritage to be preserved. In essence, the preservation of amateur records of demonstrations is out of the scope of the Brazilian audiovisual preservation institutions, reinforcing the need for the creation of a preservation project outside the traditional institutional scope. In the coming section, initiatives to preserve and to reflect the images of demonstrations in Spain and Egypt will be examined.

2.3. Initiatives of preserving amateur records of demonstrations

“Digital technologies enable civic participation and serve as important tools of accountability. It is, therefore, not surprising that many human rights actors, both individuals and organizations, utilize digital technologies for documentation purposes”

“Due to a lack of established preservation best practices for new digital technologies, born-digital materials already face the risk of permanent loss, a risk that is further compounded by limited economic resources and political repression (Kelleher, Sangwand, Wood, Kamuronsi, 2010: 94-95)

The documentation on the preservation of records of demonstrations globally is irregular and therefore there is little to be analysed here. One of the most newsworthy cases is Mosireen, the media activism collective in Cairo. The collective hosts an extensive archive of footage of the uprising, partly available for free download and streaming in high resolution, with a part-time staff member to organise the archive and to respond to footage requests. The same collective that gathered and shared protesters’ records became responsible for its preservation¹⁵³. Mosireen is a model of media activism and creating a counter-narrative, as described by UK media scholar Joshua McNamara:

“The Mosireen Collective’s raw documentary footage of the Egyptian riots supplants any such narration with more visceral representations of a violent revolution. Films [...] without use of voiceover, are sound-tracked instead by the noise of the crowd, the crack of gunfire and the rustle of clothing against an inbuilt microphone. The camera is both eye level and street level throughout, both testifying to and humanizing political violence. We become part of the battle, positioned amongst a people caught in the grips of a violent struggle” (McNamara, 2013: 129).

¹⁵³ It is unknown the preservation practices of the group regarding technological tools. The author tried to reach Mosireen November and December 2014 by email without success.

Another relevant outcome of documentation and reflection practices towards demonstrations is the multifarious 15M.cc, a web portal that congregates many initiatives to archive, document and reflect on the 15M movement for political changes in Spain in 2011. Projects are connected through *15Mpedia*, Wikipedia-based platform. Also, the portal offers an audio archive, a timeline gathering facts on the 15M movement and an interactive map with information and images of the demonstrations. 15M.cc is an extensive and complex participatory investigation of demonstrations in Spain, using tools created by active actors of the movement. Another interesting tool is a timeline of audiovisual content about the movement. There is already an extensive literature on the 15M movement¹⁵⁴. 15M.cc is an active participatory archive that fostered activism in Spain. Although its content is in Spanish, the website is in plain HTML language, allowing its content to be translated by online website translators such as Google Translate. Both 15M.cc and Mosireen can be seen as fruitful initiatives because they provide a deep and extensive panorama of both Indignados and uprising movements in Spain and Egypt.

As previously indicated, the amateur collective records from demonstrations in Rio de Janeiro in 2013 and 2014 also engender human rights issues. In other words, records on police brutality and political harassment confers to images from demonstrations a body of documentation on human rights violations. Therefore, besides initiatives focused on demonstrations, some institutions focus on archiving materials connected with human rights abuse, a field with broader scope and dedicated institutions like the University of Texas Libraries' Human Rights Documentation Initiative, Columbia University Library's Center for Human Rights Documentation & Research, Duke University's Human Rights Archive.

A significant actor in human rights advocacy in Brazilian demonstrations is Human Rights Videos WITNESS, an international non-profit organisation that "has been using the power of video and storytelling for 20 years" to show "human rights abuses". "WITNESS catalyses grassroots activism, political engagement, and lasting change"¹⁵⁵. WITNESS offers several guides on its website about documenting and sharing human rights violation videos¹⁵⁶. WITNESS has an extensive collection of

¹⁵⁴ Articles such as *The Free Culture and 15M Movements in Spain: Composition, Social Networks and Synergies* (Fuster Morell, 2012), *Political activism online: organization and media relations in the case of 15M in Spain* (Micó, Casero-Ripollés, 2014), *Structural and Dynamical Patterns on Online Social Networks: The Spanish May 15th Movement as a Case Study* (2011), *The Indignados of Spain: A Precedent to Occupy Wall Street* (Castañeda, 2012), and many others.

¹⁵⁵ *About us*. WITNESS. 20th May 2014. <<http://www.witness.org/about-us>>.

¹⁵⁶ Regarding the approach to victims, conducting interviews, authenticating online video and best practices for upload, filming demonstrations and forced evictions, among many others.

tapes and digital material in its native format¹⁵⁷, about 5,000 hours of primarily raw footage of interviews and testimonies, records of protests, speeches, documentation of human rights violations, and institutional content. The digital archive is located on in-house storage servers, with automatically checking on a periodic basis for stability. There are two ongoing projects regarding the preservation of the collection. The first is the back up to LTO6 tape and the other is a gradual deposit of copies with the University of Texas Libraries Human Rights Documentation Initiative, which will eventually provide open online access to the collection for research and scholarly purposes. The content is catalogued in a FileMaker database, with content description, technical, preservation and rights metadata. Access to the collection is possible but is not a priority. Instead, WITNESS advocate for archives and support human rights activists who want to archive and preserve their video collections through training and mentorship.

Although preservation is not among its main foci, WITNESS released the *Activists' Guide to Archiving Video* in 2013, a didactic and easy-language online publication in English, Spanish and Arabic. The guide is most suitable for amateur production and the closest publication to the issues regarding the demonstrations in Brazil, because it considers low-budget solutions as well as measures to maintain the author's anonymity.



Fig. 17 - Activists' Guide to Archiving Video by WITNESS.

¹⁵⁷ The collection includes tapes such as Beta, Hi-8, VHS, DVD, miniDV, DVCam, DigiBeta, and digital files include DV, DVC Pro HD, H.264, AVCHD, ProRes. Interview with Yvonne Ng, from WITNESS, on 20th June 2014, by email (with interviewer's permission).

Focusing on the Brazilian case, WITNESS released a guide in Portuguese on how to record police abuse in protests, concerning when and how to film protests, the rights involved, how to turn images into legal evidence, ways to protect the body from teargas, among other things. WITNESS also draws attention to numerous forced evictions during the preparation of the 2014 World Cup and 2016 Olympic Games in a video dossier¹⁵⁸. After denouncing many violent episodes in Brazilian demonstrations throughout 2013 and 2014, WITNESS launches *Cadastro de Vídeos e Fotos-Denúncia: Violência Policial nos Protestos da Copa 2014*, that could be translated to *Cataloguing Videos and Photo-Denunciation: Police Violence in the 2014 World Cup Protests*¹⁵⁹, a collaborative database on the Google Form platform. As a result, the project brought together key players in the demonstrations and human rights activist groups in Brazil, generating joint reports addressed to UN, and about 40 videos were catalogued¹⁶⁰. In the following section the details of collective records from demonstrations in Rio de Janeiro in 2013 and 2014 from a preservation viewpoint will be identified.

2.4. Particularities of collective records in Rio de Janeiro from a preservation viewpoint

The amateur images from demonstrations in Rio de Janeiro in 2013 and 2014 have several preservation particularities connected to the technological, financial, political and cultural context of the protests. Initially, the urge from the participants to record the demonstrations at any costs without consistent planning compromised previous recorded images. Three of the media activism groups reported deleting previous materials for the sake of storage space, and “some of the images from June 2013 are no longer accessible anywhere”¹⁶¹. Also, in consonance with amateur production, and in opposition to professional work conditions and the controlled archival environments, media activism groups must rely on personal camera, mobile, computer

¹⁵⁸ See <http://blog.witness.org/2013/10/can-114-videos-tell-one-story-about-forced-evictions-in-rio>, last accessed on 20th November 2014.

¹⁵⁹ *Cadastro de Vídeos e Fotos-Denúncia* was widely shared by media collectives and numerous organizations in social networks, and covered by BBC Brazil. See <http://blog.witness.org/2014/06/police-violence-world-cup-protests>, and <https://docs.google.com/forms/d/17bbwhU23UxVjeUrwXaWUbk8qCMIrkXuJ8Lyu5iMLleQ/viewform>, last accessed on 20th November 2014.

¹⁶⁰ The number was considered low for WITNESS and Artigo 19, and it was evaluated due to “a) lack of specific details of what would be done with this material (such as to be used in the legal process, or displayed for authority, etc.); b) busy schedules: people would not have time to catalogue and select what was most useful of all that had been shot; c) various other channels available to own disclosure (YouTube, Facebook, etc.)”. Email conversation with Priscila Neri, from WITNESS, on 11th February 2014 (with interviewer’s permission).

¹⁶¹ Interview with members of Vinhetando, on 2nd June 2014, by Skype (with interviewers’ permission).

and external drives as their operational and back-up equipment. In other words, the own function of media collectives faces contingencies mostly because media activists can only rely on personal equipment on recording and preserving, differentiating from professional journalists with company-owned, heavily-insured equipment. And the engagement of media activists is a matter of personal agenda and may be subject to variation in investments of time and financial resources. Most of the media collectives are based in horizontal organisations, where responsibilities are self-imposed, and no one is really in charge of preservation of the images¹⁶².

Also, the non-systematised upload to web platforms such as YouTube and Facebook can be seen as an access measure but not a preservation practice. In the case of demonstrations, especially with occasional violent images, user content control led to censorship and deletion of some images, a hazardous practice when it comes to effective preservation. To protect from harassment, as described in the previous chapter, users may prefer to use nicknames to protect their identity, or in the case of NINJA it becomes a matter of creating another identity, the collective NINJA identity. Additionally, as is current practice on the Internet, the uploader of the video may not have any connection with its author since retweeting and sharing are common practices in social networks. Therefore, the amateur collective images usually do not have a clear indication of authorship and consequently the copyright holder becomes less clear. The copyright issue has been a crucial matter in conservation practices regarding access strategies, but with the digital advent there is a shift in this matter, as explained by Uricchio:

“The contemporary blurring of intellectual property can be attributed in part to the new logics of digital culture, and in part to the increasingly draconian control over our cultural heritage asserted by corporate copyright and trademark holders. As intellectual property protection steadily expands at the behest of corporate interests, the public is increasingly deprived of anything other than paid access to their own popular culture. And as corporate profits invariably decline in traditional sectors such as music and film, the pressure to expand control over intellectual property only grows, even though the decline correlates to the increasing market share of cell phones, computer games, and exponentially increasing involvement with social media” (Uricchio, 2007: 20)

Moreover, since the images are accessible on the Internet (usually without an authorship indication), they are subjected to reuse, recontextualisation and manipulation, and to questioning of their *integrity* and *authenticity*. Digital images are easily appropriated. Also, during demonstrations some cameras or smashed or seized,

¹⁶² Information obtained by interview with members of Vinhetando, on 2nd June 2014, interview with a member of CMI-Rio, on 10th June 2014, by Skype (with interviewers' permission), and questionnaire “Operation of media activists in Brazil” (Appendices 5), on 20th August 2014.

and later on, in police operations such as *Firewall 2*, equipment like cameras, computers and external hard disk drives were seized with warrants.

Internet-based information connected with amateur images or the demonstrations is in a fragile position. Facebook does not allow users to delete their own account, only to deactivate it, but pages can be deleted by the Facebook upon other users' requests. YouTube has a similar policy. Although this is not a major focus regarding preservation, related documentation is relevant mostly because it provides context and helps an observer understand the records of the demonstrations.

On the whole, many circumstances obstruct the preservation of amateur collective records. Although media activists express concern about guaranteeing future access to images, preservation consists of complex practices that need planning and full engagement; this systematic approach is not yet practiced by any of the groups.

NINJA today estimated about 30,000 hours of video, on about 10TB. Their Flickr account has more than 30,000 photos of which demonstrations are a large portion¹⁶³. Over months, NINJA members created a working scheme of copying the audiovisual material on the same day of its creation, to hard disk drives, organised according to date and including information about the event. These videos and photos are stored on computers, external drives and in the cloud. NINJA members' equipment was seized by the police, resulting in the loss of images. Another significant loss of material occurred at the end of June 2013, when *Pós TV's* Twitter account had about 20,000 followers and was hacked and merged with the hacker's account, and the videos from the live streaming account were lost. Considering the demonstrations in June 2013 were the largest ones, and the live streaming from those days had several channels connected by the same account, covering different angles of the same demonstration in its entirety, this was a great loss for the amateur collective production of the public demonstrations¹⁶⁴. NINJA eventually received requests for footage by researchers and media activists that they could not fulfill, and NINJA members could not provide the specific footage, indicating how extensive the archive was but how poorly organised.

In the CMI-Rio case, video footage totalled about 50 hours in 3TB, more than 1,000 photos in about 2TB stored on a computer drive, an external drive and in the cloud, with backups on another computer and on external hard disk drives. CMI-Rio

¹⁶³ NINJA members also cover cultural events. The Flickr account was founded in March 2013, and in 8th February had 30,251 photos.

¹⁶⁴ Although it is not possible to calculate the amount of material in hours, one episode denotes how intense was the live stream operation: in a visit to Rio de Janeiro during World Cup, TwitCasting owners visited NINJA's base of operations to thank for having boosted their service with the live streaming during demonstrations. Interview with members of NINJA, on 20th August 2014, by Skype (with interviewers' permission),

members reported a prohibition on shooting and also that images which were stored were intentionally deleted to make storage space for other images. Filmmakers, researchers, lawyers and national and international press request material from CMI-Rio, which is provided according *copyleft* practice¹⁶⁵.

In the beginning of 2014 a media laboratory run by the oldest and most significant public university of Rio de Janeiro, MediaLab - UFRJ, announced the project *Atlas dos #PROTESTOSBR*. It consists of an online platform that collects and shares images of June 2013 protests in Brazil and was due to be launched in June 2014. The project was announced but has not yet been launched due to contingencies.

2.5. Conclusion

The digital preservation area and practices were outlined in this chapter, explaining that *digital born* materials today can be preserved through a combination of strategies: magnetic tapes, hard drives, server and cloud solutions. Different from analogue film material, where the best preservation practice is preserving the *original* material intact¹⁶⁶, in digital audiovisual material best preservation practices are about making as many copies as possible, and updating reading and writing devices, and/or migrating the content. Preserving Internet-based content has used a multitude of different tools, and will be most suitable for preserving documents related to collective records of demonstrations in Rio de Janeiro.

Spanish and Egyptian demonstrators created meaningful tools to preserve and enable reflections on the movements in their own countries; preservation was and is conducted by the same actors responsible for the demonstrations/uprising. These collaborative projects are circumscribed in Participatory Culture, and can act as counter-archives¹⁶⁷. In the Brazilian case, the immediacy of media activists groups' actions and the urgency of gathering images is not in consonance with preservation concerns. Although preservation is a matter for media activists in Rio de Janeiro, a standard practice in doing so has not yet been established. Massive records from

¹⁶⁵ “Copyleft (a play on the word copyright) is the practice of using copyright law to offer the right to distribute copies and modified versions of a work and requiring that the same rights be preserved in modified versions of the work. In other words, copyleft is a general method for making a creative work as freely available to be modified, and requiring all modified and extended versions of the creative work to be free as well”. See <http://en.wikipedia.org/wiki/Copyleft>, last accessed on 10th January 2015.

¹⁶⁶ In short, the preservation of film is to preserve the original materials, such as the camera negative, or its closest and most similar generations, and if possible, keeping untouched, without modifications.

¹⁶⁷ The term is defined by Visual and Cultural scholar Rebekah Edwards as “coterminous with a ‘state’ or ‘discursive’ archive destabilises and exposes the archive’s regulatory production, [...] both indicate the discursive, regulatory practices that produce and consolidate ideologies and in the sense of the specific collections created by these practices” (2010: 110). See <http://www.tandfonline.com/doi/pdf/10.1080/08164641003762438>, last accessed on 28th December 2014. PhD student Esra Ozban on email conversation indicated the term.

demonstrations in Rio de Janeiro were produced and shared, but are poorly preserved. This chapter provided an overview of preservation issues that threaten these images, such as the urgency to record demonstrations, and the risk of erasing previous images due to little storage space on poor equipment. Considering the current preservation practices described in the current chapter, and the details of the records of Rio de Janeiro, in the following chapter I will outline a preservation proposal for the records and related documents of demonstrations in Rio de Janeiro in 2013 and 2014.

Chapter 3. Preservation proposal

3.0. Introduction

Taking into account today's digital preservation practices and the two experiences in Madrid and Cairo mentioned in the previous chapter, and considering that to date little or nothing has been done regarding medium and long term preservation, this chapter will address a preservation proposal for the amateur digital records of public demonstrations in 2013/2014 in Rio de Janeiro.

Since this proposal is intended for practical usage by non-preservation-professionals, it will avoid complex terminology and overuse of technical concepts used in the digital preservation field. For instance, the OAIS Reference Model that “sets out a detailed model of the functions and processes required of a digital repository, as well as introducing a set of terminology that has become established as the *lingua franca* of the digital preservation community”, and although “became accepted as a *de facto* standard”, and is “widely cited”, it will not be used because its “complexity and terminology can be off-putting” (Brown, 2013: 10, 15). Since the literature used for this proposal mainly originates in Europe and North America, and the preservation field in Brazil differs significantly in financial and cultural terms, the proposal will consider Rio de Janeiro's circumstances. Additionally, considering funding restrictions, this proposal will list open-source solutions. The ultimate goal is to create a feasible preservation plan that can be implemented in betimes.

The technical literature considered for this proposal is primarily *Guidelines for the Preservation of Digital Heritage* (UNESCO, 2003), the manual *Best practices for a digital storage infrastructure for the long-term preservation of digital files* (2013), the thorough guidebook *Practical digital preservation - A how-to guide for organizations of any size* (Adrian Brown, Facet Publishing, 2013), and *Activists' Guide to Archiving Video* (WITNESS, 2013). I will also draw upon my own technical experience with digital media¹⁶⁸. Although I recognise the significance of action research, this was not viable due to geographical reasons. Therefore, the proposal is a theoretical and a speculative exercise, which may give it a detached aspect.

¹⁶⁸ From 25th August to 22nd December 2014 I did an internship as part of the UvA master program at EYE Film Institute Netherlands in *Film Conservation and Digital Access* department, where I could work directly with LTO tapes, external drives, metadata of digital files, file transcoding, and many others. The experience was vital to understand digital media theory. Among the problems and mysteries, during the internship I had to deal with corruption of digital files, storage space issues, problems with computer software, LTO tapes, external drives, among many others.

3.1. Accessibility and archiving model

Preservation is about principles, techniques and practices necessary to maintain the integrity of the audiovisual document and the potential of its intellectual experience (de Souza, 2009: 6). Ray Edmondson, pioneer Australian audiovisual archivist, effectively describes the relationship between preservation and accessibility:

“Preservation and access are two sides of the same coin. [...] They are so interdependent that access can be seen as an integral part of preservation. [...] Preservation is necessary to ensure permanent accessibility; yet preservation is not an end in itself. Without the objective of access it has no point. [...] It might be said that preservation is the totality of things necessary to ensure the permanent accessibility – forever – of an audiovisual document with the maximum integrity” (Edmondson, 2004: 19).

The interdependence between preservation practices and accessibility is key to this proposal. That is to say, the ultimate goal is to ensure short-, medium- and long-term access to amateur records of public demonstrations in 2013/2014 in Rio de Janeiro.

The recommended archiving model for this preservation proposal would be the Participatory Archiving model¹⁶⁹, to enable further descriptions of, and links between, records to accelerate the process of updating the archive, to engage users to actively collaborate with the archive, to reduce the need for administrative intervention and also as a form of preserving the articulation of media collectives. In other words:

“Involving community members in archival arrangement and description could help acknowledge and preserve context and embedded knowledge architectures in the self-documentations of historically marginalized communities in at least two ways: 1) Allowing the community’s understanding of document authorship and the circumstances that led to record creation to form the basis for provenance groupings and authorship descriptions; 2) Preserving the habits, practices, preferences, or even beliefs of the record creators through arrangement and resulting descriptive categories that preserve the links that each record has to other narratives within the community, to create an organizational structure that resonates with the knowledge architectures of specific communities. (Shilton and Srinivasan, 2007: 95).

This turns 15M.cc into a role model in terms of creating a platform that allows, or even encourages the creation of a reflection base *for* and *by* the actors involved.

¹⁶⁹ Concept explored by Isto Huvila (2008), Katie Shilton and Ramesh Srinivasan (2007), by Elizabeth Crooke on *Museums and Community* (Routledge, 2007), and the 2010 International Journal of Heritage Studies 2010, see <http://www.tandfonline.com/toc/rjhs20/16/1-2#.VN3LozHF98E>, last accessed on 10th January 2015.

3.2. Scope of the object and minimum requirements

Although this thesis may have previously addressed the amateur production footage of demonstrations as a *unity*, this production is actually comprised of diverse and numerous productions from individuals and collectives. Therefore, it is necessary to demarcate this production. In other words, to create the concept of *collection* out of diverse productions created by geographically dispersed and politically dissimilar activists. The creation of the concept of a collection would also be aligned with the above-mentioned preservation guides, since they are intended to collection, archives, and institutions, and not disperse production.

Since the production is vast and heterogeneous, it is necessary to create a genealogy of what should be preserved. Firstly videos and photos published on the web via social networks such as YouTube, Facebook, Flickr, live streaming on platforms such as Twitcasting, and also on the webpages of media activism groups (fig. 18 as one example). Secondly text related to these videos and photos, in the form of descriptions and comments (fig. 19). Thirdly raw files of videos and photos, consuming large files and storage space. These are unpublicised, but a great resource in terms of the documentation of events and uniqueness. And finally, as supporting documentation but also fundamental to understanding the chronology of the demonstrations, the Facebook event-logs of the demonstrations (fig. 20), and the articles published by individuals and media activists are yet materials to be preserved.

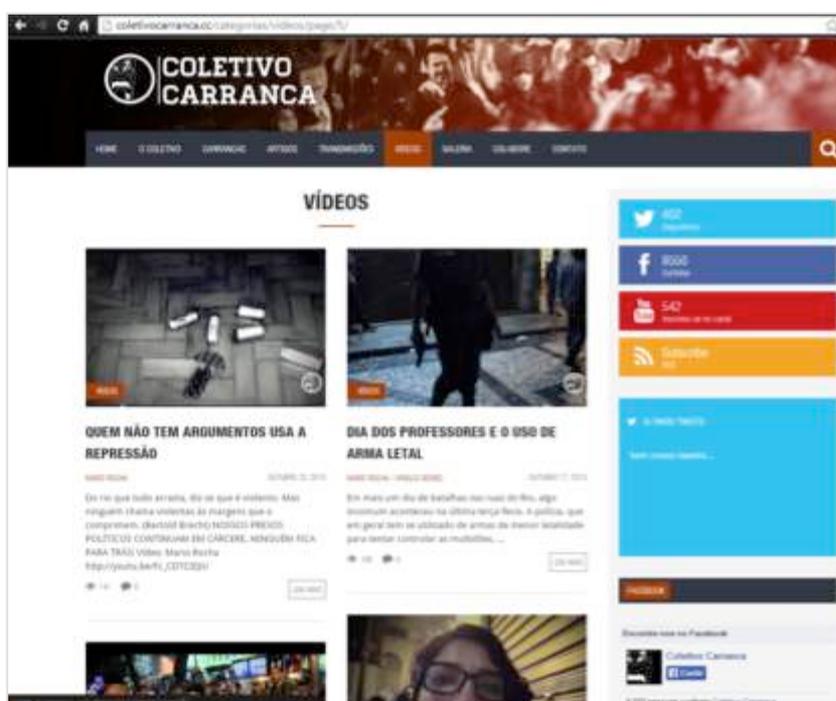


Fig. 18 - Coletivo Carranca's webpage.

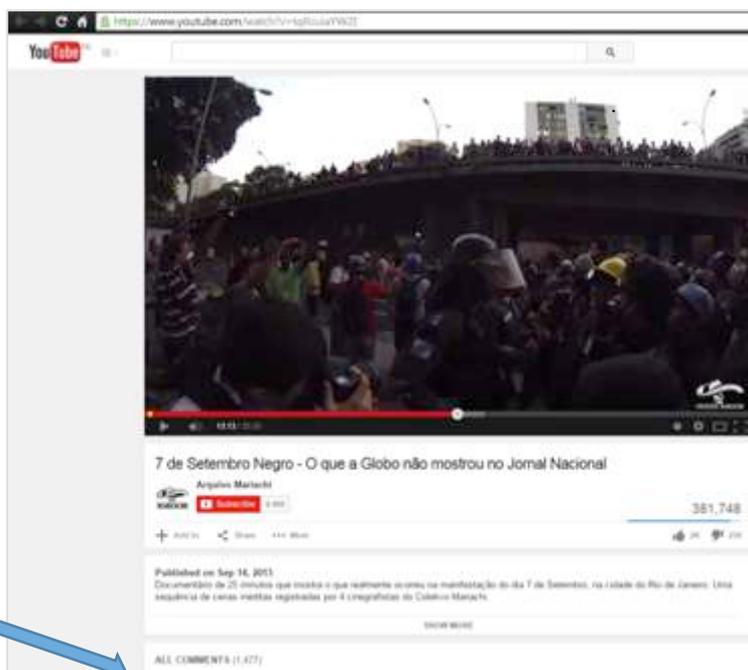


Fig. 19 - YouTube page of a video about a demonstration with 1,477 comments.



Fig. 20 - Facebook event of 20th June 2013 demonstration.

Listed as minimum requirements to create a digital preservation service by Adrian Brown in *Practical digital preservation* are *motivation* and *means* (4). Regarding *motivation*, in the cases of the demonstrations in Spain and Egypt, the collaborative initiatives were created during the uprisings (e.g. Mosireen) or just after, like 15M.cc, created in the same year just a few months after the demonstrations. In the Brazilian case, although some of media activists collectives are still active in early 2015, and demonstrations are occasionally organised, there is no active preservation of the past images from 2013 and 2014. This means it is unlikely that the development of an archival system by the actors responsible for the demonstrations will occur now or in the future, months or years after the fact.

A secondary minimum requirement to create a digital preservation service would be *means* in the form of *financial resources*, *expertise* and *infrastructure*. The amount of financial resources is a matter evaluated according to the scope of the *collection*. There is a natural equation, either implicit or explicit, that calculates the relative investment required to preserve a resource based on the total size of that resource pool. In this case, as no-one knows how large or small the resource pool may be, it is difficult – if not impossible – to calculate the investment before the project begins. The two other requirements listed above, *expertise* and *infrastructure*, will be discussed later. Therefore, the *motivation* to work with material already year(s)-old, and the *means* to do so can be seen as one of the first challenges.

3.3. Requirements and phases in the preservation plan

The first step for the preservation of such materials is to reinforce the concept of collection out of diverse and dispersed amateur production, at both the theoretical and practical levels. The creation of a digital repository, i.e. “a combination of people, processes, and technologies which together provide the means to capture, preserve, and provide access to digital objects” (Brown, 2013: 15), where “staff is the most important part” (106) would be ideal in this case, however is something well envisioned but not viable in practical terms. A primary concern that drives the whole proposal is to create adequate documentation of preservation practices in order to make the preservation choices explicit and transparent, in order to aid future projects. This would mean documenting all technical decisions, errors and impediments, investments made, the time spent in each phase and so forth.

Next, the selection and assessment of the material should be implemented. In theory, the collection could comprise any video or photo of the demonstrations in Rio de Janeiro in 2013 and 2014, and above-mentioned, related documentation – such as YouTube pages, Facebook events –, created by amateur individuals and media collectives. Among the technical considerations for selection of material is to check “content infected by malware, damaged media, obsolete or unusual media, obsolete or unusual formats, inadequate documentation, large data volumes” (Brown, 2013: 117). Content from the Internet would be archived with any of the tools mentioned in Subchapter 2.2. Following on from that it is necessary to create an archival system based on participatory archiving.

One vital element is to study video and photo file container formats, and to establish containers criteria, taking into account current standards. The next step would be to transcode materials according to the established specifications. The file containers produced from amateur video equipment and semi-professional cameras can vary through MOV, AVI, WMV, FLV, MPEG, mostly MP4, and its mobile

version 3GP, among others. Photo file formats have JPEG as a compressed file standard, but there are many formats for non-compressed files, and each camera manufacturer provides a specific type of file format¹⁷⁰. Along with the file container, there are various parameters that must be evaluated in video files in order to meet quality criteria, such as codecs, frame rates, aspect ratio, resolution, and bitrate. For preserving purposes, it is recommended to store non-compressed files. There are several reliable open-source video and photo transcoders such as HandBrake¹⁷¹ and Converseen.¹⁷² The standardisation implemented during transcoding is an important element in preventing file-type obsolescence and to avoid future inaccessibility of files.

A Brazilian filmmaker asked NINJA for images of demonstrators throwing pieces of Portuguese pavement at the police. The images would be used in a documentary about the urban use of this paving. Also, the filmmaker Gabriel Mascaro asked for images of police officers recording demonstrators for a media artwork¹⁷³. In both cases NINJA was not able to provide the exact images because the material was not yet catalogued according to its content and was comprised of numerous folders and files with the event and date information being the only identifying marker for this vast amount of material. So one strenuous and fundamental phase of the preservation plan is cataloguing the collection. Cataloguing is an organised and descriptive way that any material can be found, used, and collated, and along with embedded metadata, descriptive information about the events, the content, technical data, and rights data should be used when demarcating the footage. In the Participatory Archiving's configuration, users could describe some of these properties.

Cataloguing allows the search and description of materials, verifies its authenticity, allows future use of the material as legal evidence, but primarily allows its future use *at all*. Also, considering the adverse conditions when shooting, the quality of the image in terms of steadiness and focus should be well-described. The cataloguing process will involve checking if the embedded metadata of videos and photos is valid and relevant, with a strong focus on date-stamping, geographical location, and also file naming. WITNESS's Activists' Guide to Archiving Video (2013) indicates that "retaining the filename is part of maintaining the original order, which is important for evidence and contextualisation [and], some complex video formats rely on the original filename to function properly". In order to allow an

¹⁷⁰ See http://www.digitalpreservation.gov/formats/fdd/still_fdd.shtml, last accessed on 28th December 2014.

¹⁷¹ See <https://handbrake.fr>, last accessed on 28th December 2014.

¹⁷² See <http://converseen.fasterland.net>, last accessed on 28th December 2014.

¹⁷³ *Não é sobre sapatos (It Is Not About Shoes)*, Dir. Gabriel Mascaro, 2014, 16 min.) presented at the 31st São Paulo Art Biennial. See <http://www.31bienal.org.br/en/post/1525>, last accessed on 15th November 2014. The difficulty in accessing the images made by police forces and the images acquired were the ignition for the media artwork.

organisation of the files, it would be necessary to organise the files into a coherent folder structure, indicating its contents, and basic information such as date of event, event information, type of material (if raw or edited) and other pertinent information.

One puzzling element in preservation is the identification of the rights-holder and the authority for copyright clearance. In the Mosireen case, the usage of the assortment of materials was made possible because “all footage [...] has a licensing arrangement in place with the rights holder”¹⁷⁴. This could not be feasible in the Rio de Janeiro demonstrations collection as ownership is deliberately attributed an anonymous media collective. “This social and cultural phenomenon of co-creatorship entails a shift of the traditional paradigm of the organic nature of records and the principle of provenance” (Ketelaar, 2008: 14-15). One possible solution is to designate rights to the media collective, using *copyleft* as a licensing model, as established by CMI-Rio.

After the assessment, selection, transcoding, cataloguing, and copyright process, the next stage is to back up the material, generating “three copies in three different storage locations: primary storage, an onsite backup, and an offsite backup” (WITNESS, 2013: 49). The usage of cloud storage is recommended for small collections (DCA, 2013: 28), and therefore is unlikely to be an option in this case. After copying files, it is important to ensure file stability, comparing the file’s checksum value with a previously computed checksum. This is routine when archiving digital collections and is made possible by programs like the open-source Checksum Checker, developed by the National Archives of Australia. This tool can alert any file corruption.

One recommendation would be to have the primary storage and onsite backup in external drives, and the offsite backup as LTO tapes; if possible, at least two tapes. As a suggestion, WITNESS could be a repository of one of the tapes; one way of ensuring the long-term preservation of such a collection. It would then be necessary to outline access strategies for the collection, taking into account the “user expectations of extensive interactivity” generated by “digital technology and high speed network[s]” (Besser, 2001: 3). In other words, this would mean making the information available online, preferably with both low-resolution material for reference only, but also high-resolution. This would imitate Mosireen’s practices, which offer both reference files and high-resolution videos.

On the whole, the first phase of the proposed preservation practice consists of selection, assessment, the physical gathering of materials, downloading Internet content, transcoding, cataloguing, copying files and backing them up, sending one

¹⁷⁴ See <http://arabist.net/blog/2012/8/16/mosireen.html>, last accessed on 28th December 2014.

copy to an institution. These actions can be seen as short-term preservation measures. Considering updating and migration to avoid software and hardware obsolescence, medium and long-term preservation measures will have to be implemented. These measures seem unlikely to be developed by autonomous individuals and collectives. The collection could be integrated into the preservation and migration practices of an institution that could be the offsite, one that may have a non-custodial copy of the collection. Preservation of digital material is an ongoing practice that must deal with ongoing updating of hardware and software. In other words, “in order to maintain the data content the equipment has to be exchanged and checked every now and again, in order to avoid losing access to the data” (DCA, 2013: 3-4).

This harks back other minimum requirements listed in this chapter, *infrastructure* and *expertise*. *Guidelines for the Preservation of Digital Heritage* by UNESCO points out that “the systems and tools likely to be required include those for: storing and managing the collection material, storing and managing metadata, managing the transfer of material to the collection, storing and managing accessibility tools such as original software, plug-ins, conversion and emulation programmes, searching by users, making appropriate copies available for users” (UNESCO, 2003: 58), among others. Having been aimed at audiovisual institutions, these requirements mean that this preservation practice is only possible when the minimum equipment is available. One possible technical solution would be to use equipment belonging to one or more already-operational institution, and so I will indicate few possibilities.

The earlier-mentioned MediaLab - UFRJ hosts Hacklab, an open laboratory for partnerships. This could be a place to gather all materials. This solution could also help consolidate materials already collected by Hacklab for the project *Atlas dos #PROTESTOSBR*, announced in early 2014 but not yet publicised. Another option could be the midsize production company TvZero, where only one person would need to be in charge of the collection. Established in 1991, TvZero is a local preservation point for its own productions¹⁷⁵ and recently established a secure server and LTO drive, but most importantly a routine of copying and backing up their digital collection – both digital born and digitised material. TvZero balances low-budget productions with blockbusters, and its executive producer opens their facilities to other media outlets and is willing to provide external drives and LTO tapes to secure a larger collection¹⁷⁶. Yet another option is the technological and art residency Nuvem, which describes two of its foci as “sharing the physical and virtual space: content

¹⁷⁵ While some large and midsize production companies throughout the 1980s and 1990s lost part of their production or stored in inappropriate spaces, TvZero already had the preservation concern and practices, implementing acclimatized spaces in-house for their catalogued material, and also sending materials to film archives.

¹⁷⁶ Information obtained by Email and Skype conversation in end 2014, and meeting in early 2015 at TvZero.

networks, mapping, cartographies, on-line documentation; and reaching the local community through learning activities, in the artistic research processes and the creation of content on digital networks”¹⁷⁷.

On the one hand, the university seems most suitable for a multi-actor project. This conclusion is supported by their previous project on mapping images from demonstrations in June 2013. On the other hand a production company with the latest technology and the will to finance the project also seems an appropriate solution. Still, Nuvem could provide a place and the expertise for the development of customised tools for cataloguing and archiving the collection.

Altogether, the preservation proposal is comprised of the following phases:

1. Creating the concept of a collection out of diverse and dispersed materials, identifying and collecting:
 - a. Audiovisual material;
 - b. Still images;
 - c. Related Internet pages.
2. Meeting the minimum requirements to build a digital preservation endeavour, in terms of:
 - a. Motivation;
 - b. Means:
 - i. Expertise;
 - ii. Financial resources;
 - iii. Infrastructure;
3. Establishment of an archiving model based on *Participatory Archiving*;
4. Technical assessment of the material;
5. Establishment of containers, standards and transcoding/transcoded materials;
6. Cataloguing:
 - a. Checking metadata;
 - b. Creating metadata.
 - c. Creating online open tools for content description;
7. Organising, archiving and creating back-ups, in partnership with an operational institution;
8. Placing copies in different locations;
9. Creating access strategies;
10. Documenting the preservation choices from all phases indicated above.

¹⁷⁷ Described as “1) Rural platform dedicated to experimentation, research and creation processes connected to technology and sustainability; 2) A house for meetings and debates for the diffusion of open knowledge and autonomous culture; 3) Center for residencies and self-residencies for artists and project makers; 4) Telecenter; 5) Rural hacklab”. See <http://nuvem.tk/?start-english>, last accessed on 19th January 2015.

3.4. Conclusion

On the whole, this proposal is designed to transform the abundant and widely dispersed materials with irregular access into a secured *collection*, to be preserved and allow guaranteed access through strategies yet to be developed, in the short-, medium- and long-terms. As described earlier, there are several challenges to this, beginning with the motivation to work with material already year(s)-old, and to find the means to do so (i.e. the expertise, financial resources, and infrastructure). Three organisations were targeted to realise the logistics of gathering, cataloguing and creating copies of the collection. Also, the Participatory Archiving model was presented as the most suitable for the preservation of amateur digital records of public demonstrations in 2013/2014 in Rio de Janeiro.

Because of the great geographical and temporal distance to the subject, this proposal is a speculative exercise. The methods proposed necessitate expressly the involvement of someone on-site, someone that would be a driving force in implementing this proposal. Preserving the collection can be seen as a major endeavour, but is an essential part of preserving Brazilian audiovisual heritage.

Conclusion and further perspectives

“A society’s need to remember is balanced against its desire to forget, to leave the memory behind and put the event out of mind”. (Foote, 1990: 385)

The desire to forget Brazil’s national large-scale demonstrations in 2013 and 2014 has the driving forces of several official instances, such as archival institutions, the mainstream media, and governmental agencies. Demonstrators challenged official forces not only with their actions but also by recording and sharing the recordings of their action. These recordings should be preserved as key components in understanding a historical moment through a counter-history element, following Foucault’s concept. Moreover, the police system in Brazil is a remnant of the military dictatorship that was in power from 1964 until 1985, and the records of police brutality, arbitrariness and harassment are a vital marker of the maturation of the democratic process, as well as engendering a human-rights element to this documentation.

The demonstrations in Brazil started against a raise in bus fare, and soon after became a groundswell against a multitude of dissatisfactions: government corruption, and the demand for better health and education systems. The records of the demonstrations are also a testimony of the pluralism of voices on the streets, a crisis in political representation and partisan orientation of left and right, and social, racial gender representations. Therefore, the images can be seen as an important segment of the Brazilian audiovisual heritage, a tool for the development of the democratic process that started in Brazil in the 1980s, and also a document of the pursuit of the development of Brazilian human rights.

The aim of this dissertation has been to describe and discuss the social and historical contexts of the demonstrations in Rio de Janeiro in 2013 and 2014, and the role of images made by individual demonstrators and media collectives. This thesis has addressed the historical process of collective filmmaking, as well as the collective records of media activists. Also, considering that the images are inscribed in amateur production, this thesis has conferred a micro-history aspect, following Ginzburg’s theory. The images of the demonstrations become relevant because they can be seen as models of history and archives of anonymous and ordinary life narratives, in contrast with the history created by official institutions.

The uprisings and protests seen globally erode the fragile boundary between freedom of individual expression and government control. Therefore, the records of demonstrations are a crucial testimony of the democratic process. Additionally, in the Brazilian case, the state-of-emergency implemented during international sport events, the demonstrations against the 2014 World Cup and 2016 Olympics Games can be viewed as a matter of global interest, not only as a local one as seen in the images of,

and documents about, the demonstrations. This larger interest creates a pressing need for a preservation strategy for the amateur footage of the demonstrations.

This thesis has examined the work of media activists as organised ‘prosumers’, here connected to Participatory Culture and New Media studies. For this purpose, two case studies were examined, concerning working mode and preservation challenges, i.e. NINJA and CMI-Rio. Both are media collectives with a nationwide presence in Brazil, but with particularly strong operations in Rio de Janeiro. This thesis also examined amateur footage as points of legal and historical evidence, a practice that became evident through the Zapruder footage of 1963, the Rodney King videotape in 1991, and the work of media activists since the 1990s covering protests worldwide. The recording and documentation practices of demonstrations and uprisings in Spain and Egypt, mainly the projects created by 15M.cc and Mosireen, are key in understanding current forms of acknowledgement of those movements created by the same actors responsible for the images. Moreover, the research was based on interviews and two technical surveys.

Furthermore, I briefly examined current digital preservation studies and practices in order to develop a preservation proposal, and identified Participatory Archiving as a model to be implemented. The digital preservation of any collection is a costly practice involving in the first instance the acquisition of equipment, drives, tapes, human labour needed assessing and cataloguing, among many others. Then updating and migration plans are needed so the collection can be accessed in the medium- and long-terms. The primary challenge to the preservation proposal for images from demonstrations in Rio de Janeiro is to create the concept of *collection* out of diverse and widely dispersed productions. On the whole, any preservation plan for these records seemed unfeasible at first glance. This encouraged me to work on this thesis, and to offer a contribution to the preservation of recent Brazilian heritage.

The more I searched and worked with digital preservation, the stronger became my feeling that this area is unstable, its practice full of mysteries and problems that may arise at any moment. Also, the benefit of a 30-year life span of an LTO tape, considered supreme among digital preservation standards, seems to me dangerously insignificant in the long term. This personal view was bounded by notable constraints. This author is extraneous to the group, and although I conducted interviews with a few actors involved with the demonstrations, an external proposal may be received with suspicion, mostly borne out of past political harassment. Moreover, since the demonstrations in Brazil are still taking place in 2014 and early 2015, and the object of this thesis is a current theme, this thesis is in danger of excluding preservation practices that are being developed and are yet to be revealed.

The geographical distance between the author and this thesis' object reinforces this limitation.

This thesis shows the importance of preserving and creating access strategies for amateur digital records of public demonstrations in 2013 and 2014, in the context of media activism in Rio de Janeiro. It has proposed methods that may apply to the preservation of records of these demonstrations. Yet its execution requires leadership by someone on-site to effectively implement the proposals herein. I hope this implementation becomes a part of further activities arising from this thesis. Having said that, further perspectives would include an active research module involving direct contact with the actors responsible for creating the images, in order to create an open call for images, and to apply the preservation proposal in situ.

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Appendices

Appendix 1. Source of images

Figure 1 - <http://pensologodesisto.net.br/2015/01/10/por-uma-vida-sem-catracas>

Figure 2 - <http://www.cbsnews.com/pictures/photos-of-the-week-11-7-14/14>

Figure 3 - <http://officialmlkdream50.com>

Figure 4 - <http://photosofwar.net/13186/young-pacifist-jane-rose-kasmir-planting-a-flower-on-the-bayonets-of-guards-at-the-pentagon-during-a-protest-against-the-vietnam-war-on-october-21-1967>

Figure 5 - <https://libcom.org/gallery/france-1968-photo-gallery>

Figure 6 - http://en.wikipedia.org/wiki/Tank_Man

Figure 7 - http://en.wikipedia.org/wiki/Zapruder_film

Figure 8 - <http://wanderingeyes.weebly.com/home/on-this-day-in-history-rodney-king-savagely-beaten-by-the-lapd>

Figure 9 - http://inguol.com/c/noticias/2013/07/18/18jul2013---um-grupo-de-policiais-da-tropa-de-choque-disparam-balas-de-borracha-contr-manifestantes-violentos-durante-os-protestos-contr-a-governador-do-rio-de-janeiro-sergio-cabral-uma-reuniao-de-1374192072258_1920x1080.jpg

Figure 10 - <http://digno.net/ideias-de-cartazes-para-manifestacao-do-brasil/>

Figure 11 - <http://g1.globo.com/rio-de-janeiro/noticia/2013/06/nao-vamos-proteger-policia-nem-vamos-proteger-vandalos-diz-cabral.html>

Figure 12 - <https://www.youtube.com/watch?v=hMs7ZQq8Kiw>

Figure 13 - <http://g1.globo.com/platb/yvonnemaggie/2013/07/18/a-midia-ninja>

Figure 14 - <https://www.youtube.com/watch?v=QtuT1ZeYCOk>

Figure 15 - <http://mortoseferidosnosprotestos.tk/>

Figure 16 - <https://www.youtube.com/watch?v=-nsWplOfTSc>

Figure 17 - <http://archiveguide.witness.org>

Figure 18 - <http://coletivocarranca.cc>

Figure 19 - <https://www.youtube.com/watch?v=tqRcuiaYWZI>

Figure 20 - <https://www.facebook.com/events/182780045218967>

Appendix 2. Abbreviations and acronyms

ABPA - Brazilian Audiovisual Preservation Association

CMI - Centro de Mídia Independente

DCI - Digital Cinema Initiative

FBI - Federal Bureau of Investigation

FIAF - Fédération Internationale des Archives du Film

FIFA - Fédération Internationale de Football Association

G8 - Group of Eight

IMC - Independent Media Center

MPL - Movimento Passe Livre

LTO - Linear Tape-Open

UFRJ - Federal University of Rio de Janeiro

UN - United Nations

UNESCO - United Nations Educational, Scientific and Cultural Organization

WTO - World Trade Organization

Appendix 3. Websites of mentioned organizations and institutions

15M.cc - <http://www.15m.cc>

15Mpedia - <http://wiki.15m.cc>

ABPA - <http://www.abpreservacaoaudiovisual.org>

Activists' Guide to Archiving Video - <http://archiveguide.witness.org>

Advogados Ativistas - <http://advogadosativistas.com>

Agrega La - <http://www.agrega.la>

Artigo 19 - <http://artigo19.org>

Associação Brasileira dos Advogados do Povo - <http://abrapo.org.br>

Atlas dos #PROTESTOSBR - <http://medialabufrj.net/mnemopolis>

CMI-Brasil - <http://www.midiaindependente.org>

CMI-Rio - <https://cmirio.milharal.org>

Facebook - <https://www.facebook.com/indymediario>

Twitcasting - <http://us.twitcasting.tv/cmirio>

Twitter - <https://twitter.com/CMIRio>

YouTube - <https://www.youtube.com/user/midiaindependente>

Columbia University Libraries's Center for Human Rights Documentation & Research - <http://library.columbia.edu/locations/chrd.html?3>

DatAnalysis15m - <http://datanalysis15m.wordpress.com>

Fora do Eixo - <http://foradoeixo.org.br>

Globo Comunicação e Participações S.A. - <http://globoir.globo.com>

Jornal O Globo - <http://oglobo.globo.com>

Rede Globo - <http://redeglobo.globo.com>

IMC - Independent Media Center / Indymedia - <http://www.indymedia.org>

International Institute of Social History - <http://socialhistory.org>

Justiça Global - <http://global.org.br/en>

Madrid 15M - <http://madrid.15m.cc>

Mapping the Commons of Rio de Janeiro -

<http://mappingthecommons.net/en/mapping-the-commons-of-rio-de-janeiro>

Media Lab UFRJ - <http://medialabufrj.net>

Mídia NINJA - <http://www.midianinja.org>
Facebook - <https://www.facebook.com/midiaNINJA>
Flickr - <https://www.flickr.com/photos/midianinja>
Twitcasting - <http://us.twitcasting.tv/midianinja>
Twitter - <https://twitter.com/midianinja>
YouTube - <https://www.youtube.com/user/canalpostv>

Mosireen - <http://mosireen.org>
Vimeo - <http://vimeo.com/mosireen>
YouTube - <http://www.youtube.com/mosireen>

Mortos e Feridos nos Protestos - <http://mortoseferidosnosprotestos.tk>

Movimento Passe Livre - <http://www.mpl.org.br>

Nuvem - <http://nuvem.tk>

Rafucko - <http://rafucko.com>

Riseup.net - <https://help.riseup.net>

Tahrir Documents - <http://www.tahrirdocuments.org>

Telegram - <https://telegram.org>

Tor - <https://www.torproject.org>

TvZero - <http://www.tvzero.com/home/?lang=en>

TwitCasting - <http://us.twitcasting.tv>

University of Texas Libraries Human Rights Documentation Initiative -
<http://www.lib.utexas.edu/hrdi>

Vinhetando - <http://www.facebook.com/vinhetando>

WITNESS - <http://witness.org>

Appendix 4. Interviews

Alessandra Castañeda, André Videiros, Arthur Bezerra, Carolina Christoph Grillo, Diogo Lyra, and Livia reis, from Vinhetando, on 2nd June 2014 (by Skype).

Member of CMI-Rio, on 10th June 2014 (by Skype).

Mostafa El Yamany, on 3rd June 2014.

Paula Daibert and Thiago Dezan, from Mídia NINJA, on 20th August 2014 (by Skype).

Priscila Neri, from WITNESS, on 4th June 2014 (by Skype).

Yvonne Ng, from WITNESS, on 20th June 2014 (by email).

Appendix 5. Questionnaires

Operation of media collectives in Brazil

6 responses.

Main topics: Type of operation of the media collective (photo and video recording, sharing, editing, artistic intervention, creation of articles, etc.) / Number of regular participants / Number of participants that make photo and video records / Censorship and/or seizure / Interactions with other groups / Details about equipment and number of video and photos (quantity, hours and storage) / Content loss (for storage sake, equipment seized, etc.) / Copies and back up.

The use of LTO as archival medium in audiovisual institutions in Brazil

12 responses.

Main topics: Which LTO generation? / Year of implementation / Generation update / Copies and back up / Type of content stored / Specifications of the content, number of hours and tapes / Storage conditions.

Acknowledgments

Foremost, I am immensely grateful to my supervisor Christian Olesen, for his endless patience during the research and writing process, his expertise, and his elegant and consistent feedback.

I am thankful to Dr. Marijke de Valck for her guidance during the Preservation & Presentation of the Moving Image (P&P) program and this thesis' evaluation. My thanks are also extended to professor Dr. Alexandra Schneider, who gave me the idea for this thesis in one of her striking classes; and to Simon van Asch and Tessa Gerson from Media Studies administration, because of her essential aid in practical issues.

I thank the staff of EYE Filmmuseum where I did my internship as part of the P&P program, particularly Anne Gant, Anna Hoetjes, Irene Haan and Jeroen de Mol. The experience at EYE allowed me to better understand the digital media, and this was vital for the writing process.

I also thank Imogen Moore for the thorough revision, and Anna Nagelbach for early proofreading.

My deepest gratitude to every person who replied the questionnaire and whom I interviewed, in particular Priscila Neri, Rodrigo Letier, and my muse Alessandra Castañeda.

I thank my remote and nearby friends for enlivening my life, for our prolific conversations and the never-ending fun, especially Ana Luiza de Abreu, Carien van Aubel, Geli Mademli, José Quental, Marcia Mansur, Mayra Sérgio; and Barbara Rangel, who encouraged me to apply to P&P program.

I want to express my most profound gratitude to my family, especially my dear parents Jayme and Rachel, for the support to follow the P&P program, which made me immensely happy and fulfilled.

Finally, I thank Rodrigo, who created the best distractions and delays for this thesis in our moments together, and for our long and not-boring-at-all book of love.