

# FLOSSTV

**Free, Libre, Open Source Software (FLOSS)  
within participatory 'TV hacking' Media and Arts Practices**

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I hereby confirm that the work presented is my own:

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*Adnan Hadziselimovic, April 2012*

## **Abstract**

This research operates in the context of a European political discourse, where the main concern is counter-cultural approaches to non-mandatory collaboration and contractual agreements. FLOSSTV (Free, Libre, Open Source Software TV) covers a broad range of practices, from television via documentary up to media arts productions. This thesis documents the endeavour to formulate a policy for FLOSS culture. FLOSSTV studies the impact of new intellectual property legislation on media production, as well as conceptions and applications of collective authorship and alternative licensing schemes.

FLOSSTV sets out to explore methods that can facilitate media and arts practitioners wishing to engage in collaborative media productions. The thesis sets out to investigate the theories and histories of collaborative media and arts productions in order to set the ground for an exploration of the tools, technologies and aesthetics of such collaborations. The FLOSSTV thesis proposes a set of contracts and policies that allow for such collaborations to develop. It is through practice that this research explores FLOSS culture, including its methods, licensing schemes and technologies. In order to focus the research within the field of FLOSSTV I initiated the practice-based Deptford.TV pilot project as the central research experiment for the FLOSSTV thesis. DVD ONE contains a series of films produced collaboratively for Deptford.TV that express the characteristics and contractual arrangements of FLOSS culture.

Deptford.TV is an online audiovisual database primarily collecting media assets around the Deptford area, in South-East London, UK. Deptford.TV functions as an open, collaborative platform that allows artists, film-makers, researchers and participants of the local workshops in and around Deptford, and also beyond Deptford, to store, share, re-edit and redistribute their footage and projects. The open and collaborative nature of the Deptford.TV project demonstrates a form of shared media practice in two ways: audiences become producers by submitting their own footage, and the database enables the contributors to interact with each other. Through my practice-lead research project Deptford.TV I argue that, by supporting collaborative methods and practices, FLOSS (Free, Libre, Open Source Software) can empower media and arts practitioners to collaborate in production and distribution processes of media and arts practices.

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## **CHAPTER ONE**

### **Introduction**

FLOSSTV Practice and Theory

## 1. Introduction

### 1.1. Collaborative Media and Arts Practices

Currently the term 'social media' refers to commercial enterprises, such as Facebook, MySpace, Youtube, etc., hosting and serving User Created Content (UCC). One might argue that 'social media' in regard to the notion of User Created Content is a misleading label as it uses the word 'social' which I propose should be about being 'social', benefiting society, within media practices rather than being 'for profit'.

What is common to most of the definitions of 'social media', according to research by the Centre for Social Media (American University 2001), is that in situations of social interaction technologies are used in order to collaborate on the creation of value. 'Value' is a critical notion the meaning of which varies greatly: value for the commercial service provider, as in 'for profit', or value to the community as a 'service provider', as in benefit. This research will contribute to the latter tradition. In this respect Tim Berners-Lee warns that:

The Web as we know it... is being threatened in different ways. Some of its most successful inhabitants have begun to chip away at its principles. Large social-networking sites are walling off information posted by their users from the rest of the Web ... Your social-networking site becomes a central platform—a closed silo of content, and one that does not give you full control over your information in it. The more this kind of architecture gains widespread use, the more the Web becomes fragmented, and the less we enjoy a single, universal information space. (2010)

Even so, as Berner-Lee stated in his keynote speech (2010) during the Open Government Data Conference, there remains a window of opportunity for digital networks, mainly the internet, to allow for the sharing of knowledge and culture through linked data. Currently computers “cannot read or manipulate the actual data within those documents. As this problem is solved, the Web will become much more useful, because ... within all these data is knowledge about how to cure diseases, foster business value and govern our world more effectively” (2010). Lev Manovich (2010) points at the *Tubemogul* report which suggests that these services do not in fact fulfil their claim of User Generated Content (UGC), as only 17% of the content distributed/broadcast is in fact generated by users.

Unfortunately this sharing of knowledge, data and culture might soon be restricted to these centralised commercial services (A. Hyde et al. 2011), offering User Generated Content. My research suggests ways of putting the 'social' back into the term 'social media' by asking:

what methods can facilitate media and arts practitioners wishing to engage in collaborative and participatory media productions?

Therefore the thesis starts with a *Contextual Review* which investigates the theories and histories of such collaborations in the light of emerging production and distribution technologies, by asking how one can re-think the history of emancipatory media in comparison to contemporary participatory cultures.

In the chapter *Contracts* I ask how such participatory cultures would apply alternative licensing schemes, open legislations and open contracts? I discuss possible policies and contracts for a FLOSS culture allowing for such collaboration to develop. But I also discuss how intellectual property legislation hinders creativity by focusing copyright laws on media consumption (economy) rather than on production (education, social and cultural capital). I explore alternatives in the form of different open (free) content models. I examine how open content licenses are being applied to media productions and media art projects, and discuss the possible effects this application is likely to have on the distribution of such content.

This leads on to the question: what would such a form of media and art practice look like? To address this question I discuss in the chapters *FLOSSTV Methods* and *FLOSSTV Practice* the tools, technologies and aesthetics of such collaborations. The central focus here lies on practice as research, demonstrated through the Deptford.TV project, where code has been re-designed in order to facilitate such a practice.

Finally I pose the question: what are the issues with such participatory practices? And more specifically, what are the technical and legal issues connected with such collaborations? Drawing on the conclusions reached concerning those issues I ask how the facilitation of such practices, as experimented with throughout the FLOSSTV research, could be improved when applied within future collaborative arts and media practices.

## 1.2. Free, Libre, Open Source Software (FLOSS)

Free/Libre/Open Source Software (FLOSS) can be used, copied, shared, modified, and redistributed with little or no restriction, always allowing free access to its source code. (Mansoux & de Valk 2008)

FLOSS refers to *Free Software* (Stallman 1983) and *Open Source Software* (Raymond 2000). The term FLOSS is often used to bridge the ideological divide between the *Free Software* and the *Open Source Software* movements. It is a useful term for those who do not want to align themselves with any one group's ideology, thus alienating the other (Hillesley 2011). The *Free Software Foundation* (1996) defines four freedoms important to *Free Software*: the freedom to use the software for any purpose, freedom to study and modify its source code, freedom to share and redistribute the software, and the freedom to improve the software and release your version of it to the public. In the film *Revolution OS* (Moore 2001) Richard Stallman explains that:

Free software refers not to price but to freedom, so think of free speech, not free beer. The freedoms that I'm talking about are the freedoms to make changes if you want to, or hire somebody else to make changes for you, if you're using a software for your business, to redistribute copies, to share with other people and to make improvements and publish them, so other people can get the benefit of them too. And those are the freedoms that distinguish free software from non-free software. These are the freedoms that enable people to form a community. If you don't have all these freedoms, you're being divided and dominated by somebody.

The *Open Source* movement, on the other hand, defines itself not through the freedoms a user gains but through emphasising the advantages of peer-to-peer-developed code. The FLOSSTV research applies both aspects of FLOSS methodologies to practice-based arts and media production. As FLOSS systems do not depend on ownership of intellectual property rights (i.e. ownership of the source code), they do not require the granting of any permission for their use. Because the Deptford.TV project is experimenting with the use of alternative licensing schemes, such as the *Free Art License* (d'Alverny 2000), the Creative Commons' *Attribution-Share Alike License* (2008) and the Free Software Foundation's *General Public License* (2007) everybody who can access Deptford.TV is guaranteed the possibility of re-using the methods and the tools developed within its context. This demonstrates the key principles of the Free Software Foundation (2009).

### 1.3. TV Hacking as Media and Arts Practice



Fig. 1-1. Illustration by Critical Art Ensemble, to be found in the book *Digital Resistance* (Critical Art Ensemble 2000, p.28). Anti-copyright.

We have to imagine and cultivate heretofore untested forms of meaningful participation (and the conditions that might make the actual) against the background of the versions of participation on offer. We need to mine the contradictions embedded in a commercial information culture that exploits the promise of democracy as a means of furthering strategies of consumer and citizen management. Rather than dismissing the potential of interactivity out of hand, we need to turn this promise back against the forms of interactivity it has helped promote ... In the interactive era, it is also no longer a question of submitting to prefabricated forms of participation, but of restoring the democratic possibilities of participation. (Andrejevic 2007, p.268)

In addition to the intervention into the field of emerging alternative public spheres, a further methodological paradigm that has been key in the development of the FLOSSTV research project is that of 'hacking' (Lin 2007). Eric Raymond and Guy Steele define hackers, as people who enjoy “the intellectual challenge of creatively overcoming or circumventing limitations” (2003b), in order to solve problems and build things, who believe in freedom and voluntary mutual help. The hacker mindset is not confined to the software-hacker culture (Bernhard 2009). There are people who apply the hacker attitude to other things, like electronics, music, or even science and art. In the *Jargon File*, a hacker dictionary, Raymond states that “software hackers recognize these kindred spirits elsewhere and may call them ‘hackers’ too — and some claim that the hacker nature is really independent of the particular medium the hacker works in” (2001). But as Amy Alexander noted on the mailing list *nettime*, in her article *Hackers: the political heroes of cyberspace*, “not all hackers will agree with what the Jargon File has to say ... , but ... it presents a decent insight into hacker psychology, and the stereotypes are at least a little less closed than the 'boring computer nerd' variety” (2001).

To me, the spirit of hacking is about exploring, problem-solving, and embarking on adventures. I see hacking as a possibility for users to discover new, 'unexplored' worlds. For the Deptford.TV project participants become hackers: in the same way that hackers and coders of the open source/free software movement are sharing the source codes of their programs under a 'copyleft' license (Liang 2004), the participants of the Deptford.TV project share their video source codes. By the term 'video source code' or 'TV code' I refer to the raw film material plus the metadata created by logging and editing this raw material. The various Deptford.TV projects, together with their raw materials and metadata, become the source code of Deptford.TV, which undergoes an editing process, or a digital bricolage, at the hands of its participants. Janet Harbord discusses the bricolage within the post-production process in her book *The Evolution of Film – Rethinking Film Studies* by starting with a quote from Miriam Hansen: “Digital technologies such as computer enhancement, imaging, and editing have shifted the balance increasingly toward the postproduction phase, thus further diminishing the traces of photographic, indexical contingency in the final product” (1997, p.vii).

The work of editing, unlike enhancement, does not concern the distinction between what has been recorded and what has been simulated, but it does transform the concept of film from another direction. For, if the balance of production as a site of meaning shifts towards postproduction, the idea that the meaning of an image lies within its own frame becomes disputable, or put into crisis. In the process of editing, sequences of images are put into relation with each other, and it is the relation, as a type of hinge between one shot and

the next, that fires signification. The emergence of what, in the sphere of art criticism, Nicolaas Bourriaud (1998) has termed 'relational art' (Harbord 2007, p.88)

The Deptford.TV project experiments with collaborative post-production methods, such as applying TV hacking to media and arts practices, through the use of free and open source software. This collective approach to production merges the processes of script-writing, filming, editing and distribution, as the users are shooting, editing and viewing the productions simultaneously. Some projects never finish with the traditional final cut fixed version but remain open-ended. Harbord reflects on this notion of editing (which I argue can be found such types of projects as the Deptford.TV project) and refers to it as 'temporal art': "Editing as assemblage, a bringing together of parts into unforeseen relations, requires us to think about film's spatial manipulations, as a fabric that threads itself across space linking atomized images and producing new lines of connection" (2007, p.80). TV hacking is an act of producing television 'together', to "establish a temporary hybrid media lab" (Combiotto & Smoljo 2004). TV hacking raises the question of how interaction itself might be managed and produced, through the implicit and habitual ways of producing television. If power generates new opportunities rather than simply repressing them, then, following Michel Foucault (1980), more interaction and participation can extend and not simply challenge power relations. So far television has been the most regulated medium and holds enormous power over the field of cultural production and even artistic practices. Maybe the web will be more rigorously regulated, through a heavy commercial re-territorialisation. A good example is *Apple* which, with its *iPhone* and *iPad* products, applies strict control (Holwerda 2011) over who is allowed to publish on its *iTunes* platform, let alone produce applications for those platforms. Bourdieu argues in favour of "collective attempts" (1998) from within academia in order to resist the power of television. I would go further than Bourdieu's call by arguing that the current window of access to the internet as an 'unregulated' medium offers academia a way to establish a media practice which could very well be informed by the FLOSSTV methods outlined in this thesis.

The internet is being subjected to various attempts at control by large-scale commercial corporations. The *MP3* music file-sharing platform *Napster* (Carlsson & Gustavsson 2001) is an early example of a service that began as a peer-to-peer network but became centralised. The 'information commons' (Besser 2001) could in these instances be seen as disappearing due to the assertion of strong intellectual property

rights. In this respect, the industry is lobbying for changes in copyright law, in order to benefit from stronger regulation of otherwise unregulated practices. Under this regime it is likely that the use of creative material will become more and more a privilege of those who can afford to pay for its rights – thus automatically restricting the access to living archives. The media industry depicts a prospective future of decreasing profits due to digitisation, in order to force through draconian laws which generally benefit the copyright holders and weaken the public sphere (Besser 2001).

#### **1.4. Deptford.TV and Database Film-Making**

A 'conception' of the 'beauty' of a database is not located in the viewer's interpretation of a static form but in the dynamics of how a user inflects the database through interaction with its field or frame. A database incorporates contradiction; it is simultaneously recombinant and indexical, precise and scalable, immersive and emergent, homogeneous and heterogeneous. It is a field of coherence and contradiction. The aesthetic dimensions of the database arise when the user traverses this field of unresolved contradictions. (Daniel 1999)

Through the Deptford.TV project I put the FLOSSTV theories and ideas into practice, discuss its concept, objectives and technicalities. I established Deptford.TV in 2005, in collaboration with James Stevens' initiatives *Deckspace* media lab (2001) and the *Open Wireless Network, OWN* (2009), as well as with the media art collective !Mediengruppe Bitnik (2002), and Jonas Andersson's *Liquid Culture* initiative (2005).

Deptford.TV exists as an intervention into the public sphere and the public domain. I work together with artists, film-makers, students and people living and working in Deptford. All of these people can join the project not only as audiences but also as co-producers, in order to collectively document the process of change in the Deptford area, and/or to produce media art beyond the historical borders of Deptford. Since 2005 I have worked, and continue to work, with more than 120 participants.

For the FLOSSTV research I borrow the term 'living archives' from Saul Albert who defines it as “archives of public interest, providing material or documenting events and processes that are otherwise invisible to official sources of historical and archival authority. They are also subjective, specific to the practices of each group, individual and project which produces and catalogues the material in the archive” (2006). Public



broadcasters have recently made attempts to initiate living archive projects such as the BBC's *Creative archive* (2005) or Channel 4's *4docs project* (2009), but have faced enormous problems with the intellectual property licensing situation (Free Culture UK 2007). That is a result of the fact that the public broadcasters are implicated in the “ownership society” (Besser 2001), and, as such, are almost only able to produce proprietary media content rather than public domain or copylefted content (Forrester 2004).

The Deptford.TV practice produces 'copylefted' content (Liang 2004) - i.e. content allowing for participants to use each other's assets and share their project files. A selection of the Deptford.TV material can be found on DVD ONE and will be discussed in the chapter *Practice*. The sharing of the project files (found footage) becomes a remixing of post-production processes. Harbord introduces us to the idea of a philosophy of remix in post-production in relation to the philosopher Deleuze and the film-maker Eisenstein:

The culture of film remix is not necessarily conducted with the intellectual determination for an ideological affect as Eisenstein's work, yet the practice does in a sense tear apart the clichés of classical narrative and remake perception in a manner derivative of both Eisenstein and Deleuze. How images are linked, grouped and interconnected in a process of continual transformation is a Deleuzian obsession, rewritten in the era of remix with the zeal of Eisenstein. In the realm of post production, there lie strange bedfellows indeed. (2007, p.92)

Harbord uses DJ Spooky to illustrate such a remix. Spooky did a critical remix of *The Birth of a Nation* (Griffith 1915), labelled *Rebirth of a Nation* (P. Miller 2007), where “parallel actions occurring simultaneously and parallel action occurring in separate temporal frames,” provide “a model from which music was to evolve in sampling and cutting” (Harbord 2007, p.91). Spooky's remix criticises the racist tone of *The Birth of a Nation* and its history as the first film to have been screened at the White House, which established the film's long-standing impact on American political life as a “basis for normalisation of racism” (P. Miller 2007) within US society. Other famous films such as *Manhatta* (Strand 1921), *Man with a Movie Camera* (Vertov 1929), *Etudes sur Paris* (Sauvage 1928), *Regen* (Franken & Ivens 1929) and many more are today in the public domain and available for remix.

In his email to the Nettime mailing list entitled *Remix and Remixability*, Manovich (2005) reminds us that the concept of remixing in music became mainstream in the 1980s, when it was used in electronic music through sampling and scratching methods. Manovich continues by identifying the relevance of the term when looking at

history, for example the culture of Ancient Rome which, in a sense, remixed Ancient Greek culture, and the Renaissance, which remixed Antiquity. But Manovich argues that the remixes are not transparent in many fields and disciplines because of a lack of access to the libraries, the raw materials. The fields where the remixing culture is open and transparent are mainly in music (through sampling) and in computer programming (where programmers rely on software libraries in order to write new code). The recent emergence of video archives allows for such a transparency within the field of film remixing. Remixing films enables artists to approach films as living archives through their engagement with both historical materials and with contemporary raw materials. Remixes, especially when combined with database structures (2002) involve breaking down the classical linear narrative of a film and offer the possibility of viewing society and its history from many perspectives: because the different narratives are “stored digitally, rather than in some permanent material, [those] media elements maintain their separate identity and can be assembled into numerous sequences under program control” (2006). This leads to an audience producing and “watching databases” (Lovink & Niederer 2008), such as YouTube, instead of films or TV. But there are also examples of mainstream television producing database films: a good example is the *Channel 4 Dispatches* documentary *Iraq's Secret War Files* (Sigsworth 2010) for which *Channel 4* fed a database with documents leaked over *Wikileaks* of “nearly 400,000 secret military significant activities reports (SIGACTS) logged by the US military in Iraq between 2004 and 2009” (McGreal 2010). I would argue that this was an unprecedented early confrontation of the public with data coming out of a war which according to US officials had already been declared finished (MacAskill 2010). The data contain 38 million words written by US soldiers in Iraq between 2004 and 2009. Channel 4 states that “the scope of the files is so vast, The Bureau of Investigative Journalism and Channel 4 created a purpose-built database in order to search and correlate the military codes, operational terms and abbreviations” (2010). From the perspective of the FLOSSTV research, it is interesting that these codes start functioning as meta-data offering narratives when queried through a database.

FLOSSTV focuses on social software interfaces through which participants can share their audio-visual projects over a database. For the Deptford.TV project I chose to use software systems which themselves are FLOSS. Deptford.TV uses the content management system *Drupal* (Spreisz 2007) in order to experiment with collaborative/collective production methods by using a method of version control of the Deptford.TV project files, which are often referred

to as the Edit Decision List (EDL), all licensed under the *General Public License* (Free Software Foundation 2007). The EDL, together with the raw material and meta-data becomes the source code of Deptford.TV. In the same way, any raw material and meta-data of media and television production can become the code of a FLOSSTV project.

With the help of the FLOSS video-editing software *Cinelerra* (Corbet 2008), and since the beginning of 2011 also *Kdenlive* (Wood 2002), every contributor to Deptford.TV can view and modify each EDL and thus create “endless and complex possible connections and relations between them” (Persson 2001, p.52). The Deptford.TV work-flow in conjunction with the use of *Cinelerra* and *Kdenlive* is explained in *Appendix IV*. Following the Critical Art Ensemble (1996) I would argue that by joining nodes within the Deptford.TV database of 'recombinant' videos one invites audiences to claim a role as both participants and contributors.

The FLOSSTV research aims to provide a model for a system that can enable a collaborative form of free and open media production. I argue that the FLOSSTV research is only possible through the recent emergence of new network technologies, a 'copyleft' attitude and culture, and a broader acceptance of FLOSS. Today, a significant, and increasing, number of artists and collectives use FLOSS practices, such as the Linux operating system, for their work. In the chapter *Contracts* I elaborate further on the use and function of different 'open content' licensing schemes (Liang 2004), and discuss the different 'ideologies' (Berry & Moss 2008) that support them, such as the term 'open content' (OKF 2008), which can be perceived as being analogous to the term *open source* (DiBona et al. 1999). In this thesis I ask if FLOSS, open and free content licenses are likely to develop further in the future, providing a platform of alternative media practices and licenses.

## **CHAPTER TWO**

### **FLOSSTV: Contextual Review**

From Past to Present

## **2. Contextual Review**

Art will not disappear into nothingness; it will disappear into everything.  
(Espinosa 1979)

The *Contextual Review* is an overview of the history of emerging new technologies, participatory media (Carpentier 2011) and arts practices throughout the 20th century relevant to FLOSSTV in general and to my practice Deptford.TV in particular. The purpose of this chapter is to put FLOSSTV into a historical and contemporary context. The historical examples I have chosen to focus on are naturally those of particular relevance to the FLOSSTV research, that is the historical development of collaborative media practices (e.g. many-to-many, non-hierarchical, alternative media productions), media arts practices and author's rights legislation (e.g. copyright, copyleft and intellectual property) throughout the 20th century. I discuss in the first part *Emerging Technologies: from Past to Present*, the most relevant technological inventions in a chronological order, starting from radio, television, going to video, satellite, digital networks and the internet. Then moving on, in the second part, I will discuss the idea of 'data spheres', where I look into copyright and copyleft, and the viability of FLOSS distribution in relation to collaborative media and arts practices.

### **2.1. Emerging Technologies: from Past to Present**

In this sub-chapter I focus on the history of the development of forms of media production and distribution relevant to the FLOSSTV research. So far history has repeated itself in that every new medium has become centralised, although often after having had the potential for non-centralised, many-to-many distribution and production methods. I argue that by giving preference to centralized production and distribution methods in our legislation, the result is an imposition of single-authored media and art practices on cultural distribution, making it hard for collaborative, participatory media and arts practices to reach bigger audiences, and thus to become sustainable. Later I argue that one of the main legislative methods used to uphold centralized media production and distribution processes is the implementation of intellectual property (IP) rights, concerning which I will mainly focus on the sub-section of copyright.

In 1865 Maxwell predicted the existence of radio waves in his publication on "electromagnetic theories" (1865). One year later the German physicist Hertz built an

apparatus (1887) capable of producing and receiving electromagnetic waves and thus was the first to experimentally prove their existence. In 1872 Loomis, who experimented with radio waves, filed the U.S. Patent for “wireless telegraphy” (1872), and the idea of wireless content transmission and distribution was born. In 1897 the first patent for a 'radio apparatus' was given to the Italian inventor Marconi (1897). Marconi based his radio invention on Hertz's apparatus and Tesla's Coil (1891) which still today is often used in many radio and television sets. As a result Tesla is today often referred to as the 'inventor' of radio (Lichty & Topping 1975), as well as of AC electricity generators and transmission systems (Metzger 1996).

Though the first radio stations were set up at the beginning of the last century, the First World War meant that it took over two decades for radio broadcasters to establish themselves. Berthold Brecht (1967b) proposed that a collective approach to production could be applied to both radio and film. Brecht was also convinced of the importance of involving the audience as 'participants' (Brewster 1975), and wrote about the sociological experiment of the film *Die Dreigroschen Oper* (Pabst 1931), which he had collaborated on: “Indeed, a collective can only create works which are able to make 'collectives' out of the audience” (1967a, p.205). This made Brecht (1929) one of the first practitioners and scholars to articulate a notion of liberated media practices in relation to radio technology. Brecht envisaged the liberating potential radio could have as a many-to-many, interactive medium, by allowing audiences to operate both as receivers and transmitters, so that the "audience can no longer have the illusion of being the unseen spectator at an event which is really taking place" (1964, p.91).

Brecht saw the potential of radio as a medium that could support a two-way political discussion program format. In his letter to the Director of the German Radio Broadcasting Association in 1927 Brecht wrote “you should try to make radio broadcasting into a really democratic thing ... Since this would be a great step forward, there will certainly be a series of laws that try to prevent that. You must turn to the public in order to eliminate these laws” (1967, p.121). One of Brecht's works most relevant to the FLOSSTV research was the radio play *Lindberg's Flight* (1929), an interactive many-to-many radio event, which opened at the Festival for German Chamber Music in Baden-Baden on 27 July 1929. The play's subject was the first flight over the Atlantic Ocean by pilot Charles Lindberg, in May 1927. *Lindberg's Flight* pictured the flight as a struggle of technology against nature, and as an achievement of a collective rather than an individual. Brecht envisaged that the radio audience was to participate in the transmission (Herrmann 1999, p.179) of the interactive many-to-many radio event.

Brecht wanted to show “how the medium itself can transform social communication through its technological advantage: the ear is to become a voice” (Silberman 2001, p.41).

Brecht's *Radio Theories* never materialised. Instead, radio became, through legislation, a one-to-many medium, distributing content controlled by centralised radio stations to the masses of audiences. Community radio is an exception, and, as Kate Coyer describes in *Models of Community Broadcasting in Britain and the United States*, “Community radio offers forms of alternative communication not only based on content but by the level of participation implicit in the project's aims” (2006, p.192). Radio, historically, was the first electronic distribution medium to go through the process of centralisation and is thus relevant to the current FLOSSTV research. Decades later digital networks are witnessing a similar centralisation process, or an attempt at centralisation, through commercial, political and government interests.



Fig. 2-1. The first photograph of a TV picture by John Logie Baird (McLean 2000, p.41). Courtesy of the National Museum of Photography, Film and Television (NMPFT). Public Domain.

Television was then the next medium to suffer the same fate. Figure 2-1 shows the first known photograph (D. E. Fisher & M. Fisher 1996) of a moving image produced by Baird's 'televisor', circa 1926. I consider Baird as the first 'TV hacker', because he invented the 'televisor' in a DIY fashion (Moseley & McKay 1936), as described in his auto-biography, edited by his son, *Television and Me* (2004). On the 2<sup>nd</sup> of October 1925, in his laboratory in

London, Baird built the world's first “Televisor” (Kamm & M. Baird 2002; G. Shiers 1975) and successfully televised the first person: William Edward Taynton, “[who] became the first face seen on television” (McLean 2000).

The first public television transmission (G. Shiers & M. Shiers 1997) was undertaken in Germany in 1929. The first broadly watched televised event (Burns 1998, p.527) was the Olympic Games of 1936 in Berlin, a political PR success for Hitler, the games and the Führer being 'magically' present in the living room. In the same year the Germans also established the first two-way television system, which in a way was the first video conference call facility, as a commercial facility, between Berlin and Leipzig at a price of a quarter of the average weekly income for a 3 minute call (Burns 1998, p.528), which translates into around £200 at the time of writing. But, like radio, the idea of a two-way television medium soon gave way to the centrally controlled transmission method of the one-to-many broadcasting system.



Fig. 2-2. B.B.C. Television Studio. Photo by B.B.C. Public Domain.

Figure 2-2 shows a Television Studio at No. 16 Portland Place, London, used by the B.B.C. prior to 1935. “Left foreground: Caption machine behind the sound rack. Immediately to the right of the sound rack is the radio-picture receiver; on its right again a smaller-line picture receiver. On the extreme right is the projector. The three chairs seen in the centre foreground are used respectively from left to right by: (1) Sound-control Engineer, (2)



Programme Director, (3) Vision-control Engineer” (Moseley & McKay 1936, p.93).

The most important development, and a difficult one to foresee, was the extraordinary extension of the power of television over the whole of cultural production, including scientific and artistic production. Today, television has carried to the extreme, to the very limit, a contradiction that haunts every sphere of cultural production. (Bourdieu 1998, p.36)



Fig. 2-3. Alexandra Palace Studio, London. Photo by B.B.C. Public Domain.

Figure 2-3 shows a live transmission from a studio at Alexandra Palace, London, mid '30s, with “two Emitron Instantaneous Television Cameras in use – one transmitting the programme, the other ready to be 'faded in' for a different shot” (Moseley & McKay 1936, p.128). The '30s were crucial years for the development of today's television. In Germany television was first perceived as similar to radio, the telephone and, due to the Second World War, even as a means “for guiding rockets, torpedoes, etc.” (Pearson & Simpson 2001, p.208). Abandoning these other potential uses, television adopted the radio-like transmission of content, information and entertainment: “Early television defined in crucial ways dominant assumptions about the medium’s representational capacities, its medial homologues, its place in the public sphere and its technological and economic infrastructure” (Pearson & Simpson 2001, p.208).



Fig. 2-4. Alexandra Palace Transmitting Aerials, London. Photo by B.B.C. Public Domain.

Figure 2-4 shows the “mast and transmitting aerials” (Moseley & McKay 1936, p.101) at Alexandra Palace, London, mid '30s. The Second World War brought the development of television to a halt (Abramson 2009) with services resuming in 1946. In the UK the most famous big televised event after WWII was the Coronation of Queen Elizabeth II in 1953. Watched by an estimated 20 million people, it was a “media event [that] gripped the nation and played a major role in establishing the medium by potently demonstrating its capabilities” (Pearson & Simpson 2001, p.75). In 1953 Theodor Adorno wrote *A Prologue for Television*, discussing television's archaic images of modernity:

While the images of film and television strive to conjure up those that are buried in the viewer and indeed resemble them, they also, in the manner of their flashing up and gliding past, approach the effect of writing: they are grasped but not contemplated. The eye is pulled along by the shot as it is by the printed line and in the gentle jolt of the cut a page is turned. As image, this pictographic language is the medium of regression in which producer and consumer collude; as writing, it displays the archaic images of modernity. (1963, p.77)

The BBC went on to apply its philosophy of public service broadcasting, based on principles of a religious and serious nature, from radio transmission to television transmission (Seymour-Ure 1996, p.88). And in 1954, in the UK, the Television Act allowed for commercial broadcasting. The Independent Television Network (ITV) was established. "Television was to form a whole cultural industry through its growing reach in a period of relative affluence, so the need to satisfy audience tastes was now a compelling consideration" (Pearson & Simpson 2001, p.75). For the Independent Television Network advertising became a lucrative business. However, some believed that this approach of gaining revenue through advertising would lead to "lowest common denominator programming" (Hood & Tabary-Peterssen 1997, p.31).

Ten years later McLuhan (1964), who built on Innis' idea that the effects of technological form mattered more than content (1952; 1964), and Williams were engaged in a debate on the subject of 'technological determinism' (Freedman 2002). Williams argued that "the work of McLuhan was a particular culmination of an aesthetic theory which became, negatively, a social theory: a development and elaboration of formalism ... isolating theory of the media" (1974, p.126). In William's opinion, although McLuhan's project was to foreground the different qualities of different media such as speech, print, radio, television and so on, he attempted to do that from a position that did not encourage reflection on media as specific practices.

It is an apparently sophisticated technological determinism which has the significant effect of indicating a social and cultural determinism: a determinism, that is to say, which ratifies the society and culture we now have, and especially its most powerful internal directions. For if the medium - whether print or television - is the cause, other causes, all that men ordinarily see as history, are at once reduced to effects. Similarly, what are elsewhere seen as effects, and as such subject to social, cultural, psychological and moral questioning, are excluded as irrelevant by comparison with the direct physiological and therefore "psychic" effects of the media as such. The initial formulation - "the medium is the message" - was a simple formalism. The subsequent formulation - "the medium is the message" - is a direct and functioning ideology. (1974, p.127)

Williams was sceptical towards any positions of technological determinism, as he stated that the same technology that could liberate media production, could also be used to control and align it with commercial and/or state interests: “a few para-national corporations, with their attendant states and agencies, could reach further into our lives, at every level from news to psycho-drama, until individual and collective response to many different kinds of experience and problems became almost limited to choice between their programmed possibilities” (1974, p.151). At the same time the video artist Nam June Paik criticised McLuhan for not engaging with the media he was writing about. In his art work *McLuhan Caged* (1967) Paik manipulated TV pictures of McLuhan giving a talk, by using magnets across the cathode ray tube and cutting up the video spools by hand.

McLuhan is surely great, but his biggest inconsistency is that he still writes books. He became well-known mainly through books, he doesn't care about the situation, and is excluded from the media for which he evangelizes. Very very very high-frequency oscillation of laser will enable us to afford thousands of large and small TV stations. This will free us from the monopoly of a few commercial TV channels. (Paik 1966, p.26)

Already in the '60s Paik foresaw the emergence of the 'information super highway' and its impact on global culture (Kellein 2007; Herzogenrath & Kreul 2007). Three decades later his prediction materialised in the form of the *World Wide Web*. In retrospect Paik is often referred to as the *Cybernetic Pioneer of Video Art* (Kane 2009). In March 1963 Paik presented television pictures distorted through magnets in the *Gallerie Parnas* (Hanhardt et al. 2000). Paik moved from Germany to New York in order to gain access to the latest electronic technologies. Though he continued his work on modifying TV sets, at the beginning of the 1960s he was eager to obtain the *Sony Portapak* video camera (Abramson 2003; A. Smith & Paterson 1998). At that time it was not possible to edit the reels produced by the *Portapak*. What Paik did was to manipulate, cut and paste the spools by hand (Tappsteiner 2010). With this manual manipulation he produced a constant repetition of a few seconds of TV footage of New York's leading politician – *Mayor Lindsay* (1963) – into a 5-minute video piece. Paik was thus playing with technology or, in some sense, hacking it, using it in a different way than it was designed for. In 1963 Paik demonstrated participatory TV practices with the project *Participation TV* (1963). *Participation TV* was basically a TV set with an integrated microphone. A later version of the work showed, in the middle of the screen, visualisations of the sounds people could input through the microphone, so that “[d]epending on the sound's inherent quality or volume, the signals are intensified by a sound-frequency

amplifier to produce an endless variety of line formations which never seem to repeat themselves or be in any way predictable” (Decker-Phillips 1998, p.64). In retrospect one can describe this practice as early video art or TV hacking. In the artwork *McLuhan Caged* (1967), an installation for *Electronic Art II*, Paik (1973; 1993; 2004) further developed his TV hacking methods by distorting a videotape playback documenting McLuhan, author of *Understanding Media: The Extension of Man* (McLuhan 1964).

The video synthesizer, which Paik developed together with Shuya Abe, was recently exhibited in the Tate Liverpool (Searle 2010). It is Paik's most relevant work to the FLOSSTV research. The video synthesizer allowed for mixing and manipulation of moving images. For Paik the video synthesizer “will enable us to shape the TV screen canvas as precisely as Leonardo, as freely as Picasso, as colourfully as Renoir, as profoundly as Mondrian, as violently as Pollock and as lyrically as Jasper Johns” (1970, p.55). The video synthesizer was used for the 'video commune' (Daniels 2004) transmitting on the television channel WGHB in 1970. Other artists worked at the same idea of a video synthesizer independently, including Steve Rutt (Fox 2011) and Eric Siegel (Furlong 1983).

By the end of the '60s resistance emerged against the dominant one-to-many model of the broadcasting industry. Student movements, artists' collectives and political activists forced ruptures with the conservative media structures of the radio and television institutions. By the early '70s television provided a major service for a whole generation; but the '68 generation' wished to use this technology for themselves, they wanted to 'participate' in the production of media. In *Constituents of a Theory of the Media* Hans Magnus Enzensberger (1970) outlines characteristics that constitute participatory media, which he defines as being signified by decentralized programs, where each receiver is a potential transmitter, within a collective, interactive self-organized production process.

For the cultural underground of the '70s experimenting and practising with new media became a common means of opposing the passivity imposed by television as a one-to-many mass medium. For Williams this use of new media, aiming to create a many-to-many distribution, was a critical answer to “the notion of a determined technology as well as the more ordinary notion of a technological determinism” (1974, p.137). It was Sony's introduction of the Portapak, in the '60s, which many artists and activists hoped would lead to a breakthrough into a many-to-many media production environment. The Portapak was the first, affordable, portable video camera on the market. Artists picked up on the Portapak and video

collectives were formed all over the United States of America, such as People's Video Theater, Videofreex, Raindance, Global Village, Video Freaks, Radical Software, The Ant Farm, Guerilla TV, Broadside TV and TVTV (Top Value Television). Many media collectives wanted to purchase one of these black-and-white Sony Portapak cameras (C. Schneider & Wallis 1989).

These collectives used the Portapak as a means to achieve a democratic pluralism. In Guerilla Television Michael Shamberg (1971) predicted that media power would pass to the people, borrowing the term 'guerilla television' from the article Cybernetic Guerilla Warfare (P. Ryan 1971). However in *Subject to Change, Guerilla Television Revisited* Deidre Boyle (1997) argues that it was a naïve idea that through cheap recording equipment citizens could change the television industry so as to democratize the media.

Issues of rights ownership (copyright) and distribution (transmission over the airwaves) were often neglected. Boyle argues that it was this ignorance with respect to legislation and rights issues which caused this 'revolution' to be co-opted by the big business they were opposing. Boyle explains how the utopias expressed by these collectives materialised and finally collapsed in the take-over of mainstream media. Boyle further argues that this failure can serve as a warning for future media practitioners working in television. Referring to Hans Magnus Enzensberger, Boyle highlights that “television systematically prevents true perception of social reality. But by decentralizing the system structure, organizing collective production and transforming receivers into transmitters, the repressive use of mass media could be thwarted” (1997, p.30).

In *Requiem for the Media* Baudrillard (1981) argues against Enzensberger's *Constituents of a Theory of the Media*. For Baudrillard, television is not a medium of communication but a medium of non-communication because, as a one-to-many channel, it does not allow for exchange or interaction. Even if an interaction were possible, as envisaged by Enzensberger, this would strengthen, rather than challenge, the producer/consumer dichotomy. A good example is the emergence of audience interaction within reality TV, such as Big Brother, and dial-in games which strengthens Baudrillard's argument. Foucault's text *The Subject and Power* (1982), written around the same time, offers a valuable insight into power relationships relevant also within television production. It is the product of research that was undertaken by Foucault over a period of over twenty years. Foucault uses the metaphor of a chemical catalyst for a resistance which can bring to light power relationships, and thus allow

an analysis of the methods this power uses: “[r]ather than analysing power from the point of view of its internal rationality, it consists of analysing power relations through the antagonism of strategies” (1982, p.780).

The beginning of the '80s saw some approaches to many-to-many communications within television production in the U.K. with the participation of audiences in television programming. Seen historically this was the U.K.'s peak within television production where audiences were allowed to participate in the production process of television. This is of particular interest to my FLOSSTV research, where I look into methods allowing for such participation to happen. Patricia Holland describes in *The Television Handbook* (2000) how the BBC initiated an attempt for such bilateral communication to happen with the *Community Program Unit*, and Channel 4 followed with the *Independent Film and Video Department*. Under the direction of Alan Fountain, Channel 4 provided minority groups with infrastructure, in exchange for having priority in airing their productions. According to Holland this was when minorities had their biggest opportunity to speak up in U.K. television history. In *Channels of Resistance: Global Television and Local Empowerment* (Downumt 1993), Dovey refers to this period as a time when people had a trusting relationship with the TV channels and wanted to tell their stories in an unmediated manner – and quotes *Free for All* series editor John Samson: “I actually want to say it myself, the way that I want to say it, because I don't want a story about me by somebody else, I want a story by me. I want my story told” (1993, p.171).

The '80s was a period of post modernism, deconstruction and identity politics, looking into issues of representation; it also saw a deployment of these theories towards AIDS activism. The post modernist movement informed by AIDS activism and looking into the idea of 'appropriation' within artistic practices was represented, mainly in New York, by the *October* journal and writers such as Hal Foster or Rosalind Krauss (1976; 1997). According to the latter: “[l]ong working experience with major art journals [had] convinced us of the need to restore to the criticism of painting and sculpture, as to that of other arts, an intellectual autonomy seriously undermined by emphasis on extensive reviewing and lavish illustration” (Krauss & Michelson 1976, p.15). Activist groups like *Act Up*, “a diverse, non-partisan group of individuals united in anger and committed to direct action to end the AIDS crisis” (Shepard & Hayduk 2002) and their spin-off *Gran Fury* (Crimp & Rolston 1990) came together with the media arts scene as a result of the AIDS crisis. David Garcia argued that media arts should have a place within activist communities, as media artists and AIDS (and other political)

activists shared a common attitude towards DIY methods:

The reason for my position is not theoretical but the result of my first experience of seeing tactical media at close hand, in action, ACT UP [was] a mobilisation against the AIDS policy of the Reagan administration of the time, which in choosing to ignore AIDS was a policy of silence. Artists played a critical role in both organising and giving shape and a kind of charismatic momentum to ACT UP. I believe it was the artist collective Gran Fury in their exhibition "Let the Record Show" who created the slogan (or equation) that became the symbol of the AIDS activist movement worldwide: SILENCE = DEATH. (2001)

In the context of 'appropriation' in art, also referred to as 'detournment', after Debord, and practised by artists associated with the *October* journal (Wallis 1984; Krauss 1981; Krauss et al. 1997), like Louse Lawler, Richard Prince, Barbara Kruger, Martha Rosler, etc., critical voices that questioned copyright legislation emerged in the mid '80s. The 'scratch movement' (Dunford 2002), who perceived copyright as a form of censorship, emerged in the UK through the satirical and comic use of video that scratched sound and picture together to produce new narratives, such as the work of the artists George Barber (2009), *the duvet brothers* (1984), and others.

One of the scratch projects was Jon Dovey's *Death Valley Days* (1984; 1986), in collaboration with Gavin Hodge and Tim Morrison. *Death Valley Days* is a satirical episode that mixes TV-news footage to the sound of '50s and '60s pop music, controversially narrating a secret love-story between Ronald Reagan and Margaret Thatcher. Scratching was used as video-satire. *Death Valley Days* was originally an experiment that made use of found footage without being concerned with issues of copyright. Nevertheless, when Channel 4 expressed an interest in using the project as a part of their "Eleventh Hour" series in September 1985, the rights had to be cleared. Soon it became obvious that, to buy copyrights, one needed not just money but also an 'acceptable identity', a media status. Dovey argued that, through copyrights, the media networks exercise control over what we see and, even more importantly, over much more that we do not see (1986).

The end of the '80s also saw the emergence of an example, relevant to the FLOSSTV research, of audience participation in television programming through Deep Dish TV's project *Gulf Crisis TV* (1990). This project grew out of the Paper Tiger TV collective (1981) who produced public access cable programs in New York. Paper Tiger TV (1985), or PTTV, launched an alternative satellite distribution system, thereby linking alternative TV groups in the USA nationwide. Their *Gulf Crisis TV Project* became famous because it used this satellite



distribution platform as an alternative news network. The *Gulf Crisis TV Project* was an alternative television program protesting against the outbreak of the first Gulf War and the mainstream media coverage of it. There was material coming from around the country to Paper Tiger TV, while they also shot their own material. These materials were edited by the whole collective, and were then re-distributed via satellite to the different Public Broadcasting Systems all over the United States. Many local cable providers in the US picked up the signal of Deep Dish TV and distributed it locally. “One viewer who saw the shows the night before the war started said he kept switching channels and coming back to the one program that didn't look or sound like the rest of the material on the air waves. 'It was,' he said, 'like an explosion in my head!’” (Lucas & Wallner 1993, p.184).

In the same year, together with his colleague Robert Cailliau, Tim Berners-Lee wrote a funding proposal for a hypertext project titled *World Wide Web*. Berners-Lee's achievement was the combination of hypertext and the internet (2004). He envisioned a system that would help scientists collaborate by making it easy to create and share multimedia data (1994). According to Abbate: “Cern had adopted TCP/IP in the early 1980s in order to provide a common protocol for its various systems, so Berners-Lee designed the new service to run over the Internet protocols” (2000, p.214).

In *Protocol*, Alexander Galloway describes how these protocols changed the notion of control and how “control exists after decentralization” (2004, p.81). Galloway argues that protocol has a “close connection to both Deleuze's concept of 'control' and Foucault's concept of biopolitics” (2004, p.81) by claiming that the key to perceiving protocol as power is to acknowledge that “protocol is an affective, aesthetic force that has control over life itself” (2004, p.81). Deleuze describes the aesthetic of cinema under the influence of computers and its future as 'automation', as “the man-machine assemblage [which] varies from case to case, but always with the intention of posing the question of the future” (2005, p.252). Here Galloway suggests (2004, p.147) that it is important to discuss more than the technologies, and to look into the structures of control within media systems, which also include underlying codes and protocols, in order to distinguish between methods that can support collective production and methods prohibiting participatory culture. Galloway's argument in the chapter *Hacking* (2004, p.146) is that the existence of protocols “not only installs control into a terrain that on its surface appears actively to resist it, but in fact goes further to create the mostly highly controlled mass media hitherto known.” For Galloway hacking is “an index of protocological transformations taking place in the broader world of techno-culture.” (2004,

p.157).

For Richard Barbrook the internet is “a useful tool not a redemptive technology”, and argues that participatory media practices and democracy “should be extended from the virtual world into all areas of life” (2007). Barbrook (2001) compares the current state of the internet, the cyber civilisation, to the communist dictatorship of the former Soviet Union, by observing that more and more companies have to give away their services for free, while speculating on receiving profits in the future. Barbrook argues that this virtual reality can only be sustainable for producers who do not have to sell their intellectual property, but get paid for their work.

The turning point for the World Wide Web was the introduction of the web browser *Mosaic* in November 1993 (NCSA 1993). *Mosaic* could for the first time display images in-line with text instead of opening them in a separate window. The *World Wide Web Consortium* (Berners-Lee 1994) was founded in October 1994. The World Wide Web is credited with turning the internet into 'cyberspace', a term often attributed (Bidgoli 2004; Thomas 2003) to its use in William Gibson's novel *Neuromancer*: “Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation ... A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity” (1984, p.51).

In December 1995 Vuk Cosic got a message, sent via anonymous mailer. Because of incompatibility of software, the opened text appeared to be practically unreadable ASCII abracadabra. The only fragment of it that made any sense looked something like:

[...] J8~g#\;Net. Art{-^s1 [...]

Vuk was very much amused and exited [sic.]: the net itself gave him a name for activity he was involved in! (Shulgin 1997)

Precursors of the Net.Art movement (Tribe et al. 2006) range from Dada to Situationism, conceptual art, Fluxus to video art (Marzona & Grosenick 2005). In the beginning of the '90s the avant-pop movement became famous with the popular *Alt-X* site (Amerika 1993), a site where artists built a community through DIY web-hosting and curating of fiction. Other organisations of those times significant for Net.Art include *The Thing* (Staehele 1991), *Adaweb* (Weil 1996), *Rhizome* (Tribe 1996), and *ARS electronica* (Gerbel & Weibel 1995). Net.Art emerged in the context of a combination of the development of the internet, the World Wide Web and the fall of the Soviet Union. Greene (2004) gives as a reference point 1993 as a starting year for Net.Art when graphical web browsing became available, mentioning

several artists: Vuk Ćosić, Jodi, Alexei Shulgin, Heath Bunting, Shu Lea Cheang and Olia Lialina. For Greene, as well as Weibel, Net.Art often criticises the notion of the internet as a 'democratic' communication tool (2001). For example the artist collective Jodi (1996), who work with the aesthetics of computer errors, did so by crashing browsers with their 'pop-up application' art works, thus questioning and disturbing the browsing experience. The British collective I/O/D produced an experimental browser, the *Web Stalker* (1997). The *Web Stalker* can be classified as one of the first 'artistic browsers', presenting the WWW in a different way, by ignoring the 'classical' print design conventions:

When you open the Web Stalker you will see a blank screen. Press the mouse-button down and drag your mouse from one point to another and a rectangle will form. Release the mouse button and move the cursor back into the rectangle. Click the right mouse-button. When you do this, a pop-up menu will appear. This menu allows you to assign a function to the rectangle that you have just drawn. (1997)

Matthew Fuller refers to the *Web Stalker* project as 'not-just-art', because it "has to be used. Assimilation into possible circuits of distribution and effect in this case means something approaching a media strategy" (2003, p.63). Rachel Greene brings Net.Art and Tactical Media as detournement practices together: "The subversion of corporate websites shares a blurry border with hacking and agitprop practices that would become an important field of net art, often referred to as tactical media" (2004). Inke Arns explains, in *Social Technologies: Deconstruction, subversion and the utopia of democratic communication*, that during the early '90s, the internet became new media, and because of the nature of the internet and the growing accessibility, once again brought "Brecht's utopia of a genuine 'communication apparatus' within striking distance" (2004b). Arns connects Net.Art and the Net activism of the '90s with the participatory art projects of the '70s and '80s (2004a), but makes a difference in its reach. With the internet artists could reach out globally for the first time in the history of participatory media and arts practices.



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Fig. 2-5. Illustration by Keith Aoki, from *Bound by Law* (Aoki et al. 2006). Creative-Commons BY-NC-SA 2.5

Code has a semantic meaning, but it also has an enactment of meaning. Thus, while natural languages such as English or Latin only have a legible state, code has both a legible state and an executable state. In this way, code is the summation of language plus an executable meta layer that encapsulates that language. (Galloway 2004, p.166)

The beginning of the third millennium saw the launch of the term 'Free Art'. The *Free Art license* (d'Alverny 2000) was initiated at the *Copyleft Attitude* gatherings in Paris in 2000. *The Free Art license* is one of the first licenses that attempts to apply FLOSS ideas to the field of art by following a copyleft attitude. The *Copyleft Attitude* meetings in Paris “brought

together for the first time, computer specialists and free software activists along with contemporary artists and members of the art world” (Liang 2004). The license allows content creators to offer their works for free, granting anyone the right to re-distribute, copy and modify those contents, as long as the license is applied to any other resulting work of art. One year later Lawrence Lessig established the *Creative Commons* (Michael et al. 2001) initiative, and later on Lessig coined the term “Free Culture” (2002).

## 2.2. Data Spheres

Over the past 20 years, an entirely new global system of digital communication has come into being, comprised of satellite relays, optical fibre and coaxial cables, and computer networks. This augments the already vast global radio traffic. This new phenomenon is referred to as the 'datasphere'. Examined as an organism, the datasphere is colonial, in the sense that an ant colony or a marine sponge is colonial. Information is transmitted and received between millions of sensor and effector 'nodes' via a distributed 'rhizomatic' network. Viewed in this way, any electronic information gathering device which is hooked into this system becomes a sense organ of it. These sense organs operate on a vast range of scales, from the galactic (outward looking satellites and ground based observatories), to the global (earth watching satellites), the local (video surveillance systems), the personal (medical imaging technologies) and the microscopic (scanning tunnelling electron microscopes). One might even postulate an imagination or dreaming in the form of synthetic computer imagery. (Penny 2003, pp.816-817)

Through my research into the various meanings of the term 'data spheres' (or 'datasphere') I came across one of its early meanings in the field of aero science: in the late '50s the Thor-Able U.S. Air Force rocket was launched from Cape Canaveral “containing a datasphere, an instrumented capsule including a magnetic tape recorder” (Berkeley 1960). This might explain why the contemporary use for the term datasphere is mostly restricted within science fiction novels with reference to 'cyberpunk' and 'cyberspace'. Interestingly, in Peter Hamilton's (2003) science fiction novel *Misspent Youth* the term 'datasphere' is connected to copyright, by envisaging a scenario in which through the invention of the datasphere the publishing industry loses control over copyrights. For John Perry Barlow (1990) and Lawrence Person (1999) the 'datasphere' appears as an immersive environment, or, as described in Carol Lea Clarke's book *The Wired Society*, “a perfect breeding ground for both outlaws and new ideas about liberty” (1998, p.64). Here Dani Cavallaro argues that “cyberspace is rendered particularly ambiguous by the character of the fantasies that its users live out within its datasphere” (2000, p.34), by referring to Sherry Turkle's notion of the internet as a form of “play

space” (1995, p.236).

Douglas Rushkoff dedicates a whole chapter to *The Datasphere* in his book *Media Virus!* (1996). In *The Datasphere* Rushkoff argues that the exchange of information is the same as the exchange of viruses, and that the US media datasphere is the “new territory for human interaction, economic expansion and especially social and political machination” (1996, p.4), where “media viruses spread through the datasphere that same way biological ones spread through the body or a community. But instead of travelling along an organic circulatory system, media viruses spread rapidly if they provoke our interest, and their success is dependent on the particular strengths or weaknesses of the host organism” (1996, p.10). Gareth Branwyn (1997) refers to Rushkoff's notion of 'datasphere' (2010, p.27) as synonymous to the terms 'mediascape' or 'cyberspace', as possible descriptions for the omnipresent global media feed. Margaret Morse (1998) compares the contemporary situation of the datasphere to the situation of amateur radio in the period after World War I when there was no regulation of the airwaves. Morse refers to Brecht's (1967b) embrace of radio as a many-to-many medium, also comparing the datasphere of the '90s to another historically transitional moment, from non-narrative experimental cinema to fictional narrative cinema in the early twentieth century. Morse discusses many new media artists and curators who would be making this historical connection. Rudolf Frieling states that in the arts, net activists and artists such as the Etoy collective have “drawn attention to the existence of the hotly contested data sphere on the Internet” (2005, p.203). For Christine Schöpf artists bring the idea of openness “into a perceptible form [as] an orientation toward the artistic organisation in the data sphere ... The data sphere is characterized ... by the dissolution of frameworks. Its own dissolution as art is implicit in this” (1996, p.153). The artist Simon Penny attempted to simulate such a datasphere with the installation *Big Father*. Five surveillance stations confronted the visitors with transmissions of audio and video files triggered by sensors – stations which breathe.

Data spheres can be interpreted as automated distribution systems, that could easily be imagined to continuously operate without human interference. Thus, a more particular definition of 'datasphere' would emphasise how a vast amount of data circulates, while only becoming meaningful, however, when social contracts are applied to it. In other words, the transformation of 'data' into 'meaning' can always be seen to take place within a social contract. For example, a protocol extracting data always has to be configured, i.e. socially or politically agreed upon. Legal or activist interventions thus always interpellate the datasphere. Data spheres include all forms of data that exist in the public domain and public spheres. This data

becomes meaningful only when actors interpret it. Such instances of interaction are always in some ways social.

Another way to conceive of loosely regulated data spheres is as a critique of the public sphere (Jurgen Habermas 1988; Froomkin 2003), following Natalie Fenton's argumentation on 'counter-public' spheres (2003). They would be 'counter-public', as these digital and networked public spheres (characterised by practices such as peer-to-peer networking) cannot adhere to traditional copyright laws, as cultural content is made available on them in complete disregard of current legislation. This happens largely through processes that are almost entirely machine-driven: automated, self-emergent, governed by protocol. For Alexander Galloway, 'protocol' is open source, because 'protocol' is simply a list of instructions for how a technology should work and thus must be agreed on by all those taking part in the development of the protocol in the "public sphere" (2004, p.171). When observable coalitions arise out of this mass, they resemble 'data spheres' more than an intentional, human-centred 'public sphere' in the traditional sense, since the coming-together need not be by personal volition but by the ways the actual infrastructures are configured. Consequently, these traditional copyright laws are, for the first time, being breached by a critical mass of technology, mainly in the hands of consumers. "Software is something like a machine, and something like mathematics, and something like language, and something like thought, and art, and information ... The protean quality of software is one of the greatest sources of its fascination. It also makes software very powerful, very subtle, very unpredictable, and very risky" (Sterling 1992, p.31).

If 'datascapes' (Andersson 2008; Latour 2005; 2006) make it possible to trace and document how existing social structures come together and become constituted, 'data spheres' are the more particular instantiations that form through an actual mobilisation within these datascapes. As Pasquinelli puts it in the *Manifesto of Urban Television*: "As a Public Domain we understand a sphere which does not belong neither (sic.) to the State nor to the Market, but to the whole society, and it is managed and controlled by the society itself" (2003). Galloway argues that 'protocol' (2004), perhaps more so than legislation, made it possible to control the content distribution of decentralised networks, for which 'code' is the base. Galloway argues that it is the 'hacker culture' that embraces a different management style, which he refers to as 'protocological' and thus can resist code-based forces. Resistance has changed over time, from being against 'bureaucratic', hierarchical powers to circulating around 'protocological control forces'. It is the hacker's knowledge of code which allows him/her to take part in the power of control through protocol.

One can address the emergence of legal issues around these data spheres by looking at the Debian *Social Contract* (2004) and other open standards and alternative licensing schemes, as discussed in the chapter *Contracts*. Furthermore, these could be contrasted with the legal interventions they oppose, like the *Digital Economy Act*. In the UK, the *Digital Economy Bill* (Mandelson 2010) was rushed through the House of Commons (Graham 2010) and approved by Parliament (EDRI 2010c; EDRI 2010b) just before the elections in 2010. The *Digital Economy Act* now poses a serious threat to free wireless networks, because any single individual node holder can be held responsible for aiding the infringement of copyrights. Thus the *Open Wireless Network* (OWN) in Deptford, South-East London, might have to close its doors because many of the node holders feel that the *Digital Economy Act* goes beyond their control. Critics of the *Digital Economy Act* point out that it censors people's human right of free speech and open communication (Bolton 2010; Clarinette 2010). Concerning the FLOSSTV research I argue that what might become more important for the definition of alternative licensing schemes, in regard to media and art productions, would not be the quantity of audiences but the quality of interaction and lived experience. In the context of FLOSSTV, data spheres allow for online videos to open participatory discussions around public interests, facilitating “public engagement” (J. Clark 2007, p.15). Currently, because the internet is not entirely regulated, or centralised, we witness a window of opportunity to offer alternative forms of media production (Stalder 2005). It is likely that this window of opportunity will be short-lived, as vital elements of the internet are becoming formatted and regulated (Portlando & Feluso 2011). Another example of such regulation is the *Communication Decency Act*. This act was one of the first attempts by the United States Congress to regulate content distribution over digital networks. As a reaction to such regulation John Perry Barlow wrote the *Declaration of the Independence of Cyberspace* (1996).

*The Pico-Peering-Agreement* (Priest et al. 2004) can be seen as a prototype for the discussion around open contracts and standards for the contested data spheres (pico referring to the small size of the networks). Christof Autengruber (2007), one of the co-authors of *The Pico-Peering-Agreement* quotes Manuel Castells: “Networks constitute the new social morphology of our societies, and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture” (1996, p.500). Unfortunately, the current situation within the EU is rather hostile (McNamee 2010) to such 'DIY' distribution networks, mostly due to the claim that copyrights are being breached. In the United Kingdom the *Digital Economy Act* can have a serious 'censorial' impact on possible FLOSSTV distribution practices, as discussed above. Free Wifi networks are such a possible



distribution method for FLOSSTV productions. Free wireless community networks, such as OWN, a long-term collaboration partner with the Deptford.TV project, oppose the idea of privately configured mobile broadband. Free and open wireless community networks are also much cheaper to set up, at a cost of approximately £30-£50 per unit, and offer a freedom of communication (Lawrie 2011a), access and distribution of any media and/or files.

In order to be able to regulate networks, control and censorship mechanisms are introduced to networks by applying them to devices and nodes. This form of surveillance, or 'dataveillance', might constitute a development akin to Michel Foucault's concept of 'panopticism' (1977), "panoptic apparatus" (M. Zimmer 2009, p.5), defined as both massive collections and storage of vast quantities of personal data and the systemic use of such data in the investigation or monitoring of one or more persons. Laws and agreements like the *Anti-Counterfeiting Trade Agreement* (European Commission 2007; Lambert 2010), the *Digital Economy Act* and the *Digital Millennium Copyright Act* require surveillance of the computers that consumers use in their 'private' spheres (Fuchs 2009; Medosch 2010; Wolf 2003), and can be used to silence 'critical voices' (Movius 2009). However, it is not sure if 'copy control' technology is currently enforceable in Europe (Wang 2009) because it might violate *Article 8, The Right to Privacy*, of the *The European Convention on Human Rights* (Jaromil 2007; Roessler 2001).

### **2.3. FLOSS Culture**

It's all free? You may be wondering: why would people spend hours of their own time to write software, carefully package it, and then give it all away? The answers are as varied as the people who contribute. Some people like to help others. Many write programs to learn more about computers. More and more people are looking for ways to avoid the inflated price of software. A growing crowd contribute as a thank you for all the great free software they've received from others. Many in academia create free software to help get the results of their research into wider use. Businesses help maintain free software so they can have a say in how it develops - there's no quicker way to get a new feature than to implement it yourself! Of course, a lot of us just find it great fun. Debian is so committed to free software that we thought it would be useful if that commitment was formalized in a written document. Thus, our Social Contract was born. (Debian 1997)

In 1985 Richard Stallman formulated an alternative to, some might say resistance against, the practice of locking away computer source code through the use of copyright: *The*

*GNU Manifesto* (1985). In *The GNU Manifesto* Stallman advocates four major freedoms for anyone engaging with Free Software:

- 0) The freedom to run the program for any purpose.
- 1) The freedom to study how the program works and adapt it to your needs.
- 2) The freedom to redistribute copies so you can help your neighbour.
- 3) The freedom to improve the program and release your improvements to the public, so that the whole community benefits (1985)

Stallman went on to write the first 'copyleft' license, the *General Public License* (GPL), arguing for access to source code as a basic “human right” (2007), by paraphrasing the *Bill of Rights of the United States* stating that “the ethical response to this situation is to proclaim freedom for each user, just as the Bill of Rights was supposed to exercise government power by guaranteeing each citizen’s freedoms” (2001). The GPL as well as the *Open Source Definition* (DiBona et al. 1999, p.171) are often referred as the roots of the 'copyleft' attitude, also applicable to non-software information (Stutz 1997; Heffan 1997), which in the hacker dictionary *the jargon file* (Raymond & Steele 2003a) is defined as:

- copyleft /kop'ee-left/ /n./ [play on 'copyright']
1. The copyright notice ('General Public License') carried by GNU EMACS and other Free Software Foundation software, granting reuse and reproduction rights to all comers (but see also General Public Virus)
  2. By extension, any copyright notice intended to achieve similar aims (Raymond & Steele 2003a)

Copyright asserts ownership and attribution to the author. Copyright protects the attribution to the author in relation to his/her work. It also protects the work from being altered by others without the author’s consent and restricts the reproduction of the work. Copyleft is not an anti-copyright but rather an extension of copyright: it includes copyright through its regulations for attribution and ownership reference to the author. Nevertheless, it also extends copyright by allowing for free re-distribution of the work and, more controversially, the right to change the work if the altered version attributes the original author and is re-distributed under the same terms. A user can exercise those freedoms provided that s/he complies with the conditions of this license. I would argue that applying such copyleft licenses to media productions is a possible strategy for enabling media and arts practitioners to engage in collaborative production processes.

For the copy-paste generation, copyleft is already the natural propagation (Lessig 2004) of digital information in a society which provides the possibility of interacting through digital networks. In doing so one naturally uses content generated by others, remixing, altering or redistributing it. At the same time the Debian project, an independent decentralised organisation of mainly computer coders, argues for 'copyleft' over 'public domain' as the latter is not a good alternative to copyright, “because some will try to abuse this for profit by depriving others of freedom; as long as we live in a world with a legal system where legal abstractions such as copyright are necessary, as responsible artists or scientists we will need the formal legal abstractions of copyleft that ensure our freedom and the freedom of others” (1997).

It is not only corporate companies who strongly enforce copyrights, but also established artists and writers who are afraid of losing their position: “Plagiarism and piracy, after all, are the monsters we working artists are taught to dread, as they roam the woods surrounding our tiny preserves of regard and remuneration” (Lethem 2007). The fear of copyright infringement often derives, not only from producers and publishers who are making most of the profits from sales of intellectual property, but also from writers and artists fearing their 'bread and butter' will vanish if shared freely (Smiers 2010; Smiers & van Schijndel 2009). Linda Smith even argues that copyright is an extension of colonialism. Smith explains that the 'project modernity' ended the absolutist society (feudalism), and it signalled the beginning of the 'modern' state. This new state system, being born out of the industrial revolution, had to fulfil the requirements of the ruling economic forces. According to Smith, a system of ideas started to focus on self-interest and on a state system that had to regulate a “public sphere of life” (2006, p.59). With this system being accepted, liberalism, the ideology of individual autonomy, and ideas concerning self-interest could be discussed in academia, especially the 'scientific exploration' of the rest of the world by Europeans. The 'modernist project' was born with the systematic exploitation of indigenous people in the 18<sup>th</sup> and 19<sup>th</sup> centuries. “The production of knowledge, new knowledge and transformed 'old' knowledge, ideas about the nature of knowledge and the validity of specific forms of knowledge, became as much commodities of colonial exploitation as other natural resources“ (Goonatilake 1982). In *The Contestation of Code* Berry argues for an analogy between code and law:

As technology increasingly colonizes and structures more aspects of our lives it is becoming increasingly important that the constitutive nature of technology as socially shaped is recognized (Kesan & R. Shah 2002). If computer code is analogous to law (Kesan & R. Shah 2002), then it is clear

that without some form of democratic accountability the code-based regulation of human behaviour will continue to lack legitimacy (Jurgen Habermas 1988). It is ... an important challenge for wider society to recognize that values are being instantiated within technological forms that can and should be contested before they become sedimented. (2004, p.83)

In that regard intellectual property (IP) law seems to be a romantic idea for authors of computer code, but more and more also for authors of texts, as well as media and art productions, because most authors have become nothing other than employees, the profits go to the software and media moguls, and the big moguls lobby for the extension of intellectual property laws. Proprietary software is an exercise in power politics because the IP laws grant firms power and control over the programmers and the users, and only a “few make the basic software decisions for everyone” (Stallman & Kuhn 2001). A possible alternative to this exploitation of authors might be through the principles of attribution and share-alike, meaning “that while creative work may always be copied, modified and synthesised into new works, previous creative work is valued and recognised by the community for its contribution to creativity as a whole” (Berry 2005, p.4). Furthermore the FLOSS movement could regain control over projects through the use of componentisation which “is the process of atomising (breaking down) resources into separate reusable packages that can be easily recombined” (Walsh 2008). More and more technology shapes our social lives, therefore the discussion around the constitutive nature of technology becomes an issue (Kesan & R. Shah 2002; EDRI 2002; Post 2001). “Introducing democratic accountability to code may well be the democratic challenge of the twenty-first century and steering the implementation of technological artefacts will increasingly contribute to our ability to keep our future open and democratic” (Berry 2004).

This could signify a *Culture Without Commodities* (Stalder 2002). To a certain degree this is already being practised within the fields of music and software programming and some forms of cultural production (such as avant-garde, underground, DIY-movements, parts of academia and Open Source movements) that are not selling objects. The motivation of those groups is not the commerce, but the recognition, often by limited numbers of people, that the exchange between peers is the vital part of a culture without commodities. FLOSS culture, which extends into net culture, is more than about what happens between people and networks. In *Free Software as Collaborative Text* Florian Cramer argues that FLOSS is a “rare example of electronic literature which does not confuse the Internet with web browsers” (2000). As

FLOSS is a non-rival, non-excludable good it cannot be sustained according to conventional market logic. Paradoxically it is being sustained, exceeding often “the capabilities of conventional proprietary, binary-only software” (J. Boyle 2003, p.44). But for Chris Atton it “seems that the dominant regimes of copyright and intellectual property relations are unlikely to be replaced by a new model based on social authorship. At best, these practices of file sharing on the Internet appear as marginal interventions that can do little more than chip away at the enduring and limiting logic of capital” (2004, p.110). In that sense we might soon be witnessing a disappearance of public spaces in cyberspace, as happened with urban public spaces (Besser 2001). Urban public spaces were planned in the form of parks, squares, and promenades. These spaces served as places for people to meet, communicate, exchange ideas, and expose themselves to diversity (Whyte 2001). But today urban public spaces frequently do not support this freedom any more because often they are privately owned places (Minton 2009; 2010), like shopping malls, which can prohibit any actions – for example demonstrations – which hinder the consumption of commodities.

Remember that a 'boulevard' was originally a walk planted with trees which circled the town and usually occupied the space where the old ramparts had been. (Perec 1974)

On the other hand, digital networks provide new possibilities for participatory media practices, especially through the use of Free Software (Stallman 2011). Since art and ideas never develop within an art-historical vacuum but always feed on the past, Free Culture promises to make our cultural heritage accessible to everybody to re-read, re-use and re-mix as they like – “without open access to the achievements of the past there would be no culture at all” (Medosch 2003). Participatory culture often ignores or violates copyright restrictions that might apply to media artefacts or software employed; this form of 'piracy' and sharing can be perceived as a cultural statement.

But one ought have a critical stance towards the notion of the 'free', because 'free' is included within the economic system and, as such, file-sharing is part of the economy. Free production, as well as sharing, should be an option, allowing for experimentation, and “producing culture with other economic models, on a global scale” (Lovink & Rossiter 2006). An example is the academic AAAARG (Dockray 2010) file-sharing network: an effective distribution system in terms of its scalability, openness and durability – only made possible, however, as a conglomerate of both human and non-human agency. In fact, file-sharing can not only be used for distribution, but for

actual collaboration and production (Lawrie 2011b). In that sense a legal system, social contracts, aiming to control the data spheres, needs to be tailored carefully because “sharing” a file is not equal to “sharing” in the physical world, it is rather facilitating the copying of that file (Logie 2006, p.85). In his research on file-sharing, Jonas Andersson (2010) refers to the situation as being controlled by the most driven producers and consumers, and further states that the old distribution model is so impoverished that it chooses the safest route, “the most bland of bets” (2009b). As discussed above, Boyle warns in *Guerilla Television Revisited* (1997) of the pitfalls of participatory media. For Boyle historically such cultural statements, coming from media and arts collectives and their participatory media practices, have often been absorbed and used by mainstream media, paradoxically the very institutions these collectives resisted and tried to change.

I would further argue that the windows of opportunity emergent digital networks are currently offering might be short lived, especially the potential of decentralised distribution technologies such as file-sharing. Due to current changes in legislation we see the first examples of digital networks being formatted and regulated, for example the blocking, and many argue the censorship (C. Gordon 2011), of websites offering access to decentralised distribution technologies. Therefore I discuss in the next chapter, *Contracts*, this new legislation, as well as alternative licensing schemes and open contracts offering participatory media producers a possible legal framework. Thus applying the notion of 'social contracts,' the notion of open and distributed sharing can be reinforced as an overall heuristic and social ethos.

## **CHAPTER THREE**

### **FLOSSTV**

Contracts

### 3. Contracts

The Deptford.TV project focuses, as one of its aspects, on the process of urban change in Deptford, a former Borough of south-east London, infamous for its 'dark' history as the hub of the slave trade in London. In the first part of this chapter, *Social Contracts*, as part of this research, I will elaborate upon the idea of slavery and piracy, extending it to the idea of social contracts with reference to Jean-Jacques Rousseau's *Social Contract*, which states: "The words 'slavery' and 'right' are contradictory, they cancel each other out. Whether as between one man and another, or between one man and a whole people, it would always be absurd to say: I hereby make a covenant with you which is wholly at your expense and wholly to my advantage" ([1762] 1968, p.58).

In the second part of the this chapter, *Open Contracts*, I will look how existing networks, applications, artefacts and organisations like *The Pirate Bay* (2006), *Steal This Film* (The League of Noble Peers 2006), *Open Wireless Network*, *Deptford.TV*, the *Transmission.cc* (2006) network, etc., in effect constitute strategic entities that re-write the rules of engagement with digital media on an everyday basis. The problem facing these practices is that many are deemed illegal, quasi-legal or illegitimate by current legislation. This can only be addressed by identifying new ethical frameworks which can appropriate existing practices without pre-defining them according to the established dichotomy of 'legal' versus 'illegal'. The *Digital Economy Act* in the UK is a good example of how law suddenly renders certain practices illegal. In the case of the *Digital Economy Act* one element of the Deptford.TV collaboration, the *Open Wireless Network (OWN)*, is in the process of becoming legally contested. In this chapter I will continue the debate started in the *Next 5 Minutes* (Combiotto et al. 2003) media conference, regarding 'tactical media in crisis'. The last edition of the *Next 5 Minutes* was a conference which in many ways marked the 'crash' of an online activism based on a merely (re-active) tactical approach. As McKenzie Wark and others asked during the conference: "can tactical media anticipate, rather than be merely reactive?" (McKenzie 2003). A post-Baudrillian "information ethics" (Seeman 2010) and media produced with 'compassion' can anticipate and possibly overcome this crisis.



### 3.1. Social Contracts

"Man is born free; and everywhere he is in chains", begins Rousseau's work of political philosophy, *The Social Contract* (1968). Rousseau (Dart 2005; Hampsher-Monk 1992) aimed to understand why "a man would give up his natural freedoms and bind himself to the rule of a prince or a government" (Bragg 2008). This question of political philosophy was widely discussed in the 17th and 18th centuries, as revolution was in the air all over Europe, particularly in France 1789. In the 18th century Rousseau published *The Social Contract*. Rousseau thought that there is a conflict between obedience and people's freedom and argued that our natural freedom is our own will. Rousseau defined the social contract as a law 'written' by everybody (Roland 1994). His argument was that if everybody was involved in making the laws they would only have to obey themselves and as such follow their free will. How could people then create a common will? For Rousseau this would only have been possible in smaller communities through the practice of caring for each other and managing conflicts for the common good – ultimately through love. In *The Art of Loving* Erich Fromm reminds us that "love is not a sentiment which can be easily indulged in by anyone ... [S]atisfaction in individual love cannot be attained without the capacity to love one's neighbour, without true humility, courage, faith and discipline" (1956, p.xix). Rousseau imagined a society the size of his native city of Geneva as an ideal ground for the implementation of social contract theory. Ironically it was the French who, through their revolutionaries, implemented social contract theory. Nevertheless, the French people read it differently, as *imposing* social contracts onto the people. The mass-scale imposition of contracts compromised their non-mandatory status. Will the FLOSS revolutionaries (Moore 2001) share a similar destiny to the French revolutionaries; will they too be eaten by their children?

In the 20<sup>th</sup> century, moral and political theory around the social contract had a revival with John Rawls' *A Theory of Justice* (2005) and David Gauthier's *Morals by Agreement* (1986). Gauthier argues after Thomas Hobbes (1651) and explains that there can be morality in our society without the state having to impose morality with the help of external enforcement mechanisms. For Gauthier rationality is the key for cooperation and for following agreements made between different parties. Celeste Friend states in *Social Contract Theory* (2004) that feminist philosophers criticise social contract theory for not reflecting moral and political lives correctly and completely, and for the contract itself being "parasitical upon the subjugations of classes of persons" (2004).

In a more critical approach to rationalized contracts, in *The Sexual Contract* Carole Pateman argues that “lying beneath the myth of the idealized contract, as described by Hobbes, Locke, and Rousseau, is a more fundamental contract concerning men’s relationship to women” (Friend 2004). Similarly, for Pateman, “[t]he story of the sexual contract reveals that there is good reason why 'the prostitute' is a female figure” (1988, p.192). The feminist philosophers Annette Baier (1988; 1995) and Virginia Held (1993; 2006) criticise social contract theory for not demonstrating fully what a moral person should be and how this affects relationships. Baier argues that Gauthier does not reflect on the full spectrum of human motivations and their psychology, that he fails to see that there is a dependency on certain relationships (like mother-child) before one can enter into those contracts, as described in Baier's expression “the cost of free milk” (1988). Held, as quoted by Friend, even goes so far as to argue that “contemporary Western society is in the grip of contractual thinking” (2004).

In *The Racial Contract*, Charles Wade Mills (1997) inspired by *The Sexual Contract* argues that non-whites have similar problems with the class society as women, both sets of conflicts and suppression deriving from a patriarchal mindset. For Mills there is a 'racial contract' which is more important to the industrialized part of the world than the social contract. “This racial contract determines in the first place who counts as fully moral and political persons, and therefore sets the parameters of who can ‘contract in’ to the freedom and equality that the social contract promises” (Friend 2004).

The subject of the Debian *Social Contract* (2004) might very well be the one who writes most of the code for the data sphere: the white male (Lin 2006). Taking the above criticism regarding the sexual and the racial contract on board I would like to extend the discussion on social contracts with the notion of *Open Contracts*. I shall first look into the current Debian *Social Contract* and the issue of privacy with regard to Intellectual Property (Ristroph 2009). The Debian Foundation is one of the biggest communities for the *Linux* (Torvalds 2002) operating system. The beginning of the Debian *Social Contract* for the FLOSS community states:

Our priorities are our users and free software. We will be guided by the needs of our users and the free software community. We will place their interests first in our priorities. We will support the needs of our users for operation in many different kinds of computing environments. We will not object to non-free works that are intended to be used on Debian systems, or attempt to charge a fee to people who create or use such works. We will allow others to create distributions containing both the Debian system and

other works, without any fee from us. In furtherance of these goals, we will provide an integrated system of high-quality materials with no legal restrictions that would prevent such uses of the system. (2004)

The FLOSSTV research extends the idea of the Debian *Social Contract* to media, in the form of Open Contracts, suggesting similar principles that can be applied to free and open media. I argue that these would be a pre-condition for peer-to-peer database media production such as Deptford.TV. With open contracts such as the Debian *Social Contract* in place, various communities can start discussing, experimenting with and practising the production, distribution, and sharing of media. Andrew Lowenthal has suggested the term *Open Media* or *Free Media* (2007) for this collaborative practice. Although this sounds like a promising scenario one also has to be critical, as these alternatives can be vulnerable to corruption, especially with regards to author's rights, for example Facebook's terms and conditions (2009) state:

By posting User Content to any part of the Site, you automatically grant, and you represent and warrant that you have the right to grant, to the Company an irrevocable, perpetual, non-exclusive, transferable, fully paid, worldwide license (with the right to sublicense) to use, copy, publicly perform, publicly display, reformat, translate, excerpt (in whole or in part) and distribute such User Content for any purpose, commercial, advertising, or otherwise, on or in connection with the Site or the promotion thereof, to prepare derivative works of, or incorporate into other works, such User Content, and to grant and authorize sublicenses of the foregoing. (2008)

I would support an Open Media practice, and suggest that a feminist notion of 'restorative justice' (Crook 2009; N. Christie 1977) might serve to judge *Open Contracts*, by applying the notions of solidarity and care as principles of judicial practice. However the concern is how to move from an abstract idea of open contracts to a concrete legislation which could enable a cultural production that is not deemed antithetical, or oppositional to the current judicial system, by formulating a set of ground rules and protocols that will allow free media communities to function and prosper. I argue that this can be done by defining the independent terms and conditions, namely free and open content licenses. Social contracts and laws will eventually be defined for these data spheres, but until then the 'user-generated' platforms such as YouTube, MySpace and Facebook (von Loesch 2011) will try to appropriate every uploaded piece of content in accord with the old, non-eficacious, "copyright legislation" (Electronic Frontier Foundation 2009b). Today, in the case of YouTube, one can refer to a mass 'commodification' (Van Dijck & Nieborg 2009) of User Generated Content.

Reading the terms and conditions of user-generated platforms raises the question of

how it can be that so many artists and independent producers hand over the rights for their content to these platforms, as if they don't care? Of course one might argue that they don't know. But here one must be aware that all of those artists and independent producers agreed to the terms and conditions of those user-generated platforms when signing up for an account, by simply clicking on the 'accept' check-box. No wonder that there are several critical art projects dealing with these issues around the terms and conditions of user generated platforms and social networking sites (Macgirvin 2011), as depicted by Phil Wong in *Conversations about the Internet* (2010). A good example is the *Assisting your Virtual Suicide* project, by the artists collective Les Liens Invisibles (2009), who call for Facebook users to delete their profiles as an act of 'virtual' *seppuko*, a certain form of suicide within the Japanese samurai culture. Of course Facebook immediately issued a demanded 'cease and desist' order (Cramer 2010) to this project.

### 3.2. Open Contracts

Licenses are not the answers to social problems. ... Licenses are the constitutions of software communities, and they solve problems inside the communities. They are not tools whose primary benefit is to be found in their external consequences. ... The problem that the law has is often the problem that technology can solve. And the problem that technology can solve is the place where we go with the law. That's the free software movement, there's software hacking over here and law hacking over there, and you put them together. (Moglen 2010)

Eben Moglen, founder of the *Software Freedom Law Center*, is one of the lawyers who co-wrote the latest version of the *General Public License* (GPL). Moglen's quote reminds me of Lessig's statement 'Code is Law' (1999). Several researchers have looked into the relationships between code and law. Polk Wagner (2004) discusses how 'code meets law' by looking at how regulators should regulate code through law or, as demanded by James Grimmelmann, by "legislating particular software solutions" (2005, p.1727). *When Code Isn't Law* (Wu 2003) on the other hand describes how people use software to evade legal regulation. Further, Grimmelmann criticises Lessig's notion of virtual 'places' as being disembodied from the 'real' world. Dan Hunter (2002) criticises how 'software-mediated' activity tends to be invoked by the use of spatial metaphors. And Cindy Cohn states that:

It's a category mistake to treat the legal system as just another architecture with its own specialized language. Code and law are *different* ways of regulating; they have different textures. All of those people who are required

to make the legal system work leave their mark on its outcomes: they make a certain amount of drift and discretion almost inevitable. Code doesn't have such a limit: it can make perfectly hard-nosed bright-line rules and hold everyone in the world to them. Code is capable of a kind of regulatory clarity and intensity that law can only state, never really achieve. (2003)

Moglen calls for taking “a position that moderately and modestly insists that users have rights. And [to] think that's a position that ultimately has traction, even though business is big, because business consists of people who have rights” (Moody 2006). In his speech *Anarchism Triumphant* Moglen argued that the 'Murdochworld' is ignoring the fact that the intellectual property laws are not applicable to the bitstream networks of the digital culture and by ignoring the facts “make[s] things radically worse [since] property concepts, whatever else may be wrong with them, do not enable and have in fact retarded progress” (1999). Similarly, for Schäfer:

Critical theory has to participate in the process of policy-making. Its aim should be to unveil hidden networks, to 'make things public' and map assemblages, detect alliances to provide arguments in the ongoing and forthcoming debates on our cultural values, our freedom and our civil rights (Latour & Weibel 2005). The current debates on copyright, software patents, privacy, and net neutrality are actually affecting questions of principle. (Schäfer 2008, p.296)

In *Moral Rights and Authors' Rights: The Keys to The Information Age* Mike Holderness (1998) refers to EU politicians' strong support for intellectual property laws (European Commission 2011) as the main means in order to support the 'upcoming' information society (Moody 2011), thus in turn bringing about an IP culture (Coombe 1998; Paul 2005). Holderness points at the adaptation of the legal environment for intellectual property (European Commission 1995): “In an interactive environment such as that of the information society ... one vital consideration will be the author's moral rights ... These rights are handled very differently in different legal systems, and give rise to serious controversy” (1998). *The European Copyright Directive* arose from the WIPO's *Copyright Treaty* (1996), which was agreed on by most developed countries in 1996. The US was the first country to implement this treaty into national law in 1998 as the *Digital Millennium Copyright Act*. Jessica Litman, the author of the book *Digital Copyrights* (2001), states in an interview with Andrea Foster, that “if we have egregious laws on the books, ... the *Digital Millennium Copyright Act* is one such”, and that such laws “are not going to work ... because people aren't going to obey them” (2001). The Chaos Computer Club (CCC) in Berlin refers to the politics of the European Union as preferring the “monopolization of knowledge” (Hartwich 2004) which is endangering

the diverse development of Free and Open Source software (FLOSS). One way of resisting this monopolization of knowledge is by balancing copyright with the adoption of 'fair use', and thus bringing it into EU laws, as has already been done in the US. Pat Aufderheide refers to the 'right of quotation', and points out that every "country's copyright regime does have some exemptions for unlicensed use, acknowledging the crucial need for access to culture" (2011). Recently in the UK the government made a promising approach in its review of the copyright policy in 2010 suggesting the adoption of 'fair use' for the UK (N. Clark 2011).

Creative needs and practices differ with the field, with technology, and with time. Instead, lawyers and judges decide whether an unlicensed use of copyrighted material is "fair" according to a "rule of reason." This means taking all the facts and circumstances into account to decide if an unlicensed use of copyright material generates social or cultural benefits that are greater than the costs it imposes on the copyright owner. Fair use is flexible; it is not uncertain or unreliable. In fact, for any particular field of critical or creative activity, such as documentary filmmaking, lawyers and judges consider professional expectations and practice in assessing what is "fair" within the field. (Association of Independent Video and Filmmakers 2006, p.2)

Laws, through the use of patents, hold the possibility of turning software publishing into the privilege of a few (Schweidler & Costanza-Chock 2009). Everyone can still develop software, but in a world with countless software patents, only large corporations are equipped to deal with the incremental costs and legal risks. Some large corporations want to use software patents (Halbert 2005) against smaller competitors and FLOSS software. That would, in turn, make the whole software market much less competitive. Consequently, a cartel of 'patent superpowers' would gain strategic control over the most important segments of the software business. The development of computers and microchips with built-in copy control technology, often referred to as *Trusted Computing* (R. Anderson 2004), and the current changes in the Intellectual Property legislation endanger the sustainability of such alternative practices and licensing schemes (Electronic Frontier Foundation 2009a). Patents like those for video codecs (Apple's H264 contra open formats like OGG) restrict distribution at the level of transmission. Closed platforms of these kind restrict open content licenses as all media communicators are forced to use licensed, proprietary copyrights (Costanza-Chock 2005). Intellectual property regulation tends to breach the privacy protection of consumers, as the technology used in the private sphere falls under corporate copy control. This form of IP legislation is a negative form of social contract, as it serves to restrict rather than liberate civic uses of technology and media production (Patry 2009). The development of computers and microchips with built-in copy control technology, along with current changes in intellectual property legislation, endanger the

sustainability of such alternative practices and licensing schemes.

By mandating that all new computers include copy control technology, the government would be shifting control of these machines to the content holders and limiting the power of the computer owner and user. Home computers would be governed by remote control. What's more, this proposal could render computers that run Linux operating systems illegal, because openness in copy control technology would be counter productive, and Linux, like the larger design of both personal computer and the Internet, demands a certain level of openness. (Vaidhyathan 2004, p.76)

Open contracts such as the *Open Content* licensing schemes (Liang 2004) help to create an understanding of shared culture as a communication medium rather than as a commodity. Culture and creativity very often build upon previous works, through re-using, remixing and reinterpreting works; this is a fundamental part of any creative practice, and sometimes can turn to commercial advantage. Often this also tends to take place around any invention of new communication technologies. One example was the invention of VCR recorders. History shows how those actors that tried to stop the distribution and production of VCRs, especially the big studios, in the end made “huge profits” (N. Anderson 2009) through rentals and sales in the new home-video market. The same could prove to be the case with regards to the file-sharing technologies. Adding *Open Content* licensing schemes to file-sharing distribution technology enables audiences to become active not only in the process of viewing and criticising content but also, and more importantly in regard to the FLOSSTV research, in its production and distribution process.

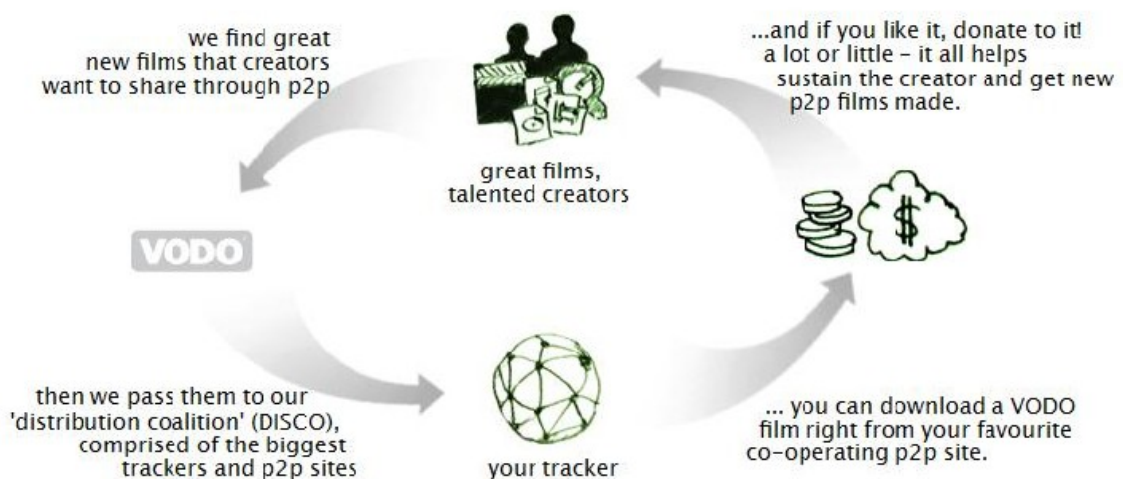


Fig. 3-1. Illustration by Jamie King (2010). Creative Commons SA-BY 3.0

A current outcome of the FLOSSTV research has been my involvement, as researcher, in the *VODO* (King 2008) project (see Figure 3-1) a voluntary donation, distribution platform and tracking system. *VODO* stands for VOluntary DONation and 'legally' allows for the distribution of media content over peer-to-peer networks (Lunenfeld 2011). It is legal because content contributors to *VODO* apply *Creative Commons* licenses to their media content, thus allowing for the peer-to-peer distribution. *VODO* asks audiences to donate to the producers, and become distributors by sharing the media further. For the distribution over *Bittorrent* networks the *VODO* project initiated a distribution coalition (*DISCO*) allowing content producers to reach a possible audience of millions. Currently *DISCO* counts over 30 partners. Content producers can upload their content to *VODO*, and *VODO* takes care of the correct encoding of the media, the creation of torrents and the distribution over *DISCO*. "This could be considered as a file-sharing network which is driven by a combination of immediacy and patronage; immediate distribution and immediate (possible) donation" (Stumpel 2010, p.14).

User Generated Content platforms, such as YouTube, present themselves as open-content providers that host a democratic discourse (Andrejevic 2009) by offering members of the public freedom of speech. But YouTube is owned by Google (Bogatin 2007) and receives its revenue from a personalised advertising system. As Guy Debord once claimed, "the real consumer thus becomes a consumer of illusion. The commodity is this illusion, which is in fact real, and the spectacle is its most general form" (1967). The current 'regime' of User Generated Content platforms exploit their contributors (Bauwens 2008; Hill 2010). In *Loser Generated Content - From Participation to Exploitation* Søren Mørk Petersen calls for a theory of labour that is "able to map both exploitation and free labor" (2008), but also achieves more openness. The use of these platforms would essentially be tactical, not strategic, as the strategic actor is the one controlling the platform. Publishing content on YouTube is to benefit from higher visibility, but on terms dictated by the broadcasting platform – see for example *YouTomb* (Price et al. 2008). According to Lovink: "Strategy is the motivation, the overview. Tactics is the positioning of the parts ready for the implementation of the strategy. Operations is the carrying through. Yes, the theory has a military origin ... but it stands as an analysis of action and is useful in any situation where intention and material have to be combined" (2003). The use of file-sharing technologies, on the other hand, is strategic, as the participants do not need to abandon their rights and can bypass the draconian terms and conditions imposed by platforms such as YouTube and Facebook. As Michel de Certeau points



out, strategies differ from tactics in that they are not reactive to an oppressor or enemy:

I call a “strategy” the calculus of force-relationships which becomes possible when a subject of will and power (a proprietor, an enterprise, a city, a scientific institution) can be isolated from an “environment.” A strategy assumes a place that can be circumscribed as proper (propre) and thus serve as the basis for generating relations with an exterior distinct from it (competitors, adversaries, “clientèles,” “targets,” or “objects” of research). Political, economic, and scientific rationality has been constructed on this strategic model. I call a “tactic,” on the other hand, a calculus which cannot count on a “proper” (a spatial or institutional localization), nor thus on a borderline distinguishing the other as a visible totality. The place of a tactic belongs to the other. A tactic insinuates itself into the other's place, fragmentarily, without taking it over in its entirety, without being able to keep it at a distance. It has at its disposal no base where it can capitalize on its advantages, prepare its expansions, and secure independence with respect to circumstances. (De Certeau 1988, p.xix)

Rather, strategies are self-maintained, autonomous, and, more specifically, spatially situated. If the ‘temporary autonomous zone’ (Bey 1985) of pirates, nomads and vagabonds is characterised not by permanence but by transience, still it might be seen as a means to generate short intermissions of stability; the establishment of momentary connectors, stable points, islands in the stream. The establishment of such islands is dependent on location and manual effort: different types of strategies became apparent throughout the FLOSSTV thesis. For example one such island is the FLOSS operating system *Debian*, a Linux distribution, developed by a community of coders. The Deptford.TV project operates by strategically building up an independent server system with the goal of distributing over file-sharing networks rather than relying on user-generated hosting services.

Following a discussion with one of the initiators of the Open Knowledge Foundation, Rufus Pollock (2006b), it became clear that the only option for Deptford.TV was to apply a copyleft ‘attitude’ (Moeller 2007) as a statement for FLOSS, or *Open Access* (Hall 2009), rather than a specific license to the raw material. It is preferable to approach social contracts as non-mandatory and moreover to deliberately license the content under three different licenses (Free Art License, GPL, CC-SA-BY (see *Appendix V*). This approach follows the same trajectory as occurred between the terms ‘free’ and ‘open’ within the software community (Berry 2004; 2011), when an alleged ‘clash’ between adherents was solved by way of a synthesis, which is manifested as FLOSS, an acronym which signifies an attitude rather than a set license. The basic reference for the Deptford.TV project is the *General Public License* (GPL). The GPL can also be applied to non-software information (Stutz 1997). The GPL “applies to any

program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License” (Free Software Foundation 2007). The 'program' may not necessarily be a computer software program – any work of any nature that can be copyrighted can be 'copylefted' with the GNU GPL. This is also the spirit in which my research into the idea of FLOSSTV must be seen. The *Free Art License* as well as the *Creative Commons Share-Alike Attribution* license follow the attitude of the GPL. As the CC SA-BY license states, you are free to share (to copy, distribute and transmit the work) and to remix (to adapt the work), but you need to attribute the original source and further, apply the same license to any derivative works.

Eric Möller's *Definition of Free Cultural Works* is a good starting point to analyse open contracts in regard to the 'copyleft attitude'. Möller states that “[i]n order to be considered free, a work *must* be covered by a Free Culture License, or its legal status *must* provide the same *essential freedoms* ... It is not, however, a sufficient condition. Indeed, a specific work may be non-free in other ways that restrict the essential freedoms” (2006). There are various other definitions of open contracts and standards like the European Commission's *Interoperability Framework* (2003), the Danish Parliament's motion *B 103* (2005), the definition on *Open Standards: Principles and Practice* by Bruce Perens (2005a), the *Open Standards* definition developed by the SELF Consortium (2006), the FFII's recommendations on the *European Interoperability Framework EIF 2.0* (2009), the CPGL collective's *Common Good Public License* (2003), OKF's *Open Knowledge Definition* (2008) and *Guide to Open Data Licensing* (2007) and the *Free Knowledge Institute's* definition of minimal characteristics for *Open Standards*, stating:

1. The standard is adopted and will be maintained by a not-for-profit organisation, and its ongoing development occurs on the basis of an open decision-making procedure available to all interested parties (consensus protection of privacy in the electronic communications sector or majority decision etc.).
2. The standard has been published and the standard specification document is available either freely or at a nominal charge. It must be permissible to all to copy, distribute and use it for no fee or at a nominal fee.
3. The intellectual property - i.e. patents possibly present - of (parts of) the standard is made irrevocably available on a royalty-free basis.
4. There are no constraints on the re-use of the standard.
5. However, the first condition does not have to be fulfilled in the case that a complete reference implementation of the specification exists in Free Software (a.k.a Open Source or Libre Software), i.e. under a license approved by either the FSF (2009) or OSI (2009). (2009a)

A promising initiative with regard to FLOSSTV practice is the *Charter for Innovation, Creativity and Access to Knowledge*, written during the first *Free Cultural Forum* (FCF) which gathered in 2009. The FCF was organised by the Free Knowledge Institute as an international meeting of parties engaged in the “dissemination of culture and knowledge” (FCF 2009) in the digital age. The FCF discussed how to build optimal networks, support for self-organizing tools and free culture (Rowan 2011), and the manifestation of common demands in form of a definition of the *Charter for Innovation, Creativity and Access to Knowledge*. The FCF charter was endorsed by Richard Stallman (EXGAE 2010). The FCF charter states that the “public interest is best served by supporting and ensuring continued creation of intellectual works of significant societal value, and to ensure all citizens have unfettered access to such works for a wide variety of uses” (FCF 2009). The charter is focusing on the right of free expression, the right of access to culture and knowledge and the right to an equitable distribution of copyright benefits: “The inviolability of communications, privacy and neutrality of internet access are necessary to defend these rights and to serve as levers for economic, political and social transformation” (Free Knowledge Institute 2009b).

Members of the FLOSS community have similar attitudes towards intellectual property to those of the musical improvisation community, which also has a critical attitude towards intellectual property and “in itself questions the foundations upon which intellectual property is based, such as: authorship, rights, restrictions, property, and the division between production and consumption” (Mattin 2009, p.168). Intellectual property becomes an ideology according to which one competes for the ownership of non-material goods. Competition is the accepted norm, 'the common sense', speaking in ideological terms. It is this very idea of competition, I argue, that FLOSSTV opposes: the ownership control of media conglomerates is opposed through 'sharing'. The practice of FLOSSTV allows for critical reflection upon society, for the benefit of society as a whole and not only for the benefit of media conglomerates or individuals. It is notable that Debord's most quoted work, *The Society of the Spectacle* is a book that is in the public domain with no rights reserved. Debord consciously published this book under 'no copyrights reserved'. Debord reflects on the development of media and communications technologies suggesting that “if the social needs of the age in which such technologies are developed can be met only through their mediation, if the administration of this society and all contact between people has become totally dependent on these means of instantaneous communication, it is because this 'communication' is essentially unilateral” (1967, p.8).

Seen in the light of media moralities media production for the welfare of others challenges the ideological belief in the 'individual' having to succeed. When sharing code (Himanen 2001), media, art and culture in general, it is ultimately a challenge to one's own ego, and it is also a subversion of selfishness. Arguably our drive to own property, or in the context of FLOSSTV 'intellectual' property, makes us underestimate the difficulty of engendering a greater compassion in ourselves for those we live with and share our lives with— basically the society we are part of:

The purpose of property is to ensure a propertyless class exists to produce the wealth enjoyed by a propertied class. Property is no friend of labour. This is not to say that individual workers cannot become property owners, but rather that to do so means to escape their class. Individual success stories do not change the general case. As Gerald Cohen quipped, 'I want to rise with my class, not above my class!'. (Kleiner 2007)

Everything we consider we own is always dependent on others. Any intellectual property (and indeed all cultural production) is based on others' efforts, dependent on others' labour, dependent on audiences supporting one's own production. Intellectual property becomes interdependent. If we accept that the welfare of others is as or even more important than our own welfare, if we accept that we all have equal rights, we can decide that intellectual property is unjust (Dowens 2003), or, to paraphrase Pierre-Joseph Proudhon (1840), that *intellectual* property is theft.

Without becoming aware of and challenging one's own greed and selfishness there is no progress towards 'social' media (Kleiner 2010). The novelist Norman Mailer stated that “the only way socialism can work is if there is ... some larger sense of things. [Otherwise] you just get the play of egos” (Quoted in Bellos 1997). My view is that any FLOSS practice needs to analyse its motivation in order to overcome ignorance of greed (Lietaer & Belgin 2004), and that “it is not enough to address ignorance with political argument, because anger and greed are an active form of ignorance - they repel counter-arguments. If we are to open minds, we must also open hearts” (Edwards & Cromwell 2009, p.251). Engaging with FLOSS practices then becomes a virtuous action, an ethical practice. A spiritual master, Śāntideva, once wrote in the 8<sup>th</sup> century: “All those who are unhappy in the world are so as a result of their desire for their own happiness. All those who are happy in the world are so as a result of their desire for the happiness of others. ... Note the difference between the fool who seeks his own benefit and the sage who works for the benefit of others” (1997).

With the Deptford.TV project I approach the concepts of freedom and ownership by using the notion of 'open contracts' through a form of coalition, as discussed by the Critical Art Ensemble (2001). Deptford.TV was designed to support ad-hoc coalitions in order to apply FLOSS methods to media production, starting with documentary film practices. For FLOSSTV productions, especially peer-to-peer film-making, the extension of copyright legislation with 'copyleft', as defined by the Free Software Foundation (2009), implies that such a contract needs to be characterised by openness (Wouter 2009). As argued above, with regard to digital distribution, copyright laws have in effect ceased to function. Consequently, artists, programmers and activists have been looking for alternatives and extensions to these laws. According to the Critical Art Ensemble, collectives can configure themselves to address any issue or space, and they can use all types of media. The result is a practice that defies specialization.

Deptford.TV is using Free and Open Source Software (FLOSS); because of that, this thesis and all the practical outcomes of the FLOSSTV research are licensed under the Free Software Foundation's *General Public License, GPL* (2007), which can be found in the *Appendix*. FLOSS has been described as a development towards a 'bazaar-like' mode of organisation, as opposed to the proprietary mode of organizing software production in a corporate 'cathedral-like' structure, as described by Eric Steven Raymond (2000; 2001; 2008). Richard Stallman is probably the most quoted source for initiating the GPL and the idea of writing a "GNU operating system" (Kelty 2008, p.199), with the deliberate strategy of rewriting all the software so as to be sure that no copyright, intellectual property or trade-secrets would be violated and more importantly, not to reproduce any mistakes of the software rewritten.

## **CHAPTER FOUR**

### **FLOSSTV**

Methods

#### 4. FLOSSTV Methods

Deleuze might suggest that the action researcher is in a sense ‘apprenticed’ to the inquiry process they are engaged within – a dialectic of ‘continuous becoming’... Deleuze tells us that we can never tell in advance what we will learn, and that no-one learns the same things in the same way. The process of engaging in action research is thus radically open and creative. This perspective emphasizes how important it is for action researchers to reflect critically on their practice. (Reason & Bradbury 2007, p.339)

In this chapter I will outline my research methods and the reason for choosing 'practice based research' with reference to *Participatory Action Research* as my main methodological paradigm for this FLOSSTV research project.

First I will describe the methods of Action Research, in particular Participatory Action Research, as well as Practice Based research, or Practice-as-Research, and the notion of AVPhD. Then I will discuss how I approached my practice based research project, with the title Deptford.TV, through the practice of TV hacking.

##### 4.1. Action Research

“In action research 'theories' are not validated independently and then applied to practice. They are validated through practice” (Bell 2005, p.9). 'Action' here signifies forms of intervention into the research fields; the researcher becomes part of, and actively engages with what (s)he is researching. *The History of Action Research* (Masters 1995) explains that action research focuses on problem-solving and improving the practice which is being researched, as “sometimes it is only by taking a practical instance that we can obtain a full picture” (Nisbet & Watt 1984, p.5). Lewin, who coined the term 'action research' (1946), states:

Planning starts usually with something like a general idea. For one reason or another it seems desirable to reach a certain objective. Exactly how to circumscribe this objective, and how to reach it, is frequently not too clear. The first step then is to examine the idea carefully in the light of the means available. Frequently more fact finding about the situation is required. If this first period of planning is successful, two items emerge: namely, an ‘overall plan’ of how to reach the objective and secondly, a decision in regard to the first step of action. Usually this planning has also somewhat modified the original idea. (1948, p.205)

*The Action Research Handbook for Practitioners* (Stringer 1996) simplifies Lewin's cycle of "planning, acting, observing and reflecting" into "look, think and act". 'Look' signifies the gathering of information, 'think' the interpretation of the gathered information and 'act' the creation of an 'overall' plan and its implementation. Then a new cycle starts, where one starts to 'look' again at the outcomes of this implementation. In other words, this is an 'iterative' process (Hughes 1997).

Through my collaboration with the *Centre for Urban and Community Research* (CUCR), Goldsmiths, University of London, I was introduced to 'action research' methods, where action research was used to break certain social barriers. CUCR's project *No Ball Games Here* used action research methods, addressing those with an interest in the "issues of youth geographies, racialisation and urban youth cultures" (Rooke et al. 2005).

*The Sage Handbook of Action Research* further outlines five interdependent characteristics of action research: emergent developmental forms informed by practical issues, knowledge-in-action, participation, and human flourishing (Reason & Bradbury 2008, p.5). For Peter Reason and Hilary Bradbury these characteristics imply "a 'participative turn' and an 'action turn' in research practice which both builds on and takes us beyond the 'language turn' of recent years" (2008, p.5). Reason and Bradbury argue that the 'language turn' focused on knowledge as a social construction and that the 'action term' considers "how we can act in intelligent and informed ways in a socially constructed world" (2008, p.5). Action research is emancipatory because it does not only create new knowledge but it also creates new abilities to generate this knowledge. For Reason and Bradbury knowledge is a living process 'rooted' in everyday life. This means that action research is "less defined in terms of hard and fast methods, but ... a work of art emerging in the doing of it" (2008, p.5). Practical knowledge and new forms of understanding are also gained through collaborating with participants interested in the research. Reason and Bradbury go so far to state that "all participative research must be action research" (2008, p.5).

For example in CUCR's research *No Ball Games Here* young people who had not played together and who participated in the research "went to areas they would not normally go to and reflected on their locality" (Rooke et al. 2005, p.3). The findings were summarised and presented in two exhibitions with still images and moving images, bringing together the participants and their respective communities, allowing for a local 'action plan' drawn up by the participants of the two meetings. Those group discussions involved 'the community' by



addressing 'social change' (Bessette 2004) in regard to youth cultures - and their ball games.

## 4.2. Participatory Action Research

*Participatory Action Research* is informed by Paulo Freire's notion of 'critical pedagogy' discussed in the *Pedagogy of the Oppressed* (1970). Freire describes that realising one's consciousness is a beginning of praxis and in the case of pedagogy it is the first step towards taking action against 'oppression' (Simões 2007). "Praxis involves engaging in a cycle of theory, application, evaluation, reflection, and then back to theory. Social transformation is the product of praxis at the collective level" (C. Stevens 2002). Participatory Action Research is further informed by diverse emancipatory and grassroots approaches to research, including contributions of indigenous cultures, communities in the global south, pedagogues and philosophers, ecological practitioners and egalitarian, feminist, 'social movements', as well as 'direct action' networks.

Antonio Gramsci coined the term 'organic intellectuals' (1971) by arguing that all people are intellectuals and philosophers through their life experiences, and that they can use those experiences for social change. In that sense the participants of a Participatory Action Research project can be seen as co-researchers. Reason and Bradbury define Participatory Action Research as "a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes" (Reason & Bradbury 2001, p.1). For this thesis, I refer to *The SAGE Handbook of Action Research* (Reason & Bradbury 2008) as a guideline when applying the Participatory Action Research method to the FLOSSTV research, and the chapter *Participatory Action Research - Communicative Action and the Public Sphere*, where Kemmis and McTaggart apply Participatory Action Research to Habermas's notion of 'public spheres'. Kemmis and McTaggart make us aware that in *Between Facts and Norms* Habermas (1996) discusses 'public spheres' in plural, referring not to the abstraction of one public sphere but to concrete and "practical contexts for communication" (2005, p.584) within public spheres. For Kemmis and McTaggart, public spheres are "constituted as actual networks of communication among actual participants" (2005, p.584), which are outside of the 'formal systems' (2005, p.585). In order to allow participation and collaboration coming from outside of formal systems the FLOSSTV research project Deptford.TV was established in collaboration with the media lab *Deckspace*, the community WiFi mesh up network *Open Wireless Network*, *OWN*, *!Mediengruppe Bitnik* and participants such as film makers, video

artists, coders and software artists. One of the aims of the Deptford.TV project was to transform the traditional notion of a singular documentary (for which one might refer to media or television production), into a collective stream of media production.

Kemmis and McTaggart explain that alternative public spheres come into existence in “response to legitimation deficits”, by trying alternative ways of production in order to overcome these 'deficits' (2005, p.584). In these public spheres the participants act voluntarily and are “free to withdraw from the communicative space of the discussion” (2005, p.588). Public spheres, according to Habermas, generate 'communicative power' (1962) by allowing participants to mutually communicate with each other on some level. In the case of the Deptford.TV project it is offering methods and tools for a communicative space through an arts practice, giving the Deptford.TV participants access to critical conversations and ways to produce audiovisual media and art works.

For Kemmis and McTaggart, public spheres arise in practice through “the communication networks associated with social movements” (2005, p.591). Those are “conditions under which loose affiliations of people can gather to address a common theme based on contemporary problems or issues, aiming to inform themselves about the core practical question of what is to be done” (2005, p.592). Such conditions are particularly relevant to Participatory Action Research methods. In those terms Deptford.TV itself takes part in the Transmission project, which is a meta network of online video distribution projects and networks, where “citizen journalists, video makers, artists, researchers, programmers and web producers ... are developing online video distribution tools for social justice and media democracy” (2006), through the use of FLOSS wherever possible. Transmission's aim is to facilitate social change, in terms of a “general political potency” of the movement, strengthening public spheres, and “understanding how objectives and methods” (Kemmis & McTaggart 2005, p.591) are drawn up by the Transmission project itself.

### **4.3. Against Methods**

Paul Feyerabend has stated that “the meaning of freedom is being understood in the course of its emergence through practice” (Reason & Bradbury 2008). Feyerabend's position is radical in the philosophy of science, because he states that philosophy can neither succeed in a description of science nor offer methods, hence his call *Against Methods* (1975). Feyerabend

demonstrates, through case studies of major scientific breakthroughs, such as Nicolas Copernicus's *Revolution of Celestial Spheres* (1543), how rules and methods have been violated in the academic evolution of contributions to knowledge. Feyerabend argues, by giving historical case studies, that without the violation of rigorous methods the scientific revolution would have been impossible. Uri Gordon's discussion in *Practising Anarchist Theory: Towards a Participatory Political Philosophy* (2007) gives an idea of how one can deal with methods from an anarchist perspective. He advocates employing Participatory Action Research as a technique that can inform debates on issues related to anarchist concerns, so as to generate new ideas on how to address those issues. Referring to Gramsci's idea of the organic intellectual, he argues that:

the process of generating anarchist theory itself has to be dialogical in the sense that both the people whose ideas and practices are examined and the people who are formulating theory and their basis must be involved in the process of theorising. Only from this dialogical connectedness can the anarchist philosopher draw the confidence to speak. (U. Gordon 2007, p.280)

Uri Gordon outlines three stages for a theoretical research undertaken within a participatory research environment. The first stage is one of 'immersion', where the researcher is or becomes part of the subject being researched. The second stage is 'absorption', where the researcher contextualises the practise which (s)he is engaging with. In the third stage, which Gordon refers to as 'integration', the researcher reflects on the 'absorption' stage to come to conclusions and feed those conclusions back into the research.

In such research strategies with a horizontal approach to the generation of knowledge, the rigid separation between researcher and researched is dissolved. These strategies emphasise the emancipatory potential of the collective generation of knowledge that legitimate and valorise a socially committed orientation in intellectual endeavours (U. Gordon 2007, p.283)

The Argentinian collective Colectivo Situaciones exemplifies the notion of going 'against method' with their discussion around 'militant research' (2007). Colectivo Situaciones argue that in contrast to a traditional academic researcher, who comes from the outside, the militant researcher goes into a situation which is being researched. In the case of Deptford.TV those research situations were represented by the workshops organised in collaboration with the !Mediengruppe Bitnik. For !Mediengruppe Bitnik it was always important to point out to the participants that these workshops were organised in a playful manner. This is why Colectivo Situaciones refer to Benedictus de Spinoza's "joyful passions" (1677). Furthermore Colectivo Situaciones argue that the playful state only becomes possible when one admits that

one does not have the answers. Research militancy resists predefined schemes.

I would argue that when participants are empowered to think of themselves as 'experts' within the collaboration then 'communication' can become playful 'composition', because participants are open to experiment, or in other words to 'hack' around with, and reflect upon, the media they use and how they use it. As the *no border* activists put it: "Everybody is an expert" (AutorInnenkollektiv 2000). As a result, the process of production and composition as experienced by the participants becomes the research method itself (Precarias a la Deriva 2003).

In a similar vein, I became a member of the !Mediengruppe Bitnik collective in 2008 (after having collaborated with them since 2005), experimenting with situations and workshops, as art practices and part of my wider FLOSSTV project.

I first met !Mediengruppe Bitnik during the *CODE Ars Electronica* festival in Linz, Austria, in 2003. At that time !Mediengruppe Bitnik were taking part in a group exhibition from the University of the Arts *Hochschule fuer Kunst und Gestaltung Zurich*. Mediengruppe Bitnik was originally founded in 2003 by students of the University of the Arts Zurich. Their supervisors *Knowbotic Research* invited me to create a documentary entitled '*free the code*' about the exhibition the university had organised for the *Ars Electronica* festival. *Knowbotic Research* themselves are an electronic art collective founded in 1991.

What caught my interest during the group exhibition was a project entitled *Teleklettergarten* that !Mediengruppe Bitnik were involved in. It was a keyboard the size of a house mounted on the outside of the University of the Arts Linz, in the form of a climbing wall, connected to a computer and the internet. Visitors were asked to climb the wall and to push the keys in order to collaborate with the programmers on the ground and to write code critical of forms of intellectual property, such as copyright and electronic patents:

We program codes, scripts and tools, and demonstrate functions. In times of software patenting, digital rights management and access controls, one is no longer guaranteed to be able to write and run a function without running the risk of committing illegal acts thereby. (FOK 2003)

Ever since *Teleklettergarten*, I have documented many of !Mediengruppe Bitnik's works over the last eight years, creating a long-term documentary (in the sense of this research as a FLOSSTV database documentary) of !Mediengruppe Bitnik. What drew my attention to Bitnik was their way of practising art. Changes to existing cultural systems are part of the artistic work of !Mediengruppe Bitnik. Bitnik uses the strategies of hacking that are available for a practice of conversion, reorientation and criticism of media systems. For Bitnik hacking is an artistic intervention into an existing system, to open it for other than its intended purpose. Bitnik is especially interested in multimedia systems, mediated realities and live media. Our interests converged in the exploring and opening up of questions around intellectual properties, rights issues, and the use of copyleft for media, arts and software productions.

In 2005 I started collaborating with !Mediengruppe Bitnik envisaging the use of their *Copyright!* street television system for Deptford.TV. I invited !Mediengruppe Bitnik to take part in the *Node.London* season, March 2006, to run a TV hacking workshop and present their project *Download Finished!* during a Deptford.TV *Peer2Peer* Cinema session on the *Mindsweeper* boat (fig. 5-13).

Download Finished [<http://www.download-finished.com>] transforms and re-publishes films from p2p networks and online archives into new originals. For the transformation of the found footage Download Finished exploits a characteristic unique to online films: Before films are fed into filesharing networks, they undergo a series of structural transformations and their data structure is completely reshaped for the purpose of compression. Download Finished uses the new data structure for the transformation of the visual layer: What usually appears as a compression error becomes the aesthetic form of the new originals thus showing the underlying data structure of the films on the surface of the screen. The original images dissolve into pixels, making the usually hidden data structure visible. (!Mediengruppe Bitnik 2008c)

In 2007 I documented the project *Opera Calling*, which was an artistic intervention into the opera house of Zurich. !Mediengruppe Bitnik placed bugs in the auditorium of the opera house which retransmitted the performance over a call centre phone server individually to private households in Zurich. The numbers were randomly selected and anyone picking up the call could listen to the opera performance live.

In 2008 participants in the Deptford.TV workshops got interested in surveillance systems around Deptford and built a CCTV sniffer. At the same time Bitnik organised TV

hacking workshops around CCTV sniffing. My documentary practice and Bitnik's media arts practices joined and I became a member of !Mediengruppe Bitnik. In May 2009 we gave a TV hacking workshop entitled *CCTV – A Trail of Images* at Goldsmiths, University of London. The Deptford.TV project extended from being a collaborative documentary film project, around the urban change process of Deptford, to a database project which also applies and experiments with artistic practices. With the project *The Parasite's Delight* we looked into parasitical (Serres 2007) potentials within media systems, influenced by Bazon Brock's *Ästhetik gegen erzwungene Unmittelbarkeit, Aesthetics against Forced Immediacy* (1986), Fernando Pessoa's *The Anarchist Banker* (1922), and Slavoj Žižek's discussion around 'systematic violence' (2008; 2007). Through the notion of parasitical (2010b) use of media systems the collective is intervening not only into media systems such as radio, television (2008a; 2008b), file-sharing (2005), but also into classical performance institutions such as the opera house (2007).

!Mediengruppe Bitnik's latest art piece entitled *Too Big To Fail, Too Small To Succeed* was exhibited at the same time in London and Zurich. It was an intervention into the financial systems of these cities (Reichert 2009), calling audiences to survey bankers, follow them in public space and report their movements back to the call-server of !Mediengruppe Bitnik. These calls were subsequently also used as raw material in the Deptford.TV editing workshops. As part of the exhibition !Mediengruppe Bitnik used the billboard Space (see figure 4-1) in front of the Space Gallery in London to present the work (Stalder 2011). The work was a photograph of a street scene in which an investment banker stands in front of a USB bank branch, holding up a cardboard sign that has the word 'LIES' on it, a homage to a photograph of Peter Weibel from 1971, in which Weibel stands in front of a police station, holding up a cardboard sign that reads 'LIES' underneath the police sign.

The following statement was emailed to the Nettime mailinglist by Lennaart van Oldenborgh who witnessed the removal of the image the billboard at the night of the vernissage:

All the buzz on the night was about how the image was now surely going to go viral, and surely the Bitniks and the gallery were going to get lots of attention from this, but in the following days I didn't hear or see anything. Out of curiosity, I asked around people I'd met on the night and someone who didn't want to be named said that indeed the gallery had received a threatening letter from UBS and could not be

seen to publicise the case pending possible legal action (presumably a libel case, in which of course both the gallery, which is a non-commercial space, and the artists would be 'too small to succeed'). The image was taken down from the [Space ] gallery website. ... I think the whole incident throws up some interesting questions about the limits of freedom of (visual) speech, freedom of art, the difference between making a controversial gesture in public space vs doing the same inside the sanitised, screened-off space of the art gallery, etc. With its legal threats UBS is nicely illustrating what was the point of the work in the first place: in our time, it is corporate and financial entities that are 'too big to fail', that can use libel and copyright laws to repress freedom of speech, analogous to the way the police was used as a tool of state repression at the time of Peter Weibel's image from 1971. (2010b)



Fig. 4-1. Removal of the 'UBS lies' billboard. Photo Leela Axon. Free Art License 1.3

#### 4.4. AVPhD: Practice Based Research

Practice as research (PAR) and practice-based research (PBR) — and 'research through practice', 'research by practice', 'performance as research' — are contested terms that resist close definition. Practice as research and practice-based research are frequently used interchangeably to suggest a relationship of research between theory and practice. Broadly speaking, practice as research is an attempt to see and understand performance media practices and processes as arenas in which knowledges might be opened. The institutional acceptance of practice as research in the higher education sector acknowledges fundamental epistemological issues that can only be addressed in and through theatre, dance, film, TV and video practices. (PARIP 2005)

Research that takes “the nature of practice as its central focus is called ‘practice-based’ or 'practice-led' research” (Candy 2006, p.2). Practice based research is often undertaken by

practitioners within doctoral research programmes. For Linda Candy, in *Practice Based Research: A Guide*, this form of research has initiated new “concepts and methods” (2006, p.2) in the creation of original knowledge. FLOSSTV is a practice based research project investigating methods that can facilitate other media and arts practitioners wishing to engage in collaborative and participatory media and arts productions. The general principles of participatory media production were recognized many years ago, as discussed in *Chapter 2: Contextual Review* starting with Brecht's *Radiotheories*. I use practice as a research method in order to find means to put these ideas and theories into practice (Hadzi, Medosch et al. 2008). Various systems of participatory media have been developed in theory. The FLOSSTV research is inventing new methods of participatory media and arts production by applying theories of participatory media and art productions in practice. I position the FLOSSTV research within the methods of AVPhD practices. AVPhD (Dowmunt & Pearce 2008, p.194) is the name given to an AHRC (Arts and Research Funding Council) [Humanities] funded network for researchers, supervisors and examiners of audio–visual practice-based doctorates, launched in September 2005 (AVPhD 2005).

According to Ian Christie, in the humanities there is “often the unspoken sense that the thesis is the research: that it embodies the search for sources, materials and their interpretation” (2008, p.275). But this is not the case for research within the sciences, where the practice, the experimentation is at the centre of the research, a 'conceptual inquiry', which then is 'written up' as a thesis, with “the significance of the research resting on its results” (2008, p.275). Christie states the problem as being that “in the wake of post-structuralism, [there] is a comparable extension of the ‘textual’ to cover works in all media, including the audiovisual. This latter, in particular, has become a critical commonplace in analysing a wide range of forms of production and practice: if all can be ‘read’ as ‘text’, then what need to seek other terms of engagement?” (2008, p.277).

At this point I turn to the argument of my thesis supervisor Tony Dowmunt, who himself finished an AVPhD entitled *A Whited Sepulchre* (2003; 2009b). In his speech *An Invigorating Shake?* (2009a), Dowmunt states that demonstration might be a term used alongside argument within a thesis. Within AVPhDs one can demonstrate the generation of original knowledge. For Dowmunt it might be possible that the differences between argument and demonstration are to be resolved with digital technologies, by suggesting that it's “now possible to move beyond the familiar text/film polarity – the conflict over whether (or to what extent) a film needs text accompaniment to make it a bona fide research outcome” (2009a,



p.10). The assumption here is that digital media are making this distinction 'redundant' (2009a, p.10), as everything becomes binary from digital text to digital artefact, such as video, image, sound and code itself. All these digital artefacts can be combined within one artefact:

Digitisation liberates us to ask a more basic and useful question: what (for us as P/R practitioners in moving image) is the appropriate material form for an academic research outcome, given these technological developments? I assume that we are seeking new forms of academic 'text/image-production' that can both fulfil the objective of making our research processes transparent to other researchers, but also, crucially, are able to convey the nuances and textures of work that has been originated (at least partially) through audio-visual (rather than text-print) media. 'New'/digital media (DVDs, websites etc) clearly offer ways of doing that. (2009a, p.10)

Therefore the research project Deptford.TV acts as a proof of concept for this investigation. My main methodological approach, through which I gain new knowledge by applying practice through research, consists of hacking methods, like the method of TV hacking discussed below, as the practical element. The FLOSSTV research documents and reflects on these methods and the resulting outcomes of the Deptford.TV project. The videos, images, sounds, code, and the Deptford.TV database are the outcomes and results. In order to give an understanding of my research investigations this text acts as a written account, by contextualising and analysing the practice based Deptford.TV project.

#### **4.4.1. Metadata and Taxonomy**

Through TV hacking practices the FLOSSTV research aims to raise awareness about the individual's responsibility towards the way (s)he relates to mass media. The focus lies on shifting the role of television audiences from passive consumers to active participants who can share, discuss, and develop an alternative television culture. Deptford.TV functions as an open interface for the process of communication in the form of a participatory medium. In this collaborative process the log file becomes an efficient way to communicate the content. In the case of the Deptford.TV project the log file signifies a log of all the raw materials, a description of the material to be found on the database through taxonomy, and a log of the edited material, the edits, giving access to all the different versions of edits stored on the Deptford.TV database. Through the log files the Deptford.TV database has a 'memory of material' in a form of an index. In the traditional editing process of a video or film the log file is important in order to keep one's orientation through the editing process, because the editing process mixes up the original chronology of the raw material, and one's own memory becomes

distorted as the editing process constructs a new history, a new chronology. Thomas Schadt describes the process of logging raw material as 'letting go' (2002b) of the raw material.

I decided to use as the main method of gathering metadata from Deptford.TV participants the tagging technology used in many web 2.0 applications, such as *Delicious*, *Flickr* and web-blogs. Clay Shirky refers to *Delicious* and *Flickr* as new systems for taxonomising and aggregating tags, which do not recreate a hierarchical categorisation but a user-generated aggregation of tags. This means that the individual attaches value(s) to the objects' tags, rather than hierarchies. Shirky further argues that there is currently a difference between 'browsing' and 'searching' in regards to how we categorize and tag. Whereas the 'browse' function requires a hierarchical categorisation, the 'search' function is the opposite, as nobody pre-decides what the searcher needs and the function is based on a vertical link structure: "When people were offered search and categorization side-by-side, fewer and fewer people were using categorization to find things" (2005). Critics of the search engine Google who are concerned with privacy issues are pointing to the fact that since the beginning of 2010 Google has added a personalised horizontal structure to the vertical link structure by offering as first results a prediction based on what the user would most likely click, using a personalised search mechanism (Pariser 2011).

Because moving images are not machine-readable like text files, even highly sophisticated systems such as the face recognition software used by the police (Bianchi & Rojo 2010) or the open source face blurring project *faceblur* (Jilt 2010) use metadata in order to manage the information on archives and user generated platforms. How useful this information is for the production process of a project depends on how well defined the metadata vocabulary for a specific database and project is, but also on the metadata provided by the contributing participants (Kessler & Schafer 2009), as well as comments or changes to those metadata files made by the collaborating participants of a project. I looked into several approaches to metadata standardisation (Pollock 2006a), and annotation, such as Annodex's open specifications (2005), Advence's metadata annotation system (2002), AMW's metadata management system, and Transmission's metadata standards (2008). As there is no standard which as yet has been widely adopted, there are still many proposals being developed and researched. In this regard one promising annotation initiative is the *Blarchive*.

The media collective The People Speak (2003) proposed developing this annotation process further for the *Blarchive project* (2009) by applying the metadata annotation process in

real time to a live show. This would allow for a television studio production set to use these annotated videos in order to create visualisations, using the metadata keywords as triggers, alongside the filmed and transmitted material. The *Blarchive* proposal would allow “people to enhance and illustrate live video with shared meaning, mitigate the overload of audiovisual information and activate a video archive with the dynamism and semantic interlinking of a conversation. It is an attempt at a 'conversational' video archive, pushing agency and conviviality to the forefront of the act of watching” (Albert 2010). The technology envisaged behind the *Blarchive* is based on FLOSS. It consists of parts of the *MetaVid* project (Dale 2006), the above mentioned *Annodex* metadata annotation system, and software entitled *Semantic Media Wiki* (Kraetzsch & Vrandecic 2007). Unfortunately the *Blarchive* has not materialised so far. Wikipedia itself presented their idea of best practices for an open video production environment in New York at the *Open Video Conference* (Kaufman 2010).

The European Broadcasting Union, EBU (2007; 2008; 2009), recommends keeping the metadata annotation as simple as possible, as there is no 'unique' production process for the annotation of metadata to moving images which would represent a standard (Metenhorst et al. 2008). For the Deptford.TV project I decided to add the option of free tagging of raw material with keywords. In that way I managed to offer both a stable, clear way of annotating metadata through a vocabulary (akin to that of image archives), as well as a more user friendly way of allowing for tagging the content with keywords chosen by the participants, often referred to as 'folksonomy' (Perkins 2008). How the participants used the tagging methods is explained in the Deptford.TV work-flow, to be found in the *Appendix*.

When Deptford.TV participants tag their clips with additional metadata information the raw material becomes deeply linkable (Nelson 1999) and the clips become text, in other words become fully quotable. Two projects worth mentioning in terms of how they work on deep-linking raw material are Active Archives (Constant VZW 2006) in Brussels, and Pad.ma in Delhi (2008; 2009). Figure 4-2 represents a screen shoot of Active Archives running in a browser, developed by Michael Murtagh (1996). Active Archives is based on the idea of using a Wiki editing method for videos, thus also referred to as Video Wiki (Constant VZW 2010a).

You're browsing a database with a program called WikiWikiWeb. And the program has an attitude. The program wants everyone to be an author. So, the program slants in favor of authors at some inconvenience to readers. (Constant VZW 2010b)

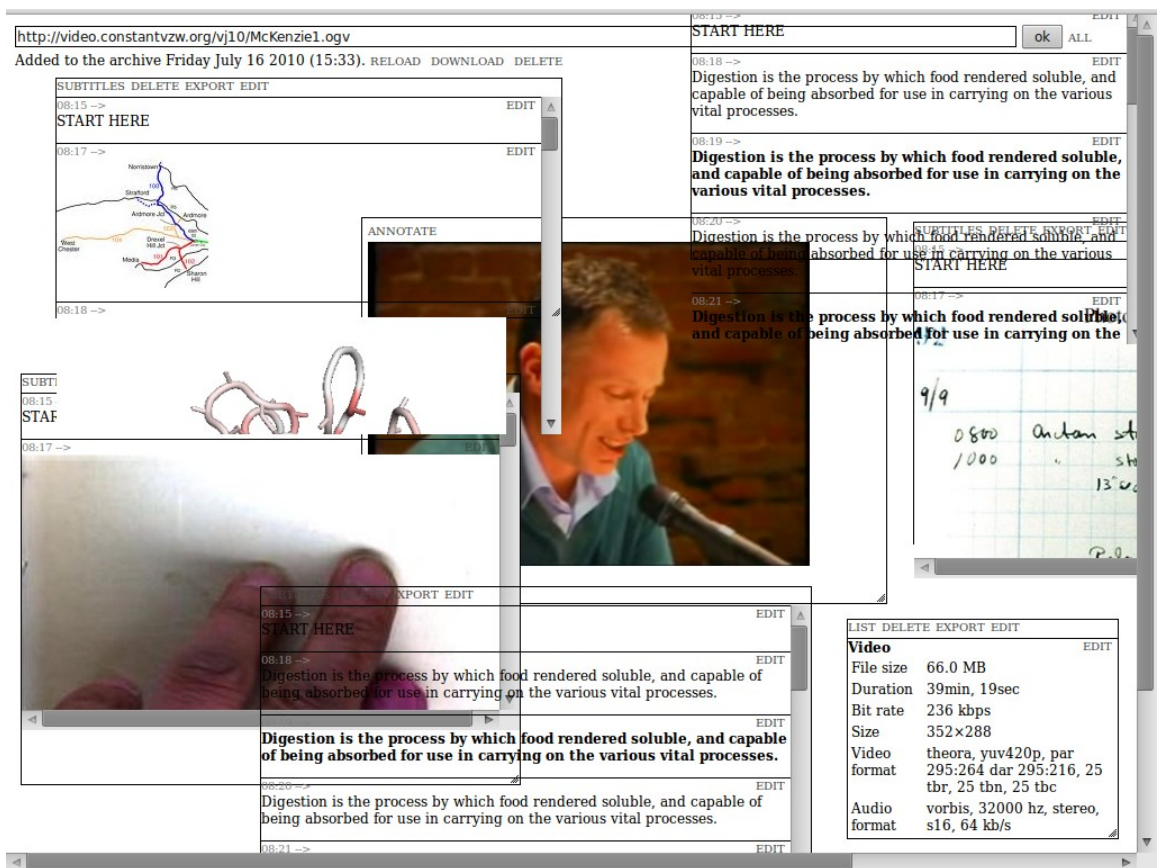


Fig. 4-2. Screenshot of *Active Archives* by Adnan Hadzi. Free Art License 1.3

Video Wiki turns the browser into a canvas for video presentations. As of June 2010 Deptford.TV also experiments with an installed version of Active Archives on its servers. Active Archives allows for the metadata annotation of media assets over a subtitle interface by using the subtitle track allowing for additional markup through the *Textile* (D. Allen 2005) markup language turning the web browser into the screen, and allowing for video clips to control events according to the timeline (the subtitle track). Meta-information will be the key for search engines to handle the 'semantic web' (Berners-Lee et al. 2001) of the files and documents searched, as that information helps to parse the meaning:

When preserving digital information for the long term, different metadata are important. Descriptive metadata are needed to describe the intellectual entities, binary metadata, technical metadata, and structural metadata are essential for the description of the data on all levels (bitstream, file, representation). Preservation of metadata is necessary to describe the provenance of the data, to guarantee the authenticity of the digital data, and to provide a context. (Coppens et al. 2009)

Ross Anderson has proposed *The Eternity Service* (1997) which would replicate data

across a large set of machines (such as the Internet) with the aim of storing data forever. This might seem far-fetched, especially when considering problems with maintaining all the different formats data is stored in (Momus 2006). A practice that might be closer to achieving this ideal is the The Internet Archive (1996) which is used as backup storage for Deptford.TV content. Because Deptford.TV uses FLOSS (specifically, the open licensing schemes *Free Art License* and the *Creative Commons Sharealike-Attribution* license), it can make full use of The Internet Archive as a living archive. This is because The Internet Archive itself uses the *Creative Commons* licensing scheme for all the material archived on its servers. The Internet Archive aims to be an 'Internet library', offering permanent access for researchers, historians, and scholars to collections that exist in digital format. All data created using the service is hosted and stored by the Internet Archive. Two copies are stored online and with partners who have copies in other locations such as the Library of Alexandria (مكتبة الإسكندرية 2002), in Egypt. Deptford.TV also stores a copy of the project data for local use and preservation on hard drives at the media library of Goldsmiths, University of London.

#### **4.4.2. TV Hacking**

On a commercial level participatory TV is often conceived of as a TV-voting mechanism for mainstream shows like Big Brother, teleshopping or call-in sessions, rather than offering a many-to-many communication experience. Such a TV-voting participation within 'television cultures' (Fiske 1987), poses, as Bourdieu puts it, "a serious danger for all the various areas of cultural production" (1998, p.10), because modern media are able to exploit the 'primal passions' of audiences. To explain these 'primal passions' Bourdieu refers to a case-study from the 1990s, in which a small private Greek television station almost led the country into war with Turkey, by encouraging audiences towards strong nationalistic attitudes in relation to the small and deserted island of Imia. This is just one of several examples that demonstrate television's power to influence, shape and commodify participatory media practices.

A project critical about television's routine practices of interactive television shows was *PROXiViSION* (Combiotto 2004), an early TV hacking project by the Mediengruppe Bitnik; a local television system inspired by the Italian *Telestreets* movement, in which television becomes Street Television as Spatial Intervention

(Harris 2007). *PROXiViSION* included the *CopyFight!* system, which is a collaborative TV editing system allowing a local community to produce TV over a web interface. Mediengruppe Bitnik built a local DIY TV station allowing for the distribution of content found over the Internet (mainly over file-sharing networks). TV hacking workshops were organised during which participants learned how to build their own TV transmitter with an old, cheap VHS recorder (Smoljo 2004). *PROXiViSION* was an attempt to break with the traditional notion of television by becoming “tactical” (Lovink & D. Garcia 1997; D. Garcia 1999) and to hack into the TV signals (Norton 2006), offering an open platform for locals to participate.

This further relates to 'hacktivism', emphasizing the 'do-it-yourself' ethos of Deptford.TV, as implicit to hacking (Liebl 2005). “Why be dependent on large corporations when one can learn the protocols or acquire the templates for becoming one’s own producer or distributor?” (Andersson 2009a). With the recognition borrowed from Daniel Miller (2000) and effectively invoked by Andrea Rota (2006), we must not assume an insurmountable gap between the alleged ‘online’ and ‘offline’ worlds: Deptford.TV is a local, situated practice as well as one which stretches into the online world. For the Critical Arts Ensemble hacking “offers participants in the projects a new way of seeing, understanding, and (in the best-case scenario) interacting with a given system” (2000). In that sense, TV hacking is a performative rather than just a theorizing practice. By developing practices that demonstrate a critique through an experimental process results are achieved that can serve as proof of concepts of theories being researched. One of *Telestreet's* initiators, Franco Berardi (aka “Bifo”) foresaw the “explosion of TV channels as a decisive social and cultural phenomenon” (2004) by focusing on the relationship between communication technology and social movements.

Italy was the first European country to propose a regulation of web TV (EDRI 2010a) in such a way that it would make FLOSSTV practices illegal. Should Italy implement this regulation it might mean that Italy would be added to the list of internet black holes, countries heavily censoring internet publishing and access. Figure 4-3 shows a map of the world illustrating internet censorship, as published by Reporters Without Borders (2010), where grey signifies 'unknown', blue 'no censorship', yellow 'some censorship', red 'under surveillance', black 'heavy surveillance'.

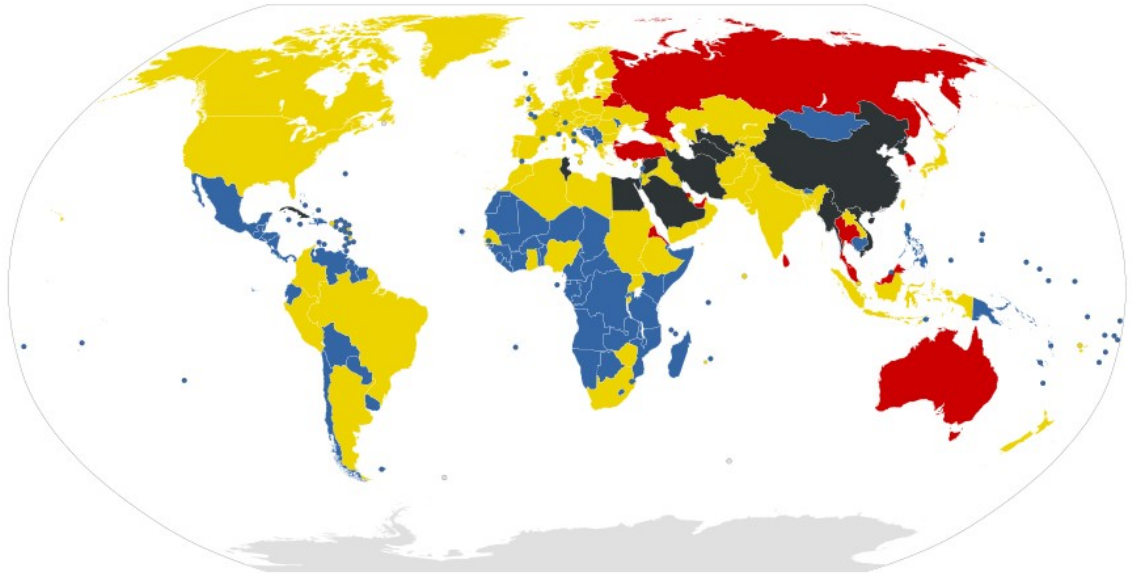


Fig. 4-3. Internet Blackholes, Reporters without Borders (2010). Graphic by Arnfjörð Bjarmason. Creative Commons SA-BY 3.0

For !Mediengruppe Bitnik TV hacking is a radical counter-proposition to the mainstream notion of interactive television (2004). As the participatory art project *PROXiVISION* demonstrates one can simply buy a cheap TV transmitter (GoLink 2003; B. Sheets 1986), or modify and recycle an old VCR recorder, and quickly set up a street television transmitter. As illustrated in figure 4-4, another possibility is to assemble a kit for around £50 (Ramsey 1995), by putting together an HF modulator (Velleman 2011; Hama 2011), which converts a video signal into a TV signal, connected, via coax cable, to an analogue TV transmitter (Braga 2001), a UHF/VHF signal amplifier (Axing 2011). This set up needs to be connected to a good antenna (figure 4-5) which can be a bit pricey, around £150-200.



Fig. 4-4. TV transmitter. Photo by Doma Smoljo. Free Art License 1.3

For the Deptford.TV distribution method I first envisaged to use the *Copyfight!* (Smoljo 2004) system of !Mediengruppe Bitnik, as a community micro TV broadcasting system, but also a web stream running along-side. A user who is connected online can watch the stream on any computer connected to the internet and capable of playing back streams (watch community TV stream), but also receive the signal over a television set, if in range of the *Copyfight!* transmitter. Any user connected to the community micro TV server can also edit the television programme, the schedule online, over a web browser interface. Initially I intended to use the *Copyfight!* system allowing for media convergence by connecting a DIY TV station to the Deptford.TV database.

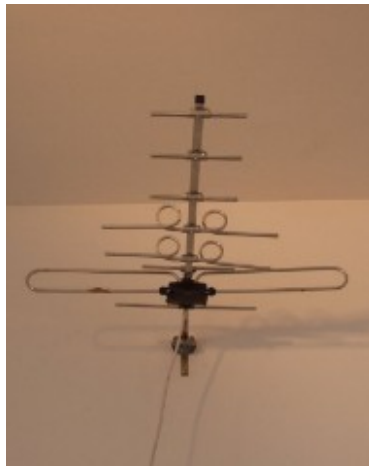


Fig. 4-5. TV antenna. Photo by Doma Smoljo. Free Art License 1.3

Although buying it and owning it is legal, as one vendor of such TV kits, Apogee Kits, states, it is not “permitted to cause interference with local TV broadcasts” (2002). In the UK, operating this kit can lead to imprisonment. I decided not to take the risk of operating this kit, and to establish Deptford.TV as a web project only. I decided to use a web-only production-distribution cycle replacing *Copyfight!* with Archive.org and the *Boundless* WiFi network which today runs under the name *Open Wireless Network* (OWN) (see figure 4-6), consisting of a network of over “400 participants” (J. Stevens 2009) who have been accessing OWN on a daily basis in order to exchange web-services but more and more also media services such as *Deptford.TV* and *Wireless FM* (2008).

In his book *iSpy* Mark Andrejevic discusses false promises of the digital revolution, thereby he proposes to reclaim the democratic potential of digital networks. OWN represents such a mesh network:



These ad hoc or mesh networks come with a built-in sense of collaboration. ... The digital enclosures envisioned by Rushkoff and Negroponte are not extensions of commercially managed virtual spaces into other realms of life, but the outward expansion of collectively managed virtual space in which it is possible for databases to be distributed and subjected to collectively developed controls, rather than being left to the profit-driven whims of corporate media owners and managers ... Betting on an open-source, open-network future may not be a particularly sure thing, but at the very least such models provide an ideal - one that reminds us that the democratic promise of interactivity, even as a ruse of the digital enclosure, promises the possibility of something beyond the communicative practices that have until now prevailed. This is a possibility to be preserved rather than rejected in a fit of postmodern nominalism that reduces the potential of new media technologies to the reality of their current deployment. The political theorist Carole Pateman has argued that the cultivation of a sense of participation in nongovernmental spheres of life is crucial preparation for participation in democratic forms of self-governance (1970, p.105). That is to say, involvement in a participatory workforce better prepares its employees for participation in political self-governance. (Andrejevic 2007, p.266)

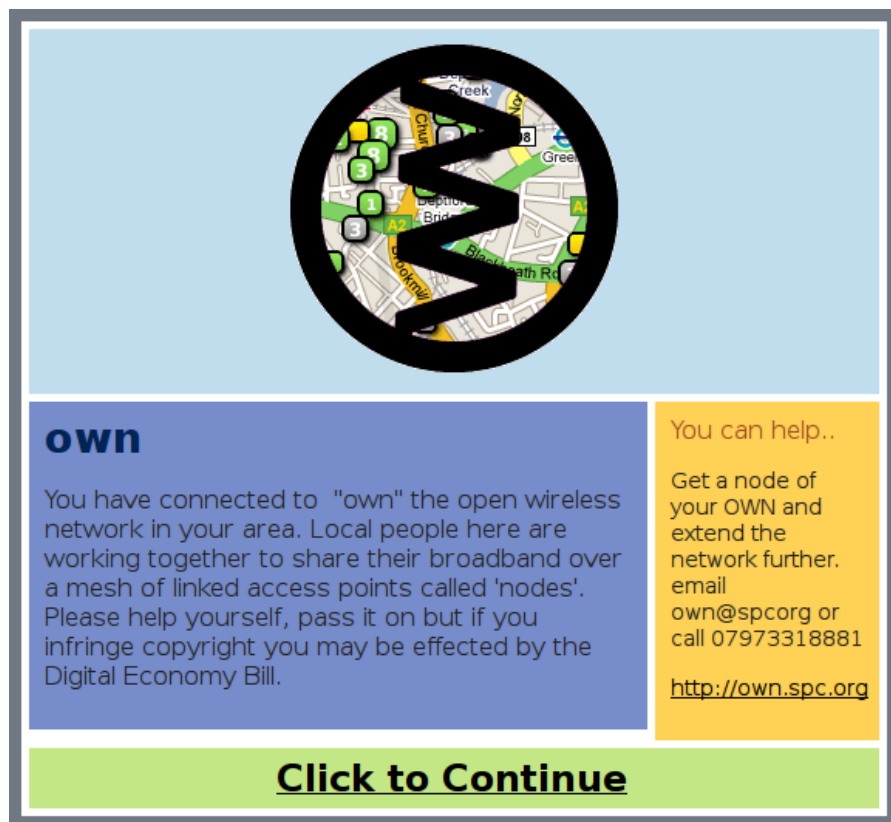


Fig. 4-6. OWN welcome screen by James Stevens. Creative Commons SA-BY 3.0

The OWN community allows for a local distribution of media content over a local 'mesh-up' network with the *Open Mesh* (Burmeister-Brown 2008) technology and thus having a similar reach as the *Copyfight!* system would have. Most importantly, it is 'still' legal, at least

until the enforcement of the recently introduced *Digital Economy Act* (Meyer 2010). The OWN participants were amongst the first contributors to the first TV hacking workshop. I used the guidance of *OurVideo Toolkit* (Wray 2006, p.V) in order to initiate this community participation.



Fig. 4-7. DIY TV studio. Filmed by Adnan Hadzi. Free Art License 1.3

Constant VZW invited !Mediengruppe Bitnik, in 2008, to present TV hacking methods and the Deptford.TV proof-of-concept at the *Collaborative Online Video* conference in Brussels (Westenberg 2008a). After several years of being unable to apply the *Copyfight!* TV concept for Deptford.TV, !Mediengruppe Bitnik performed a pirate TV system, as illustrated in figure 4-7, for a collaborative TV studio (Westenberg 2008) during an evening slot of the conference. As documented in figure 4-8 !Mediengruppe Bitnik was also able to use the same transmission method earlier on in the same year, during an artist residency in Jamaica for the iStreet.TV (2008b) project, demonstrating the viability of *Copyfight!* as a distribution method for FLOSSTV.

What emerged out of these first TV hacking workshops was that distribution was not such a vital issue, for the Deptford.TV project, to research into, as there already exists a range of distribution methods and techniques. However currently, as a result of the *Digital Economy Act*, we witness a possible form of censorship of such new distribution methods: one example is the *Open Wireless Network* (OWN) in Deptford. Therefore other academic inquiries and research projects into the methods of using mesh networks for the distribution of media are needed in order to demonstrate its viability and argue against the kind of censorship which the new legislation, as discussed in the chapter *Contracts*, is imposing on such practices.



Fig. 4-8. DIY TV studio in Jamaica. Photo by Natascha Sturny. Creative Commons SA-BY 3.0

Rather I decided to focus on the production methods of moving images. In the remaining part of this *Methods* chapter I will discuss and analyse the gradual development of the practice-based production methods used for the Deptford.TV project. I started to organise TV hacking workshops around digital production of moving images. In that sense the Deptford.TV project offered participants the know-how required in order to share the raw material and to access each others' project files over the archives stored on the Deptford.TV servers (see figure 4-9).

Archives have always been an important element of a documentary film-maker's practice. Including the Prelinger Film Archives, the Internet Archive holds over 2,000 feature length films (Leyden 2004, p.6), constituting a 'living archive' and generating new audiences. There has been limited analysis of those archives as cultural memory, especially in relation to amateur contributions. Patricia Zimmermann's study *Reel families - A Social History of Amateur Film* offers some insights into the development of the user generated video culture: according to Zimmerman, the notion of 'amateurism' emerged at the end of the 18<sup>th</sup> century as a 'cultural inversion' (1995, p.7) to the development of the industry, professions, and professionalism. At that time, the term had a positive connotation: it was understood as a

pioneering force, offering new insights through inventions which were not possible to achieve in the rigorously structured industrial society, and were thus excluded.

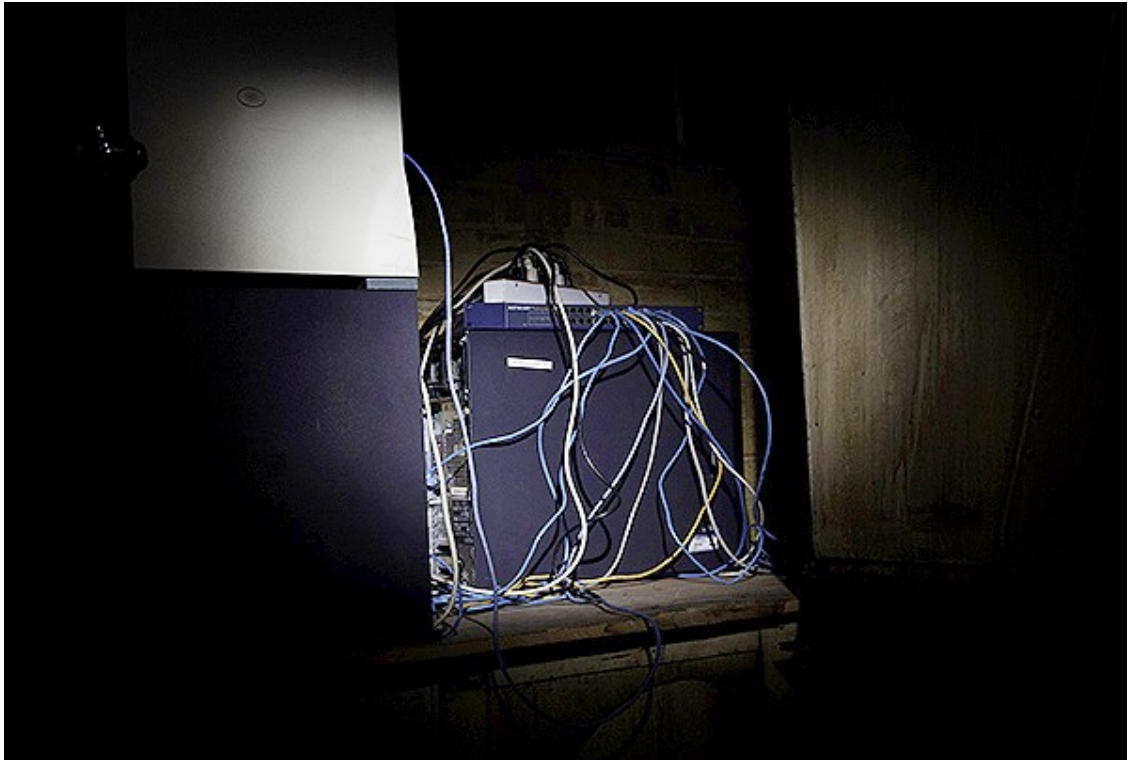


Fig. 4-9. Deptford.TV servers at Deckspace. Photo by Simon Rowe.  
Creative Commons SA-BY 3.0

Stefan Szczelkun argues that it was the increase of leisure which reversed the meaning of 'amateurism,' making it signify “poverty of technique, lack of sophisticated aesthetic judgement and intellectual incoherence” (2002) towards the beginning of the 20<sup>th</sup> century. Today, since leisure has become a guiding principle in industrialised nations, we are witnessing a shift back towards amateurism. This is manifest in the rise of user-generated platforms that are once again offering alternatives to the over-professionalized leisure industry by creating new ways of communication and media production. James Moran, in *There's No Place Like Home Video*, reminds us of Bourdieu's theory of practice (1977), “whose concept of 'distinction' theorizes that oppositions between the amateur and the professional and between the avant-garde and home modes reveal elitist power plays in the service of social privilege and class hegemony” (Moran 2002, p.67).

#### 4.4.3. Deptford.TV as Living Archive

In relation to the use of online (found) footage the term 'collective documentary' becomes highly relevant, at one hand emphasizing the intention of telling something significant about real life events, on the other hand telling that the work is made as a result of several people working together, not as a organized team defined by a given task, but rather as a small community with shared interests ... As soon as video-material are shared ... we might come close to the computer-age's version of Dziga Vertov ... Where Vertov was talking about his freedom to use film-material in any order, we might be able to extend this freedom by using the material which others come up with. (Hoem 2004)

Today, film-making has become more accessible through the use of digital technologies. I argue that, despite the accessibility of the medium, most film projects are only pre-produced (i.e. written, researched) and/or produced (i.e. filmed) collectively. Seldom are film projects edited collectively. This is due to the nature of post-production itself: it takes place in a small room, an edit-suite in front of which there is place for a maximum of two people to make decisions. The editing of a film is still a very author-driven art form (Beller 2006).

Deptford.TV aims to raise awareness about the individual's responsibility in the way (s)he relates to mass media. The focus lies on shifting the role of film audiences from passive consumers to active participants who can share, discuss, and develop culture. The Deptford.TV project functions as an open interface for the process of communication through the use of 'many-to-many' media. The outcome of Deptford.TV is an online, often 'locative' (van Oldenborgh & D. Garcia 2008), platform connected to existing archives of film and sound content and/or archives with content that defies easy categorization as fictional or non-fictional. The Deptford.TV media content is simply multiple documentations of a process, while it invites the viewer to make his/her own interventions. The material, that is, the film, can be recombined by the participants, thus giving the viewers control over the interpretative matrix in order for them to construct their own meanings.

This idea of Deptford.TV as a living archive, when put into practice, runs into the problem of media literacy (Kellner & Share 2005), and the understanding of how to collaboratively manipulate image and sound, especially for participants who are new to video editing. For some participants being confronted with film making for the first time it seemed like an intrusion of intimacy to be manipulating someone else's raw material. The participants

mainly edited materials from their own groups, as if the group had its own ego and authorship, using their body of raw materials. If a team was composed of beginners the films were mostly post produced with own material, using, in some cases, 'anonymous' archive material, not produced by Deptford.TV participants. It seemed that for those participants who produced their first films the possibility of manipulation of material which was produced by other Deptford.TV participants who are known, or who could possibly be known, was felt to be too intimate. On the other hand, participants experienced with video editing did access other participant's raw material from the Deptford.TV database.

An example of a database film is Lev Manovich and Andreas Kratky's *Soft Cinema* (2002; 2005) project based on Manovich's discussions on database narratives, database as a symbolic form, and making art of databases (2000; 2003). In *Soft Cinema* it is not participants, as in the Deptford.TV project, who decide on the edit, but an algorithm on the computer which is running the *Soft Cinema* software, and which is editing files from the database in real time following rules defined by the authors/participants. "The liveliness of data as it couples with other forms of life prompts possibilities for a sophisticated computational culture that, as much as it runs with the expansive nature of computing in the present day, begins to reshape what is understood as computing as a way of thinking, sensing and doing" (Fuller 2009).

Unfortunately it is not possible to read and study the *Soft Cinema* algorithm without the permission of the rights holder, as they are closed source based on the *Macromedia Director* software which nowadays belongs to *Adobe*. Hence it is impossible for researchers to 'quote' and review this code in the way it is possible with any academic text book or textual source.

In his research on database documentaries Graham Harwood takes up the view that databases can also serve as raw materials for film productions. For Harwood the database administrator, as director and author, can query the database in order to produce narratives which can form the foundation for film productions:

Within the technologies of power, the database can be seen as an energy source, a motor of change or an amplifier for the progression of truths within the discourses that fabricate them. 'Truth', in this instance, should be understood as the system of ordered procedures for the production, regulation, distribution, circulation and operation of authoritative statements. ... At it's most simplistic the relational machine, (the conceptual machine that make a database possible) operates as a process where data atoms are placed in entities and relations, queries then process those atoms

into information. New knowledge is formed by comparing the information. Power then emerges as the new knowledge which has the potential to change the conduct of others. (Harwood 2011)

Tony Downmunt argues in *Waves of potentiality: Some thoughts on database narratives and the digital dissemination of audio-visual practice research* that new forms of digital dissemination allow for “more reflexivity, more self-interrogation, to the process of sharing [one's] research than will be available in the film on its own” (2007, p.42). But Downmunt criticises Manovich's notion of 'digital materialism', one aspect of which is “the systematic 'auto-deconstruction' performed by computer objects, applications, interfaces and hardware” (Manovich 2001, p.208), as being technological deterministic. Instead Downmunt calls for this 'materialism' to be “socially situated” (2007, p.42) by using Manovich's notion of a 'language of new media' which makes practice based research “inherently self-reflexive, or allows it to interrogate itself” (2007, p.42). Practice based research “uses the database – rather than narrative” (2007, p.42), as its “key form of cultural expression” (Manovich 1999, p.80). Downmunt supports his argument with two texts by Marsha Kinder, *Designing a Database Cinema* (2003), and *Hotspots, Avatars and Narrative Fields Forever: Bunuel's Legacy for New Digital Media and Interactive Database Narrative*, stating that if a database structure raises “meta-narrative issues” (2002, p.3), it is “an extremely useful tool [for practice based research] if we accept that such work needs to be seen to be interrogating itself and displaying its own meta-narrative” (Downmunt 2007, p.43).

Thus, a guiding principle of the FLOSSTV approach is that every time you read (selected) data from a (general) database, you engage in a documentary practice: an edit is made. Like the Open Source/Free Software movements share the source code of their programs under copyleft licenses, the raw production materials are shared as film 'source code' under a copyleft license. The film source code is the raw material plus the metadata created by logging and editing this material. This FLOSSTV method changes the notion of traditional broadcasting. The production and distribution processes merge into one, and the audiences participate actively, undertaking a role traditionally reserved for producers and thus challenging the notion of professional media production. These changes also challenge the expectations of the film as a finished, linear product, and the audiences as passive consumers of culture.

Through the Deptford.TV project, content is being contributed to the data spheres, to the public memory (Haskins 2007). It allows contributors to discuss the

urban change of south-east London and the transformations this brings to specific, physical public spaces. This online public space exists on the Deptford.TV website and as a contextualising document, a record of the practical outcome, on the Deptford.TV blog (Hadzi 2006b). I would argue that FLOSS, because of being supportive of collaborative methods and practices itself, can empower media and arts practitioners to collaborate in production and distribution processes of media and arts practices and therefore is a more appropriate solution than using proprietary software, which only allows for the modification of the source codes when restrictive permissions are fulfilled. I would further argue that in order to establish a FLOSSTV practice one has to attribute the underlying source codes of the software one works with, as well as the project files and raw material created by the production of free and open media.

The first approach to establishing Deptford.TV as a living archive was to use video blogs as a method to collaborate between the participants. When researching video blogging I found the most promising approach in Jon Hoem's paper *Videoblogs as Collective Documentary* (2004), where he describes the relevance of found footage for the notion of collective documentary, allowing a small community to identify with the work of others while telling a story about real life events. For Hoem, video-blogging is a process allowing for new approaches to video production, which can be used in order to achieve a collective documentary film production process. The Deptford.TV project therefore requires that each individual contributor undertake a part of the responsibility within the production of those films. Amateurs are taking control of domains that were strictly reserved for the professional 'classes' of media-producers, and thus transforming the production process into one's own media. In that sense collaboration becomes communication where there is no clear distinction between "senders and receivers of information" (Hoem 2004). Unfortunately the video blogging process did not allow for a collaborative approach very well, since participants were using different types of editing software and it was difficult to keep track of the edits made. Thus I decided to look into the possibility of version control of all the project files, as described in the Deptford.TV workflow, to be found in the *Appendix*.

A weakness of free and open source video-editing software development is that it often is only practised on a collaborative level for specific software projects. The Cinelerra coders don't really exchange their expertise and experiences with the Kdenlive coders and vice versa (Piccirillo 2011; Saunier 2011). Coders like to join 'clans' in



which they work on specific projects, and in the case of video-editing software currently don't develop standards which would allow for an interoperability between the different forms of software. This makes it harder for outsiders to join in, and thus the development process becomes exclusive, making it difficult to follow up on the development of FLOSS video-editing software. One could argue that this is the case because video-editing on LINUX is still in a very early stage.

On the other hand the strength of FLOSS lies in the freedom and openness of the code allowing for an interaction with the software projects which would not be possible with proprietary software. When I used the proprietary video-editing software *Final Cut Pro* and *Avid* in the beginning of the TV hacking workshops, as these are the video-editing systems offered by Goldsmiths, University of London, participants ran into the problem of having different project files of different versions of *Final Cut Pro* and *Avid*, which were incompatible. I would argue that the proprietary software is deliberately developed without offering a downward compatibility, or basic standards for the project files; this means that once a project file has been opened with a newer version of the software the project cannot be opened with an older version of the software. Anyone who owns an older copy of a piece of proprietary video-editing software will have to buy an upgrade in order to open any project opened with a newer version (even if the project was edited solely in the older version and only once opened and saved with a new version of the editing software).

Furthermore I would argue that, in the case of FLOSS video-editing software, developing free and open communication standards between developers and users within the FLOSS context could allow for stronger collaboration between the software 'clans'. A good example for such a standardisation process is the *Free Desktop Project* (Pennington 2000; 1999) sharing the technologies of the different LINUX desktop systems and thus allowing for an interoperability between the different systems. In the case of FLOSS media production systems the development of such 'media' standards could allow for FLOSS based media and art production methods, as envisaged through this FLOSSTV research, to develop a different approach to the editing of visuals and sounds, different production methods, and with it a different audiovisual language, leading to a FLOSS culture producing free and open media.

#### **4.4.4. Deptford.TV method**

According to Sher Doruff there “is no single methodology, no general description, that aptly depicts the making of a collaborative tool by a collaborating team. The process is as variegated as the personalities of the contributors and as fluid as the dynamic socio-cultural-economic ecology it inhabits” (Doruff 2005, p.98). I agree with Doruff in that collective projects, such as the Deptford.TV project, are co-created. The participants' expertise, knowledge, personalities, cultural contexts and practices all have an impact on the development of the collective practice, research and methods. In this chapter I will first outline in 4.4.4.1. how I approached the Deptford.TV AVPhD practice-based research through Action Research, in the manner of first-, second-, and third-person research/practice. Then I will explain in 4.4.4.2. the notion of 'critical video editing' and its importance to the Deptford TV method, which uses version control mechanisms and a collective contribution of content to the Deptford.TV databases. Finally I conclude with 4.4.4.3 on the relationship between Deptford.TV practice and participatory media, and analyse how the contingent and situated Deptford.TV method can be abstracted and made mobile.

##### **4.4.4.1. FLOSSTV AVPhD and Action Research**

I found Action Research combined with Practice Based Research (AVPhD) the framework to be most suitable for Deptford.TV's methodological approach. For the Deptford.TV research project, practice, curiosity, reflection, and questioning are all important parts of the method. The process is the method: what was “found in putting together this 'bricolage' of perspectives is that action researchers themselves could be understood to have been acting as 'bricoleurs' over time, and in a very real sense, 'making the road while walking’” (Wicks & Reason 2008, p.26). FLOSSTV is a pragmatic search for methods, processes, tools supporting collective media and arts productions, which supports an egalitarian approach to media and arts production, and thus also aspires towards an egalitarian society (Lykes & Mallona 2008). Deptford.TV is situated within FLOSS culture, characterised by an ethos of sharing, improvisation, borrowing and creativity. The Deptford.TV method calls for engagement with participants, and critical reflective learning in collective relationships, “opening new 'communicative spaces' in which dialogue and development can flourish” (Reason & Bradbury 2008, p.3). Following Peter Reason and Hilary Bradbury (2008) the

Deptford.TV method involves cycles of action and reflection producing practical knowledge that is useful to practitioners and researchers. It is important for the Deptford.TV method to create 'laissez-faire' spaces which are inclusive, safe, and unbiased towards participants, such as the media lab Deckspace or the FLOSS festivals *Pixelache*, *Piksel*, *Make Art*, and *LiWoLi* (where the Deptford.TV method became mobile).

Chandler and Torbert (2003) developed the concept of first-, second-, and third-person research/practice, “offering a conceptual step forward by pointing to the temporal dimension – inquiry can be concerned with past, present, and future – unlike conventional research which is entirely limited to what happened in the past” (Reason & Bradbury 2008, p.6). According to William Torbert and Steven Taylor (2008) action inquiry studies not only the past, but also the future and the present. Following this methodological framework the Deptford.TV method can be seen as a timely inquiry, as first-person research on second-person practice for the future (an envisaged critical video editing process), which in itself is second-person research on third-person practice in the present (TV hacking workshops practising with prototypes/contraptions).

The FLOSSTV research started as a first-person, subjective, piece of research with an initial reflection on collective media and arts production using FLOSS, databases and TV hacking, studying also my own changing practices, as well as the interactions between collaborators and participants. In that sense the first-person research signifies research into the second-person practice of the future. From the perspective as a first-person researcher the big challenge is to aim for a non-judgmental first-person awareness of how first-, second-, and third-person levels of research/practice are interacting with each other.

The implementation of the envisaged processes and methods into practice is, in the sense of Action Research methods after Chandler and Torbert, an intersubjective second-person research/practice. Systems, processes, and tools are being created for the Deptford.TV practice itself in collaboration with the second-person researchers/practitioners: media lab *Deckspace*, *!Mediengruppe Bitnik*, the *Liquid Culture* collective, *Southspace*, and the *GOTO10* collective. The second-person research inquires into the third-person practice of the present. Thus I situate the action within the objective third-person practice which happens in the setting of the TV hacking workshops. The workshops consisted of between 10 and 25 participants with interests ranging from documentary film production to media arts experimentation. The planning, action, observation and reflection cycle, following Action Research methods, happens mainly between the second-person research and third-person practice. In the beginning the

third-person practice started with observation through video blogs (vlogs) on watch.deptford.tv and later on through contributions to the version controlled edit.deptford.tv content management system. The second-person research then reflects on these observations (Reid & Frisby 2008), refines the Deptford.TV process, and feeds it back into the third-person practice, to the next TV hacking workshop round. For the reflection process the second-person research uses the *MediaWiki* environment for logging, documenting and observing the actions of the third-person practice. But we also used 'diaries' and published two volumes of the *Deptford.TV diaries*. *Deptford.TV diaries I* (Hadzi 2006) reflected on the strategies of sharing, and *Deptford.TV diaries II* (Hadzi 2008) reflected on pirate strategies, critically discussing intellectual properties and FLOSS culture (to be found on *DVD TWO*). In parallel with this second-person reflection, I kept the first-person research reflections as a blog on Deptford.TV. Throughout my five years of running the Deptford.TV project I organised these workshop rounds altering between third-person practice and second-person research. These second-person researches and third-person practices fed back into the first-person research in the form of this thesis, reflecting on the emerging notion of 'critical video editing', through version control.

#### **4.4.4.2. Critical Video Editing**

In analysing the conditions under which the Deptford.TV project took place, I would argue that the method of version control opens up the possibility of collaboration within the field of media and arts productions. By applying version control to art and media productions, artists are enabled to 'deep link' assets and gain access to archives, since the versioning system enables tracking of updates as well as sources. Jim Blandy, the initial developer of the *Subversion* software, notes on this point that “it's clear that open source practices are the best way to develop programmers' tools. I expect flourishing ghettos to appear in other areas soon – music, or map making, say – buoyed by the same principles. What I like the most about the Free Software movement is that people can freely choose whether to participate. It's a voluntary revolution” (2010). The Deptford.TV method is situated within FLOSS culture applying the politics of software, the idea of 'versioning systems' (Fuller & Haque 2008), to media production, by version controlling the Deptford.TV project files. A good example of such a version control system, on a textual basis, is Alexandre Leray and Stefanie Vilayphiou's *Ongoing Manifesto*, which is written with the software *Brainch*:

Brainch allows its practitioners to duplicate and edit their peers' texts. Several versions of a text can exist in parallel, and be recombined or not at any time whether their owners' opinion converge or diverge. Thus, unlike a conventional wiki requiring its users to reach a consensus since they all work on a single shared copy, Brainch allows the authors to freely express their opinions. Each copy of a text comes with its full history (authors, versions, etc.). Therefore Brainch becomes a critical tool by documenting the process of writing a text, identifying the committers and their contributions, revealing relationships - agreements and conflicts - between the various protagonists. (2010)

The code handling the version control of video project files, written for the *Drupal* content management system of the Deptford.TV project, aims to carry over to the field of film making what *Brainch* does for texts, that is, critical video editing. The participants in the Deptford.TV project use version control on the project files of the edited films. Participants can download (in coding terms this is referred to as 'checkout') a copy of a specific project file, including an edit-log file describing all the assets, which can then be shared, modified and amended. Contributors can add content or delete content. In the case of Deptford.TV, they can re-edit and remix projects. Having done edits on a project file, the contributors upload the files, also referred to as 'committing' files, back to the Deptford.TV database, the 'repository' (see fig. IV-13). If other contributors have been working on the same project, *Subversion* remembers every version, every project file, that was ever created and uploaded to the repository, with additional metadata information about who submitted a specific revision, “and even gives you a line by line listing of who changed what when” (Haskel 2008).

Before it was possible to implement the version control process into the Deptford.TV *Drupal* content management system it was important to understand how the project files of the editing software *Cinelerra* could be read by version control software. The first implementation of a version control system was developed in collaboration with Lisa Haskel (2008) using the original *Subversion* software on the Deptford.TV server. With this set-up we gained an understanding of how to handle the *Cinelerra* project files. This assumed that the Deptford.TV participants had the technical understanding in order to be able to use the *Subversion* software, so that they could upload the project files to the Deptford.TV server. After we identified how to deal with the project files we implemented the version control process into the *Drupal* content management system which is much more user friendly. Participants don't have to have the technical expertise concerning how to handle a version control system, all they need to understand is how to handle the project file uploads over a normal web browser.

The *Drupal* version control process was implemented for two editing applications: *Cinelerra* in 2010, and later, in early 2011, also for *Kdenlive*. Both of the client-side editing applications *Cinelerra* and *Kdenlive* are installed on the live Linux distribution *Pure:Dyne*. The participants in the TV hacking workshops received *Pure:Dyne* USB memory sticks on which they could store their projects and from which they could boot into the client editing application without having to install any software on their computers. The participants could take with them all the materials and software needed. The *Pure:Dyne* distribution can be found on the *Appendix DVD TWO* (see *Appendix IV* for a detailed description of the Deptford.TV work-flow).

For the phase of publication and 'rendering out' the Deptford.TV project uses *Archive.org* as a host for finished projects, connected with an RSS feed over the *Broadcast Machine* installed on the Deptford.TV server. During the last cycle of second-person research on third-person practice the publication aspect of 'finished' videos was extended to a digital television station: DORF TV. Here the Deptford.TV method itself was taken out of the usual context (a web-based project) by being abstracted and transferred into the context of a television station. Deptford.TV was invited to collaborate together with DORF TV during the *LiWoLi* festival in 2011 and produced with participants of the *LiWoLi* festival a one minute CCTV sniffing video which then was transmitted on the same day over the DORF TV television station (see video clip *Austrian Surveillance Techno* on *DVD ONE*).

#### **4.4.4.3. Participatory Media**

There are further collaborations planned with the DORF TV project in which further workshops using the Deptford.TV method will be initiated allowing for a practice, research, and development of server-side rendering of collectively edited videos and films and directly feeding them into the transmission server of the DORF TV television station. This will allow participants of the DORF TV workshops to post-produce the projects collectively and to collectively engage within the publishing and programming cycle of DORF TV. The acronym DORF stands for 'der offene Rundfunk', meaning the 'open broadcasting station'. DORF TV produces participatory media.

Participatory media practices are of importance for the FLOSSTV practice because participation in 'open' and 'free' media production should be inclusive to all interested parties. Eggo Müller explains that the influence of television extends to the newly established sphere of user generated video content sites, such as YouTube. User generated video hosting sites and television do not represent “diametrically opposed concepts, but different institutionalization of television on a spectrum of cultural forms of television that mutually define each other. One should not underestimate broadcast television's power to shape [this] participatory space of video-sharing sites” (2009, p.59). Following Müller I am critical of the romantic notion of bottom-up, as in user generated video hosting platform, versus top-down forces, as in traditional television institutions, implicit to television and its audiences. Müller draws an analogy to a similarly romanticised notion of utopian versus dystopian cultures within digital media production which, according to him, brands professional, commercial media practices as repressive and manipulative, while non-professional, non-commercial media practices are seen as empowering and democratic. Müller argues that these different spheres are not imposed upon users but co-created:

The concept of ‘formatted spaces of participation’ allows for a more differentiated and adequate analysis of the technological, economic, social and cultural powers and conventions that structure the diverse participatory practices which these spaces allow for and also provoke. [It] helps to move beyond the technologically defined range and depth of interactivity. It asks us to critically address the routinized practices within these spaces that make these spaces into individualized institutions with their own specific, cultural conventions and ideologies. (2009, p.59)

This concept of formatted spaces can be applied to most of Web 2.0, or social networking platforms. Many of these social networks are 'walled off' systems not allowing for an open exchange between different platforms and thus an interoperability, and even often take ownership of the data their users are contributing to these social networks.

Given the foregoing analysis of the characteristics of the contingent and situated Deptford.TV method, I would argue that it is within the field of participatory media and arts practices where researchers and/or practitioners can abstract and apply the Deptford.TV method to other practices and/or research contexts. Within the field of participatory media, Deptford.TV critically proposes an open platform in the form of a joint authorship, as a 'commons-based peer production' (Benkler & Nissenbaum 2006), rethinking and questioning the consumer-versus-producer dichotomies. For researchers and practitioners

engaging with the Deptford.TV method this means co-curating of the projects and co-participating in the process, further enhancing the access to such methods and processes which can be further applied by other artistic and/or social practices. This 'collaborative culture' (Doruff 2003) signifies a shift from conventional interdisciplinary arts projects towards “a synergy that marginalizes individual contribution over the relational dynamics and emergent possibilities of the collective, [...] that builds and uses media technologies that both reflect upon and engender new types of social interaction” (Doruff 2003, p.1). Anybody interested in the FLOSSTV research, and the Deptford.TV method, can access all the code and content, available under a copyleft license, either through this thesis or the Deptford.TV databases, and apply them to other participatory research projects. As a collective, participatory research project, Deptford.TV is as much about its evolving method as it is about its practice, content, and its participants. The Deptford.TV method can facilitate media and arts practitioners wishing to engage in collaborative culture, and the practice of participatory media and arts productions, enabling a discursive environment through critical video editing, remixing, and the sharing of media.



## **CHAPTER FIVE**

### **FLOSSTV**

Practice

## 5. FLOSSTV Practice

### 5.1. A Symphony of Deptford



Fig. 5-1. First TV hacking workshop. Photo by James Stevens.  
Free Art License 1.3

In the Deptford.TV project, the groups engaging with a film project together often share a similar political and/or aesthetic approach to the film but different levels of technological know-how. I borrow the term ‘cell’ from the Critical Art Ensemble (2000) to describe the organisation of such a collectively working group. In these cells, solidarity is thought to be achieved through difference. Because the individuals bring different knowledge to a cell, working groups are ideally organically created and constituted by participants specialising in different professional areas, such as directing, editing, producing, operating the camera and so on. When a cell decides how to produce the film or project, those members with the most know-how in their special fields become authoritative in the sense of deciding how to film, direct, edit etc. “Solidarity based on difference” (2000) creates functional and more powerful groups, compared to the dominant approach of solidarity based on equality and consent democracy, which has been adopted by many tactical media groups such as the Ant Farm collective. Those groups had a fear that hierarchy would lead to stronger members becoming dominant over the weaker members within the collective (D. Boyle 1997), and thus leading to a ‘community’ stifling of projects. The Deptford.TV project follows Foucault’s principle (1980) that hierarchical power can be productive.

Participants, from different backgrounds (Hadzi & X 2007), choose to document or experimentally work on specific topics that fall within their shared interests. The Critical Art Ensemble explain that this kind of alliance, “created for purposes of large scale cultural production and/or for the visible consolidation of economic and political power, is known as a coalition” (2000). Those who take responsibility within a Deptford.TV cell are also those who are most involved in the decision-making. In short, this is a demonstration of ‘online video-making’ being “part of a much larger process in which the people formerly known as audiences of mass media or consumers of popular culture are asserting themselves as participants in culture-making” (Aufderheide & Jaszi 2008).

Theorists like Howard Rheingold increasingly acknowledge that notions of 'community' with all its connotations (1999), are often overstated. Steve Jones (1995) notes how 'community' is generally conceptualised as (1) solidarity institutions, (2) primary interaction or (3) institutionally distinct groups. Only really the third of these, Jones argues, community as institutionally distinct groups, makes sense in the context of computer-mediated-communications. While I would diverge from Jones's argument in that this mode of communication is not only socially produced, but equally technically constituted, it is notable how it still challenges the idea of community as being based on geographic proximity to the extent that one could, like Jones, talk about computer-mediated communities as 'pseudo-communities'. 'Virtual communities' (Bacon 2009) are defined "as incontrovertibly social spaces in which people still meet face-to-face, but under new definitions of both 'meet' and 'face'" (1995, p.19). "If we really start to focus on creating an open – and open source – infrastructure ... the only way ... is to start locally" (Van Kranenburg 2008, p.54). Deptford.TV does this by collaborating with the above mentioned mesh-network OWN, a network with no 'top', "where each node on the network is connected to a number of neighbours offering many possible routes across it" (Priest 2004).



Fig. 5-2. Video still of *Symphony of Deptford*. Filmed by Lennaart van Oldenborgh. Creative Commons SA-BY 3.0

The first TV hacking session was organised and delivered in collaboration with the artist collective !Mediengruppe Bitnik. It was held during the Node.London Festival in 2006, (see figure 5-1). Within the TV hacking series I organised a walk through Deptford with the help of Peter Pope, a local community activist, and Ben Gidley from the Centre for Urban and Community Research (CUCR), Goldsmiths. The walk allowed the participants to get an inside view of the urban change happening in south-east London. Andrew Orford, one of the participants, noted on his blog:

After a visit to a participant's home in Stowage, where the very personal story of how legacy film and video footage has been digitized into a legacy for local-social historians and The Creative Commons, we went to Deckspace inside the old Greenwich Borough Hall building for our last tea and cake, a nice sit down and a chat. In summary the walk was very much a clarion call for how culture at the edge (which I term edgital) is actually at the centre of what's really happening now. It was like looking into a crystal ball to see how digital technologies in combination with Free Software and Copyleft are transforming the social and historical landscape. (Orford 2006)

This TV hacking series ended with a remix performance of the Deptford.TV database. I re-edited the performance entitled *A Symphony of Deptford* (Hadzi 2006a; Anel 2006) (see figure 5-2) in homage to the film *Berlin, Symphony of a City* (Ruttman 1927; Schadt 2002a). *A Symphony of Deptford* was later screened at the *Made in Deptford* festival (Hadzi 2006a).

The film *Symphony of Deptford* (Hadzi 2006a) (figure 5-2) is to be found on DVD ONE. This film documents a live performance held on a boat in Deptford during the *Node.London* (2006) festival in spring 2006. For this project, the video artist NRSZ (Anel 2006) remixed the Deptford.TV database using the software *Pure Data* (Puckette 1996; F. Zimmer 2006) to manipulate the video material from the Deptford.TV database in real time, to the live music of the band *Ampersand* (2001). The outcome was a VJ performance that created “coherence from distinct visual samples” (Menotti 2009). The whole performance happened on a boat, the *Mindsweeper* (McDonald 1998), situated opposite the *Laban Dance Centre*. The *Pure Data* patches, used for the VJ-ing session, can be found on DVD TWO. The *Mindsweeper* itself has been the subject of some short Deptford.TV documentary films about the boating community around Deptford Creek, a community in danger of being evicted. *Symphony of Deptford II* (Canning 2009) (see figure 5-3) represents a collaboration with the composer Canning, who works with computer generated compositions (2011), from the GOTO10 collective, using the Deptford.TV database in order to create a remix of the material according to the meta-data added to the clips. This video shows an example of an art work envisaged as a

video installation. I like to call it the DaDaBase edit. The code written for this project can be found in the *Appendix on DVD TWO*.



Fig. 5-3. Video still from *Symphony of Deptford II* by Rob Canning & Barbara Kukovec. Free Art License 1.3

The first projects initiated on the Deptford.TV database looked into the documentation of the urban change of the Deptford, South-East London area, extending also to fictional, experimental and media art elements, still under the idea of a *Symphony of Deptford*. I was very fortunate that I could work together with the *MA Urban Photography* students from the CUCR Department, and the *MA Screen Documentary* students. Both sides showed great interest in taking part in the research on the collaborative approach to establish an audiovisual database for Deptford.TV, reflecting on Deptford itself; the project created a spatial documentary practice as an intervention into public space, through putting content into the public domain.



Fig. 5-4. *Walking on the Rim* (Cardullo 2009a). Creative Commons BY 3.0

The topic of urban regeneration is, in itself, a contested one, and one that contains the clash of conflicting interests. In the case of Deptford.TV this allows for discussion and reflection, especially with regards to whether the application of these “technologies create a new (virtual) public space”? (Segers 2004, p.12). In this context I refer to Paolo Cardullo, one of the first TV hacking workshop participants, who completed his MA in *Urban Photography* and then went on to undertake a practice-based PhD. Reflecting on regeneration in his latest publication *Walking on the Rim* (see a selection of pictures in figure 5-4), with respect to urban change in Deptford he states:

- a) The symbolic scenario built by urban planners, architects, and agencies has been increasingly hinting at the achievement of a long-standing goal of revitalizing inner cities, via innovative design and master planning, so as to attract and retain middle-class families.
- b) In order to achieve this, a symbolic landscape of corporate culture and 'sustainable' community has been created, in contrast to the pre-existing territory, defined as highly polluted, derelict and unsafe.
- c) There is a sense in which the new visual order and planning discourse reflect middle-class cultural assumptions, whose retention and well-being seemed to prevail in the official discourses. (2009a)

The regeneration of the Deptford area is a controversial process (Evans 1997), as documented by the Goldsmiths, University of London, Centre for Urban and Community Research (CUCR) (1998a; 1998b; 1998c). Local communities argue that big sums of money are currently being invested into highly privatised projects that are not concerned with supporting the community (Keith 1997) or safeguarding public spaces. Several people living in Deptford thought that one of the first outcomes of the regeneration process (Risner 2009), the new building that hosts the Laban Dance Centre (Mallory 2002), 'landed' in Deptford like a 'space-ship', an architecturally alienating building (Glancey 1997; Glancey 1999). The Laban Dance Center is set in an industrial landscape surrounded by a council housing environment (Marchant 1997), where many buildings are not that well looked after.

In 1999 the *South London Gallery* in Peckham, south-east London, held a series of events entitled *Non-Place Urban Realm*, which aimed to "explore urban renewal in the city through art and cultural practices in the form of an Exhibition, Open Forum and reading Room" (SLG 1999) with a focus on south London, the very area that Deptford.TV is documenting. Pseudo-public spaces or 'non-places' (Auge 1995) are the spaces that economic interests produce in order to maximise profits rather than for social or public benefit. Oppositional groups like the *Reclaim the Streets* movement (J18 1999) support the production

of meaningful spaces (Lefebvre 1974) within these pseudo-public arenas and thus disrupt the control that private investors attempt to gain and sustain over the profit-maximising pseudo-public spaces. The generic discourse on issues of regeneration used by local councils, advisory boards and PR campaigns mostly approaches regeneration initiatives as aiming to turn public spaces into a “unitary public sphere, characterised by its inclusiveness and openness, even though it is structured more by exclusions and attempts to erase the traces of these exclusions” (Iles et al. 2000). Through utilising the FLOSSTV method as an intervention into online public space, data spheres and the physical public space, the Deptford.TV participants have been engaging in a re-editing, or re-thinking of those spaces, in the spirit of “an oppositional utopianism that seeks to trace alternative possibilities for what cities might become” (Pinder 2002, p.236).

One highlight of these TV hacking workshops, on the topic of 'urban change', was the collaboration with The People Speak (Hadzi 2008a) where we focused on two themes: The renovation and closing of local shops around the Deptford Town Hall, and the 30<sup>th</sup> anniversary of the *Lewisham 77* protests, in the form of an alternative epistemology of walking. The main significance of the *Lewisham 77* protests (Knowles 2009, p.1), was that the far-right National Front march through Lewisham on the 13<sup>th</sup> of August 1977 was faced with a big local resistance which resulted in riots and many claim a 'defeat' of the National Front. This is today often referred to as the *Battle of Lewisham* (Lewisham '77 2007). The Deptford.TV documentaries around the *Battle of Lewisham* focused on the history of this event but also on the relationship migrant communities have with urban change. The participants documented the needs for developers to take into account that “black and immigrant communities have contributed much” (Goodwin 2007, p.3) to the development of cities.

*What will New Cross be?* (Hadzi 2008b) (see figure 5-5) was a collaboration between the participants of Deptford.TV and the *Talkaoke* project of The People Speak. This video is an edit of the highlights of the TV show event around the topic of the future of New Cross, in South-East London, focusing on the discussion around a block of houses, next to Deptford Town Hall, owned by Goldsmiths College, and squatted by fashion designers, a coffee shop owner and people living in the buildings. I invited The People Speak to hold their talk show *Talkaoke* (1997), alongside a screening of produced documentary films as part of the *Black History* month programme under the title *What will New Cross be?* (Hadzi 2008b) in Deptford Town Hall. Deptford Town Hall is part of the history of racism and the slave trade. Paul Hendrich, an anthropologist and participant in the Deptford.TV workshops (who sadly was

killed in a traffic accident a year later, which led to the termination of the *Lewisham 77* collaboration) proposed a progressive reconsideration of Deptford Town Hall, questioning the “appropriateness of Goldsmiths possessing and occupying this building which in some way embodies a celebration of the slave trade” (A. Shah 2008, p.4).



Fig. 5-5. Video still from *What will New Cross be?* by The People Speak.  
Free Art License 1.3

Hosting a TV talk show around the future of New Cross in *Deptford Town Hall* created a special atmosphere, with the audience members discussing the future of the very place in which they sat. *Talkaoke* is a TV talk show around a host sitting in the middle of a UFO shaped table (see figure 5-5) passing around a microphone and facilitating a discussion around a topic, in our case about the future of New Cross. During the talk show, The People Speak creates visualisations of the discussion and shows them in real time as projections, highlighting certain moments within the conversation. All the raw material was uploaded to the Deptford.TV database and short clips were edited out of it. The focus of the talk show was the *Cafe Crema* coffee shop, which is neighbouring Deptford Town Hall. *Cafe Crema* is located in a house owned by Goldsmiths – but not for rent, rather it is a squat. At the time of the talk show, Goldsmiths had issued an eviction warning to the squatters. Thus, the eventual eviction of *Cafe Crema* and the surrounding fashion shops became the central discussion. *Cafe Crema* has still not been evicted, but there is no solution, so far, for what will happen to the buildings around *Deptford Town Hall*. How much the Deptford.TV activities have been an influence is hard to



tell. Nevertheless, it engaged many community members, students, as well as Goldsmiths staff members who followed the *Lewisham 77* events as well as the *Cafe Crema* discussions.



Fig. 5-6. Video still from *Voice for the Voiceless*. Filmed by Flavia Guerra.  
Creative Commons SA-BY 3.0

*Voice for the Voiceless* (figure 5-6) and *Lewisham77 – The Battle of Lewisham*, (Lewisham '77 2007; Gidley 2008) were produced for the *Black History Month 2008*, by students from two different departments of Goldsmiths, undertaking the *MA Urban Photography* and the *MA Screen Documentary*, who worked together for those projects. The same year the BBC developed an interest in Deptford (Flett 2007), when Lewisham Council sold the *Aragon Tower* (Mangan 2007) to real estate developers Berkeley Homes. The BBC produced a documentary series *The Tower: a Tale of two Cities* (Wonke 2007) on the clash between the 'rich' entrepreneurs moving into the tower and the neighbourhood of residents living in council flats. The series received the BAFTA Best Factual Award (2008). *The Tower: a Tale of two Cities* was, however, criticised by locals (Chandler 2007; Siany 2007; Freeman 2007; Storm 2007) as portraying a very negative picture of Deptford and thus justifying the actions undertaken by developers to 'regenerate' (Potts 2008) the area. Andrew Orford, a local Deptford blogger and Deptford.TV participant, noted:

Deptford needs to take back control of its own image and I appeal to readers to continue to blog about this complex and fascinating confluence. The Deptford.TV project was an extraordinary intervention in this sense and perhaps one day for this reason we will no longer need the trickery of big budget TV. (2007)

## 5.2. Deptford.TV and the Politics of Sharing



Fig. 5-7. Video still from *Strategies of Sharing*. Filmed by Iracema Sodre. Creative Commons SA-BY 3.0

*Strategies of Sharing* (Hadzi & Chatzichristodoulou 2007) is a video essay composed of interviews with a selection of Deptford.TV participants, which provides an overview and evaluation of the first two years of Deptford.TV. This video essay, which was published accompanied by a text, was collaborative on the level of both the audiovisual production, and the essay writing. Maria Chatzichristodoulou who participated in the Deptford.TV workshops, approached me to write an article on collaborative culture for the *Feedback* magazine of the Whitechapel Art Gallery. We decided to use this opportunity in order to work collaboratively (Beck et al. 2008) on the piece of writing. Collaborative projects are shaped by the people taking part in them in terms of expertise and fields of interest, but also in terms of cultural background, specific viewpoint, personality and temperament. What matters, therefore, is, according to Walter Benjamin “the exemplary character of production, which is able, first, to induce other producers to produce, and, second, to put an improved apparatus at their disposal. And this apparatus is better, the more consumers it is able to turn into producers - that is, readers or spectators into collaborators” ([1934] 1978, p.233). For

Benjamin a work of art cannot only be 'politically correct', but politics need to consider writers, artists, and their position within the means of production:

Nothing will be further from the mind of an author who has carefully thought about the conditions of production today than to expect or even to want such works to be written. He [/she] will never be concerned with products alone, but always, at the same time, with the means of production. In other words, his [/her] products must possess an organizing function besides and before their character as finished works. (Benjamin 1966, p.98)

This part of the Deptford.TV chapter, *The Politics of Sharing* (Hadzi & Chatzichristodoulou 2007), is an edit of an excerpt of the original *Feedback* article. All the interviews were filmed and are stored on the Deptford.TV database in their full length. The selection of interview partners was undertaken in a discussion with Chatzichristodoulou (2009). The interviewees were:



Fig. 5-8. Video still of Janine Lăi in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Janine Lăi is a local resident, filmmaker and student at Goldsmiths who has personal experience of the regeneration process of South-East London. Lăi hopes that her experience and her personal project of documenting soon-to-be-gone areas of the city would be transferable into the context of the Deptford.TV project.



Fig. 5-9. Video still of Gordon Cooper in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Gordon Cooper is a local resident and film-maker, who has an interest both in the area of Deptford and in generating open-access and shared resources through the use of alternative legislation such as the Creative Commons. Cooper, having lived locally for a long time, felt that he contributed his own individual account of local history.



Fig. 5-10. Video still of Elvira Zaera in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Elvira Zaera is a local resident, student and film-maker.



Fig. 5-11. Video still of Stephen Oldfield in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Stephen Oldfield has been a local resident for twenty years, and is a sound artist. His band *Ampersand* contributed the live sound performance for the *Symphony of Deptford* event, on the *Mindsweeper* boat.



Fig. 5-12. Video still of two members of !Mediengruppe Bitnik in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. !Mediengruppe Bitnik produce artistic, social and collaborative work. They are concerned with open media practices and the production of tools that can facilitate such practices. They produce their own software systems, which they are interested in making applicable in different contexts.



Fig. 5-13. Video Still of Camden McDonald in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Local resident, performer, and initiator of the *Mindsweeper* project, a floating venue on a boat that was hosting Deptford.TV screenings and other small-scale events. McDonald thought that contributing the *Mindsweeper* boat for a live event was useful in terms of showcasing a series of small-scale social and cultural activities.



Fig. 5-14. Video still of Nikki Hilton in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Nikki Hilton is a local resident, architect, interested in the intersection between film and architecture. Hilton got involved in Deptford.TV in a conscious effort to work collaboratively, as this was not the case in his professional life as an architect.



Fig. 5-15. Video still of James Stevens in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. James Stevens is the initiator of the projects *Boundless* and *Deckspace* in South-East London. Stevens has had a long history as the initiator of projects concerned with open spaces and public access media. Stevens thought that his special contribution has to do with his interest in making things happen and reducing the obstacles people face when they attempt to get involved in, closely guarded, expert areas of practice. His aim is to identify and exploit usable public space.



Fig. 5-16. Video still of two members of the *Raw Nerve* collective in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Kieran McMillan and Rebecca Molina are the Chief Executives of the Raw Nerve design collective, based in Deptford. Raw Nerve are working on a number of community-focused projects and their aim is to build up the connectivity

between different creative people in the area so as to come together and learn from each other.



Fig. 5-17. Video still of Amanda Egbe in *Strategies of Sharing*. Filmed by Adnan Hadzi. Free Art License 1.3. Amanda Egbe is a film-maker and Goldsmiths student. Egbe is interested in the political and technical issues raised by practices of collaborative film-making. She is also interested in the social issues raised by processes of regeneration.

One of the aims of these interviews was to gain an insight into the complexities of producing collaborative work within a creative context and the 'politics of sharing'. All of the participants supported the practice of remix culture and were therefore prepared to copyleft their works. We asked the Deptford.TV participants how they perceive the notion of authorship, and to what extent this was important to them as contributors of either content or context. Every single contributor felt that personal attribution is important as it protects their identity as creators of either content or context, and allows them to track down their input as well as any 'transformations' their contribution might undergo through being reused, re-edited or remixed.

Zaera pointed out that Deptford.TV can fluctuate as a group, which is why it cannot be used as an umbrella. At the same time, Zaera felt that once her material goes into the public domain it belongs to whoever wants to watch and/or use it. She thought of this process of sharing as enhancing creativity, as it reduces the limitations imposed by mainstream legislation. Oldfield saw it as a way of giving his group *Ampersand* more exposure and hoped that it could lead to new collaborations. He, like Zaera, felt that once the work is 'out there' in



the public domain it is no more his to keep. !Mediengruppe Bitnik were quick to declare that they are not concerned with issues of authorship. !Mediengruppe Bitnik argued that we are all, already, making use of shared resources such as folk stories or common cultural references for anything we produce, thus our outcomes are not 'new'. What an author really does, Mediengruppe Bitnik explained, is to form, identify, make emerge, and/or attribute specific meaning to something that is already there, rather than producing something 'new' out of nothing. But Stevens believed that there is a lot of confusion and contradiction around issues of authorship. He argued that whereas many authors would be happy to make their work freely available, when it comes to collaborative projects people get more sceptical because they are not familiar with such practices. Stevens explained that, in terms of copyrights, the new alternative licenses attempt to map the 'open space' around media production and usage, and support a policy of 'restrictive openness'. Nevertheless, Stevens considered these licensing systems to be extremely complex. He personally believes that people who wish to make use of alternative licenses should be prepared to stand up for themselves when they feel that their work is being misused or that they, as creators, are being misrepresented.

Hilton was also happy for his work to be reused. Like !Mediengruppe Bitnik, Hilton argued that everything that is being produced is based on things that already exist, 'nothing is new'. When it comes to his own architectural practice he is happy for his ideas to be dissipated, explored and developed, and for his materials to be re-used. Since architecture is an applied art, an architect also has to adapt his/her vision in order to accommodate the clients' needs; in that sense, he considered architecture a collaborative practice. Raw Nerve used a similar argumentation: as designers, they are aware that the remixing of content is a common practice that goes on all the time. They are themselves mixing and manipulating existing content to produce their work. But Cooper wanted only part of his work to be open for other people to use. He insisted that people who reuse material need to attribute authorship. Cooper believed that opening up a piece of work always carries the risk of the author losing control over its consequent uses. At the same time, Cooper held that authors should protect any materials that might be too precious or too private to risk losing control over.

Coming back to Walter Benjamin's theories, we can focus on his notion of 'The Author as Producer' ([1934] 1978) which can be extended into the very idea of changing the conditions of production. If intellectual property laws, as looked into through the FLOSSTV research, are changed by neither rejecting nor preserving the intellectual property laws, then one could refer to this as what Benjamin calls

'revolutionary violence'. One might argue after Benjamin that the artist/author should subvert the relations of author and production, not merely in order to supply a production for the apparatus, but also to actually change the apparatus.

However, Mirko Tobias Schäfer and Hans Bernhard (2008) make us aware that aesthetics and subversive practices such as hacktivism, culture jamming or guerilla communication are often integrated into the relations of production, by only supplying a production for the apparatus. Subversive strategies begin to be assimilated by mainstream media producers and start appearing in the media as part of a cultural grammar, which is used successfully in many areas, such as marketing and PR, and serves the interests of politicians and corporations for 'agenda setting' and lobbying activities (Klein 2000). Schäfer and Bernhard argue that 'the subversive' merely serves, within a technology of communications, the transport of messages from transmitters to receivers. The message itself becomes replaceable. 'The subversive' is not necessarily located with those who are associated with the subversive, but with all those who use subversive strategies.

### 5.3. Dérive: A Trail of Images of Deptford



Fig. 5-18. Video still from *Images of Ebb*. Captured by Steve Allen. Free Art License 1.3.

It seems as if art as we know it has become obsolete in its mission to actively intervene in social space. (Kleindienst 2008)

*Images of Ebb* (Hadzi, A. Wong et al. 2009), see figure 5-18, was entirely produced with the Deptford.TV method (Hadzi, Haskel et al. 2008). The video follows the *dérive* idea of CCTV sniffing, inspired by !Mediengruppe Bitnik's art practice, creating a workshop situation in which participants experience the city through a drift (*dérive*) through the city and search for CCTV signals, transmitted over WiFi signals (!Mediengruppe Bitnik 2011). What emerged out of the urban change of Deptford TV hacking workshops was an interest among the participants in the density of CCTV as a consequence of the regeneration process, and how these systems can be used in a creative way offering an 'image of the city' (Lynch 1960).

A possible answer to why participants had such an interest in these CCTV hacking workshops can be found in '*Bilder der Ueberwachung*' (images of surveillance) where Dietmar Kammerer (2008) looks into the question of why CCTV is so widely accepted. For Kammerer

CCTV is not only about technology but mainly a social practice (2008, p.143), meaning that CCTV images have to be seen in order for them to have any influence on our realities. Krammerer argues, as one possible answer to his question, that it is also due to mainstream media that CCTV technologies have gotten a certain flair of pop-culture. Surveillance became part of the pop-cultural imaginary; thus Krammerer claims CCTV reached the state of the “spectacle of surveillance” (2008, p.20). What is of interest for the Deptford.TV CCTV hacking workshops is Krammerer's reflection on the subversion and hacking of these CCTV technologies, which leads him to a Foucauldian conclusion that there is no outside power. “As these kinds of critical practice are operating on an immanent level, they simultaneously react to and perpetuate the always changing modulations of the *dispositif* of surveillance. Thus, the *dispositif* will not be eliminated but reproduced ad infinitum” (Prinz 2009, p.162).

I decided to organise a TV hacking workshop focusing on the topic of CCTV images by inviting !Mediengruppe Bitnik to collaborate on a workshop on how to capture CCTV images. As with the Deptford.TV hacking workshop, the participants worked with found content. In this case, the content comprised the CCTV images that the workshop participants could 'receive' (Parisi 2008) over consumer wireless TV receivers (System & Harrison 2005; Schwartz 2002). The participants themselves became 'social hackers' (Kulikauskas 2004) who witness the previously discussed pseudo-public spaces through CCTV technology. After a short introduction to CCTV film-making, the participants went on a walk through Deptford in order to find CCTV images, practising 'sousveillance'. Sousveillance, French for 'subveillance,' describes the reverse process of the habitual surveillance. Normally, state- or other privileged institutions take or have the right to survey. With sousveillance, it is the other way around: "watchful vigilance from underneath" (M. Hyde 2009). Steve Mann called this “inverse surveillance” (2004b; 2003) while researching wearable computing (1997) such as the *EyeTap* (2004a) device, which would allow anyone to record moving images of their surroundings through cyber-glasses. Mann criticises the aggressive “surveillance mechanisms” (1998) put in place by states and big corporations.

Equipped with CCTV video signal receivers (see figure 5-19) the incoming surveillance camera signals led the participants through the city. By using wireless television receivers, which are sold in many electronics shops, the participants could view signals transmitted on the open spectrum of the WiFi frequency. The receivers caught surveillance camera signals in public and private spaces and made them visible: surveillance became sousveillance.

By making images visible which normally remain hidden, we gain access to the 'surveillance from above' enabling us to use these images for a personal narrative of the city (!Mediengruppe Bitnik 2008a).



Fig. 5-19. CCTV sniffers. Photo by Natascha Sturny.  
Creative Commons SA-BY 3.0

The *dérive* took place literally below the threshold of visibility, in the sense of being beyond what is visible to the voyeur's gaze. As Debord describes it, the *dérive* replaced the figure of the voyeur with that of the walker: 'One or more persons committed to the *dérive* abandon, for an undefined period of time, the motives generally admitted for action and movement, their relations, their labor and leisure activities, abandoning themselves to the attractions of the terrain and the encounters proper to it.' In allowing themselves 'to be drawn by the solicitations of the terrain,' persons on the *dérive* escaped the imaginary totalizations of the eye and instead chose a kind of blindness. (McDonough 1994, p.73)

By drifting through the city, guided by the receivers, one can draw an analogy to Guy Debord's '*dérive*' (Coverley 2010), or drifting. The workshops followed Debord's *Critique of Urban Geography* (1955) by performing 'psychogeographic' (Self & Steadman 2007) urban walks, discovering Deptford. Debord saw a progression from Futurism through Dadaism and Surrealism to the *Situationist International* as discussed in his text *Report On The Construction Of Situations And On The International Situationist Tendency's Conditions Of Organisation And Action* (1957). Situationists wanted to create 'situations', and take those situations onto the streets. In that sense the Situationists experimented with the construction of 'situations' in everyday life, referring to unitary urbanism and psychogeography. This (anti-)aesthetic practice is historically ascribed to Debord. The practice includes the method of

the “creation of new forms and the detournement of previous forms of architecture, urbanism, poetry and cinema” (Home 1988, p.30) to be found in Debord's *Theory of the Dérive* (1958).

An artist leaves his studio. He is Vito Acconci. In the course of three weeks in October 1969, he follows the same strictly formulated "dailyscheme": the program demands "choosing a person at random, in the street, any location; following him wherever he goes, however long or far he travels (the activity ends when he enters a private place - his home, office, etc.)." (A. M. Wagner 2000, p.62)

The CCTV hacking workshops were informed by several artistic practices such as the early Vito Acconci's *Following Piece* (1969), or Sophie Calle's *The Shadow*, where Calle asked her mother to hire a detective who would follow Calle and report her daily activities with photographic evidence; thus: "the viewer is the third witness" (1981). In *Pictures of a Family*, Ulf Lundin spent a year spying on the family of one of his friends. Lundin did this under the terms of a contract that said that Lundin was allowed to photograph his friend and his friend's family, as long as he remained invisible. For over a year, Lundin spied on this man and his family, snatching shots through his windows, from behind the bushes in his garden, or hidden in his neighbour's house. Lundin even followed the man on weekend-trips and on his summer holiday. He recorded more than 100 rolls of film. "And of course I thought about giving up. Hundreds of thousands of times. It got quite awful. But it was important just to stand out there looking and thinking" (1996) .

Surveillance Camera Players, SCP (2003; 2006) uses the idea of performing a play for the bored operators behind the CCTV monitor screens. Whereas *i-SEE* (IAA 2001) is a web-based CCTV map allowing the user to find routes to avoid these cameras or at least a way with the least surveillance. Eleanor Dare (2008; 2010) created a contraption, the *Fear Machine MK II* (2007, p.424), which uses the concept of a visual language *Panoptica* based on “surveillance and the analysis of user interaction with a software or hardware interface, ... a language that signals the affective response generated by a user, ... transforming CCTV into a tool owned and used by the community it surveils” (2007, p.408).

Jill Magid's *Evidence Locker* (2004) was a 31-day continuous performance piece during which Magid built a relationship with the CCTV service of the city of Liverpool (Merseyside Police and Liverpool City Council), that operates by collecting CCTV data all over the city. Magid used a mobile phone communicating with the

CCTV services while being observed and performing a blindfolded guided walk through the city. If there is no request for the recorded material the data will normally be deleted after 31 days. Magid had to write 'Subject Access Request Forms' in order to receive the footage, which she did in form of 'love letters', through which she expressed her thoughts and emotions. All of the letters are published in *One Cycle of Memory in the City of L* (2005) documenting the relationship between the artist and the observer (mainly Merseyside Police).

How do we know what being under surveillance, or engaging in surveillance, is really like? Why do we experience surveillance in specific ways? Following questions like these, raised by David Lyon (2007, p.139), Manu Luksch used the *Data Protection Act* (OPSI 1998) to gather the raw material for her dystopian science fiction film *Faceless* (2008a). Luksch noted her requirements in her *Manifesto for CCTV filmmakers*: “After completing each shoot, the filmmaker is to address a written request ('subject access request letter') to the CCTV operator ('data controller') immediately to ensure that the data recovery process can be initiated while the recordings are still archived” (2008b).

The main influence for the Deptford.TV hacking workshop on CCTV surveillance were two artist practices. Firstly the *How To Do Video Sniffin'* project, documented on Mediashed's *Gearbox Video Sniffin'* which turns CCTV cameras into one's “own environmental television studio” (2007). The *Gearbox* simply demonstrates how to use WiFi Audio/Visual receivers in wireless CCTV systems. Secondly, Michelle Teran's *Life: A User's Manual* which is a series of public performances (2003). The artist walked through the city with a shopping cart full of television sets, displaying in real time the received CCTV signals. The title is taken from a novel of the same name by Georges Perec. “In his novel, he peels away the outer wall of a ten story building in Paris and proceeds to describe the interior of each apartment and the stories of its inhabitants. As observers, we are led through a sequence of readings and views as we mentally navigate from one apartment to the next” (2003).

One of the resulting films of the Deptford.TV CCTV TV hacking workshop was a collaborative edit of found CCTV footage, entitled *A Trail of Images of Deptford* (Hadzi, Raffa et al. 2009). Later on in the same year Ashley Wong, an MA student in Cultural Studies, Goldsmiths, approached me to collaborate on her curatorial project *The End of Something*, which is a “critical archival project” (2009b) collecting reflections on the topic of the 'financial crisis', over an open platform. For this project, Wong initiated the *Sound of Ebb* (2009a) sound

archive, aiming at a collaborative practice by asking sound artists to respond to the question “What is the sound of Recession?” (2009b). I discussed with Wong taking the *Trail of images of Deptford* approach further and to organise a workshop using the *Sound of Ebb* material and merge it to the Deptford.TV visuals of the *Trail of Images of Deptford* TV hacking workshop, creating an *Images of Ebb* video (Hadzi, A. Wong et al. 2009) (figure 5-20).

The Images of Ebb workshop is an act of subversion – to reclaim the narratives imposed from above (from the CCTV cameras and from the media) and to reconfigure them for our own uses. The resulting Images of Ebb video becomes a document of a narrative composed on the ground level by numerous contributors in the video and sound that is an alternative expression of the city. (A. Wong 2009b)

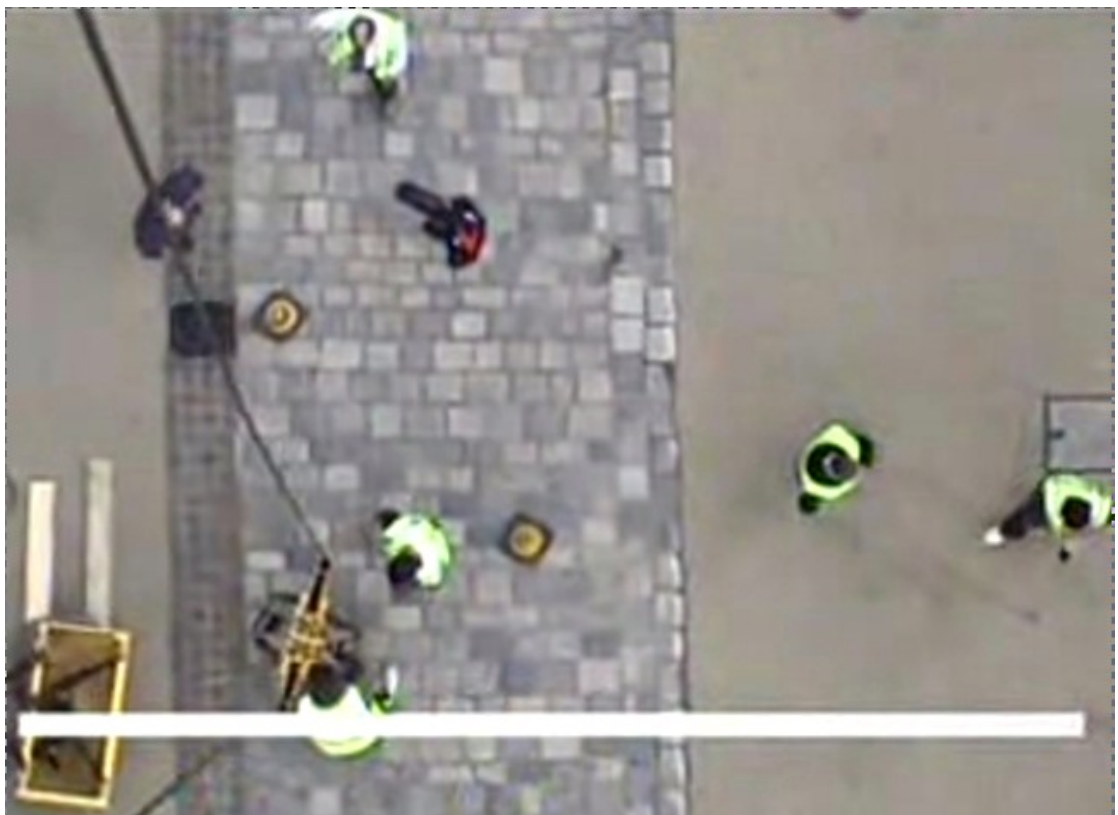


Fig. 5-20. Video still from *Images of Ebb*. Captured by Paolo Cardullo. Free Art License 1.3

I decided that only participants whom I see face to face and to whom I give an introduction to documentary film-making and its ethics (Blackburn 2003; Bignell 2005; Archard 1998) would receive an account, mainly because the raw material could contain material which might not be appropriate for public broadcasting. In the current Deptford.TV set up only the edited clips and finished films might be broadcast. For the definition of the Deptford.TV project it is agreed between the participants that it is the participants'



responsibility to choose what is published, reflecting on the ethics of publishing media content during the Deptford.TV hacking workshops. The raw material is licensed under an open content license, in our case the *General Public License*, the *Creative Commons ShareAlike-Attribution License* and the *Free Art License*.

I would argue that one possible analogy for free and open source code within media practices is the notion of 'found footage'. The Deptford.TV database holds, especially with the CCTV sniffed footage, a significant amount of 'found footage' for the Deptford.TV participants. I compare the Deptford.TV found footage to the type of found footage and aesthetic objects made famous by the DaDaist French painter and conceptual artist Marcel Duchamp. Dadaism was an anti-copyright movement. Dadaist artists challenged established art practices of their times, for example through the use of photo-montage that involved reproductions of photographs found in news papers, or assemblages out of three-dimensional objects and, most famously, ready mades such as Duchamp's 'Fountain'.

Working with 'found footage' raises similar questions of how to deal with the collaborative creation of media and art, as being raised within the Free and Open Source Software community on the issue of working with each other's codes. Interestingly the Deptford.TV participants had fewer issues with editing the raw CCTV material recorded by other participants than editing the raw material created by other participants, as these recorded CCTV clips did not signify videos created by another participant, but rather it was material generated by a camera, which was not operated by any human, and so machine-built raw material. This material resembled much more anonymous archive material or found footage. The motivation for collaborative editing was much higher. Therefore I would argue that collaborative post-production processes are more easily initiated with found footage, anonymous archive material, or machine generated material, than material specifically for the database authored material one is working with.

The CCTV sniffing workshops in a TV context offered the participants an insight into CCTV film-making itself. In regard to participatory media I would argue that CCTV film-making can be discussed in analogy to reality TV, due to the above discussed pop-cultural flair of these CCTV images, often used by reality TV shows. There are producers of reality TV claiming that reality television offers 'democratic' participation, which politicians should take as an example (Andrejevic 2007, p.242). But as already discussed in the *Contextual Review*

this is a pitfall for audiences who are being sold 'restricted' participation.

In *Beyond Monitoring* Mark Andrejevic has discussed this reality TV culture of 'restricted' participation, by explaining as an audience member one is invited to "one's own manipulation" (2007, p.242), delivering a vast amount of private information which is used for advertising purposes in order to sell 'stuff' to audiences. For Andrejevic the public is participating in "the spectacle of its own manipulation" (2007, p.243), and made to believe that it itself, the public, is participating in a democratic ratification of policies, whereas in reality it only supports the status quo of elites and their interests. In order to support this argument Andrejevic draws on Susan Buck-Morss notion of the "place of pain" (1992, p.38), and Žižek, for whom two features which "characterize today's ideological stance - cynical distance and full reliance on paranoid fantasy - are strictly codependent: the typical subject today is the one who, while displaying cynical distrust of any public ideology, indulges without restraint in paranoid fantasies about conspiracies." (2004, p.817). Andrejevic claims that the audience interaction as offered by reality TV is a 'prepacked' participation, where audiences only have a 'forced' choice of a defined range of products and a defined range of narratives.

A way out of this 'restricted' participation might be a shift in the social conditions within which these participations happen, by the application of privacy laws, which are in force in the UK, through the *Human Rights Act*. Jeffrey Rosen explain that privacy is necessary "to protect important social relationships - to make it possible for people to interact as citizens in the public square, as professionals in the workplace, and as friends, lovers, and family members in intimate group settings" (2000, p.216). But for Andrejevic the question around how much privacy there should be in interactivity is not about "how much privacy has been surrendered, but who benefits and who is disempowered by the deployment of interactivity as a monitoring strategy, and in what ways? Who is subjected to more sophisticated forms of management and control, and to what end? How does knowledge about individuals facilitate forms of control over them?" (2007, p.257). Andrejevic's answer to the privacy issue is that:

Any version of interactivity that lays claim to democratic empowerment must allow feedback to shape collective goals as well as the means for achieving them. Moreover, a democratic version of interactivity cannot define feedback merely as a survey of consumer preferences, but must promote collective deliberation over shared goals. That is to say, it must foster what Cass Sunstein terms *political sovereignty* rather than consumer sovereignty. Democratic interactivity relegates the market to the status of a tool and facilitates shared control over the ends to which this tool is to be directed. Surveillance is not a substitute for deliberation, and the market is not a

substitute for democratic participation. (2007, p.262)

In May 2011 the LiWoLi festival in Linz, Austria invited Deptford.TV to collaborate on a workshop with Dorf TV. Dorf TV is a user-generated television distributing over a digital television signal, with the same technology that is behind the British FreeView service. For its server back-end Dorf TV uses FLOSS. The post production of Dorf TV is a mix of FLOSS and proprietary software. Most often Apple's Final Cut is used to edit or subtitle videos and films. In that regard it was a new concept for Dorf TV to use the Deptford.TV method in order to create a one minute CCTV clip (see figure 5-21) entitled Austrian Surveillance Techno (LiWoLi 2011a), to be found on DVD ONE. The collaboration with Dorf TV closed the once envisaged circle of a FLOSSTV production method, by collectively producing one minute's TV programming, being distributed on the same day over a television station. Furthermore, through collaborating with LiWoLi festival the distribution of raw material was transmitted in real time from the Deptford.TV server into the gallery space, allowing visitors to the gallery space to interact with the screened work by picking up a video sniffer and uploading their own found clips of CCTV signals (see figure 5-22). In that sense I extended the traditional, very formatted, way of producing and transmitting television. I would argue that with the existing abundance of distribution methods it would be wise to reclaim some of the distribution channels for the production of experimental television, allowing for further insights into the language and maybe even ethics of television (Medosch 2011). The journey for the FLOSSTV research practice has been one of “comparing, imitating, observing, testing, reflecting and combining” (LiWoLi 2011b).



Fig. 5-21. Video still *Austrian Surveillance Techno*. Captured by Sebastian Pichelhofer. Free Art License 1.3



Fig. 5-22. Deptford.TV at LiWoLi. Photo by Adnan Hadzi. Free Art License 1.3

#### 5.4. Psychogeophysics: Following the Crisis



Fig. 5-23. Video still *Following the Crisis*. Filmed by Larissa Blasic. Free Art License 1.3

The project *Following the Crisis* (Mediengruppe Bitnik et al. 2010), figure 5-23, can be screened from DVD ONE. The film is a collectively produced visual *dérive* of the *Psychogeophysics Summit 2010* (Howse, Guenter et al. 2010; Iles 2010; Prudence 2010; Howse 2010; Hanson 2009) using video, sound and still image raw materials generated during the *Psychogeophysics Summit 2010*, using the Deptford.TV subversion system (edit server). The summit itself proposed an “intense week-long, city-wide series of walks, field trips, river drifts, open workshops and discussions exploring the novel interdisciplinary frame of psychogeophysics, colliding psychogeographics with earth science measurements and study” (Howse, Guenter et al. 2010). In October 2010 I organised a TV hacking workshop using the completed Deptford.TV prototype with version control method and the *Cinelerra* editing software. The Deptford.TV participants created a video around the first *Psychogeophysics Summit* (Howse, Guenter et al. 2010), which was held in August 2010, including the Mediengruppe Bitnik contribution *Following the Crisis*, which was part of the *Too big to fail, too small to succeed* exhibition at Space Studios (2010) in Hackney, East London. For this workshop I only invited participants with an intermediate skill level in video editing; the

requirement was to have at least some experience with other video editing software, but ideally with *Cinelerra* itself.



Fig. 5-24. *Following the Crisis* performance. Photo by Natascha Sturny. Free Art License 1.3

The term 'Psychogeophysics' was first introduced during the Transmediale festival, in a research workshop entitled *Topology of a Future City* (Howse, Kuni et al. 2010). Psychogeography after Guy Debord is “the study of the precise laws and specific effects of the geographical environment, whether consciously organized or not, on the emotions and behavior of individuals” (1955), whereas Psychogeophysics can, according to Anthony Iles, be understood as “a hack of psychogeography” (2010). Iles describes the summit offered an opportunity for psychogeophysicists to meet and to follow the tradition of psychogeographers, focusing not only on losing themselves in the city, but in the 'cosmic mystery' of this universe by applying contraptions measuring and detecting this universe's 'support and regeneration of life':

The contemporary turn to fiction and magic relates to a few impasses that confront contemporary culture. One pertains to the institutionalisation of the relational in art, a market which produces valuable outputs to be celebrated by curators, critics and dealers, and instrumentalised by government agencies,

prison services etc. Another would be the general loss of measure apparent in the ongoing aftereffects of the 2008 global financial crisis. Fiction might be a tool to resituate ourselves more freely in a society which has 'lost the plot'. (2010)

*Following the Crisis* was such a fictionalised psycho-geographical experiment by a *dérive* through the environment of the financial sector of London, observing bankers (see figure 5-24: one of the workshop participants standing in front of the UBS bank). The instructions for a silent observer (!Mediengruppe Bitnik 2010a) were as follows:

1. Go to the Liverpool Street Station today, Wednesday, Aug 4, 2010 at 2:30pm
2. Look around for the next bank or bank office building. Follow the next person to leave the building inconspicuously.
3. Let this person guide you through The City by following him/her until he/she reaches a private building into which you cannot enter. Wait to see whether the person emerges from the building within a short time and continue following him/her.
4. Document your mutual journey live using your mobile telephone by calling +44 8458 699 187 (answering machine). Describe every change in direction, the routes, stops and activities of your leading person in short messages.
5. If your chosen guide enters a private building shortly after you start your mutual journey: start again at step 2 of the instructions. Your calls will be recorded on the answering machine for documentation purposes (of course, your phone number / personal details will not be disclosed). All material produced will be published under the Free Art License.



Fig. 5-25. *Following the Crisis* editing workshop. Photo by Natascha Sturny. Free Art License 1.3

Several participants in the *Psychogeophysics Summit* uploaded their materials, such as sounds, videos, and images of the different workshops to the Deptford.TV database. The workshops were walks, field trips, river drifts and discussions exploring the topic of psychogeophysics. The participants of the *Following the Crisis* TV hacking workshop (figure 5-25) edited several videos, an example of which can be found on DVD ONE entitled *Following the Crisis*. This was the first time participants did not only meet locally, but also virtually, joined in from Italy, Brazil, Germany and Switzerland, communicating over the #Cinelerra (2010a; 2010b; 2010c) and #Psychogeophysics (Raffa et al. 2010) IRC chat channels.

Eleanora Oreggia, one of the participants, stated in an email, that the “whole concept of database collaborative video editing emerged clearly, and this would have solved my life many times in the past, if I only knew” (2010).



## **CHAPTER SIX**

### **FLOSSTV**

Conclusion

## 6. Conclusion

"Our life is half natural and half technological," comments Nam June Paik. "Half and half is good. You cannot deny that high-tech is progress. Yet if you make only high-tech you make war. So we must have a strong human element to keep modesty and natural life." (Lovejoy 1989, p.248)

I will discuss in this concluding chapter the achieved outcomes of the FLOSSTV research, but also its limits, what the practical implications of those limits are to the FLOSSTV methods and practice, and building upon this discussion I will suggest future avenues for the research. In this thesis I set out to articulate the emergence of FLOSS within collaborative, networked media and arts productions, focusing on the moving image. I aimed to identify methods and practices that can facilitate media and arts practitioners wishing to engage in such participatory media productions. To achieve that, I applied practice as research as my main method, by establishing the Deptford.TV project. The outcome and results of this practice-based research provide methods and tools which support participatory media production, enabling the sharing and remixing of media content. As it is often the case with research projects more questions have been produced. I will discuss these questions in this chapter and how to address them when carrying on the FLOSSTV research into new areas, based on the findings of this thesis.

In the beginning of this research I experimented with the method of collective video blogging, through the use of the WordPress software. I realised that video blogging did not allow for the sharing of project files in a manner through which Deptford.TV participants could co-create media, and work together on projects. Thus I researched the application of content management systems, and found the *Drupal* interface to be user friendly enough for Deptford.TV participants with less technical skills to collaborate with each other. With the first Deptford.TV workshops dealing with the documentation of urban change in Deptford I found that it is more difficult to apply these FLOSSTV methods in traditional fields of media production environments, such as documentary films where the participants are focused on the notion of the 'auteur'. The application of FLOSSTV methods to arts practices was better received by the Deptford.TV participants of TV hacking workshops focusing on CCTV sniffing and psychogeography. Furthermore it is worth extending the research focus from its original limit, my research parameters around participatory media production with FLOSS, into the practice of media productions dealing with databases, and therefore looking into the use of open data (OKF 2008).

Currently the notion of data is often discussed in conjunction with research into social media (Kareem 2010). One could therefore use my discussion of how social media practices are under the influence of mainstream media and how the notion of top-down versus bottom-up needs to be analysed critically along with the notion of utopian versus dystopian cultures within digital media production practises. I use Müller's notion of “formatted spaces of participation” allowing a more “differentiated and adequate analysis of the technological, economic, social and cultural powers and conventions that structure the diverse participatory practices which these spaces allow for and also provoke” (Müller 2009, p.59). The FLOSSTV research impacts on the notion of social media, in conjunction with social software and a criticism incorporating “an explicitly wider notion of such processes into software - to reinfuse the social, the dynamic, the networks, the political, communality” (Fuller 2003, p.14). Through the FLOSSTV research I criticise the current trend in 'social' media towards centralised services. Facebook's action of taking down protest sites in the UK (Preston 2011; Shiv 2011; Killock 2011) is an example of the censorial power of centralised social media networks. The centralisation of those services might lead to an artificial scarcity of digital content distribution services over the Internet, because of the distribution being controlled by a small number of user generated content pools.

The idea and history of participatory media practices sharing user generated content pools is discussed in the chapter *Contextual Review*. I investigate theories and histories of collaborations with focus on participatory media and arts practices, and discuss emerging production and distribution technologies. Here I re-think the historical notion of participatory media production in regard to my practice, by looking into Berthold Brecht's *Radio Theories* (1967b), Raymond Williams' discussion of television and technological determinism (1974), and Nam June Paik's *Versatile Color TV Synthesizer* (1970). I am following Brecht and his notion of 'liberated' media (1967b), questioning established notions of intellectual property (A. R. Miller & M. H. Davis 2004). The band Negativland is a good example of such a participatory culture practice questioning intellectual property regulations. They became famous in 1991, with their release of a single with the title "U2" (1995), see figure 6-1, displayed in very large type on the front of the cover, and "Negativland" in smaller typeface. The single was a parody of U2's well-known song “I Still Haven't Found What I'm Looking For”. Island Record eventually sued Negativland who ended up having to destroy all their singles.



Fig. 6-1. Cover of the Negativland single U2. N©!

Laws devised to protect the "ownership" of transmittable information have, for example, resulted in a music industry in which the very idea of a collage is a dangerous one, and artists inspired by "direct reference" forms of creation do not have the "right" to decide what their own art will consist of. Has it occurred to anyone that the private ownership of mass culture is a bit of a contradiction in terms? (Negativland 1995)

Not focussing on the "importance of alternative systems of distribution" (Mellencamp 1998, p.205) can, in retrospect, be seen as central to the failure to achieve many-to-many production methods and democratic 'pluralism', spreading as a cultural practice, in the 60s and 70s. In *Kitchen Story* Steina Vasulka (1976) states that one of the main reasons for the initiation of those collectives was that the New York State Council on the Arts (NYSCA) "deemed video an applicable art form". DeeDee Halleck further reflects on how the "eighties became a period of co-optation, or some might call it 'sellout.' ... [t]he ideas of the movement often appear in strange conimpetus." (2002, p.276), depicting the TVTV members as "cowboy/artists" (2002, p.273) characterized by elitism, and right-wing funders preferring not to fund the "oppositional" (202, P.256) utopian notion of 'collective projects'. Critical voices were also raised at that time through collectives themselves, such as the media collective *Radical Software* (Gigliotti & I. Schneider 1970). *Radical Software* foresaw, in their publications, the commercial exploitation of creative and cultural commons through the use of media content rights, in the form of copyrights:

Tape will soon be everywhere. CATV will bloom, and electronic neighbourhoods will be the rage. Home cassettes will rival the hi-fi markets in sound recording. There will be a computer in every pot... Tape as an art form will develop its modes, its classicism, its surrealism, its abstractions. The boobs who have been staring hypnotically at the tube for thirty years will come to with a start, rub their eyes, and discover that they have a radically new medium on their hands. Finally it will become good business. And the race for exploitation rights will be on... Every innovation in technology brought about by heads will be used by the powertrip neanderthals to furnish a more sophisticated 1984. (Vassi 1970, p.18)

In the chapter *Contextual Review* I demonstrate certain pitfalls of previous participatory media projects such as the different participatory projects emerging out of the *Guerilla Television* movement, of which many started as participatory community media and/or arts projects, but often ended up being run by an exclusive clan and sometimes even only owned by individuals. I argue that this was due to the collectives ignoring certain intellectual property rules, especially copyright (but also patents), allowing for the business minded participants to take over control of the content and its distribution.

Therefore I elaborate in the next chapter *Contracts* on copyright and copyleft by discussing the contracts and policies that allow such collaborations to develop, exploring also the relationship between tactics and strategies. Because FLOSS already comes out of a collaborative production environment it offers appropriate methods and tools to also support participatory media and arts practices. Thus I argue that the implementation of FLOSS production and distribution methods empowers collaboration between media and arts practitioners. I demonstrate this through the application of copyleft licenses to the Deptford.TV project, such as the *Free Art License*, the *Creative Commons - Attribution-Share Alike 3.0* license, and the *General Public License* (all to be found in the *Appendix* of this thesis). By drawing upon the work of Howard Besser (2001), Jessica Litman (2001), Adams Ernest (2005), and Joost Smiers (2005) I demonstrate how intellectual property legislation hinders creativity by focusing copyright laws on media consumption rather than on production. The software which FLOSSTV uses could become illegal due to software patents. I further argue that potentially democratic distribution over open mesh networks, such as the *Open Wireless Network* OWN could soon become censored due to restrictive laws, such as the *Digital Economy Act*. The attempt to create a stricter copyright by eliminating 'fair use' might compromise cultural production, as artists will not be able to access and use the cultural materials they need in order to produce new work. This approach to copyright disadvantages artists and small producers while privileging some large media conglomerates. As a result, the

author becomes the producer of a corporate-controlled culture, in which “diversity is marginalized” (Besser 2001).

Through analysing initiatives such as the *Debian Social Contract* I argue that such initiatives hold the potential to subvert the current trend in the regulation of digital culture, through implementing FLOSS culture in 'social contracts' as 'open contracts'. I also demonstrate the limits of these 'open contracts', by arguing that the current threat to such contracts lies in the formation of rigorous intellectual property laws which would require a 'copy control' technology for all newly produced digital devices, such as *The European Copyright Directive* (European Parliament 2001), which can be seen as strengthening the copyright owners interests, “giving large corporations carte blanche to control how consumers use the internet and other digital devices” (Timms 2003), and taking away the 'fair use' right (Aufderheide 2008). 'Fair use', as practised within academia for the purposes of 'quoting', 'sourcing' and 'referencing', has suddenly become an urgent issue as a result of Google's *Settlement Agreement* (2009), as discussed by Geoffrey Nunberg in *Google's Book Search: A Disaster for Scholars* (2009). But not only 'fair use' is at stake, also access to sources itself, because the settlement “gives Google the power to censor its database by excluding up to 15 percent of the digitized works” (Darnton 2009).

When it comes to intellectual property legislation (World Intellectual Property Organisation 2006), current discussion revolves around the development of 'Software Patents' (Henrion 2009). Pro-patenting lobbies (i.e. big software industries mostly) argue that the practice of patenting will provide motivation for further innovation (Beresford 2007). But software patents are problematic for a number of reasons: firstly, they are very expensive and thus not accessible to every inventor. Secondly they involve, other than newly-invented software, also a lot of software which has already been 'invented' as mathematical algorithms. As discussed in the *Contracts* chapter Jessica Litman (2001) argues that the patenting of software would mean the transfer of its total control and the possibility of any further development to big companies that can afford to pay for these patents. As FLOSS is based on open sharing of code and public ownership it would become impracticable as 'free' software, if software patenting is established, because no individual software developer could afford to pay for the patents in order to keep coding on free software. “Software patenting is generally hostile to Open Source, because patent holders require a royalty payment that is beyond the means for developers who distribute their software at no charge” (Perens 2005b). Such a change in the legislation would make this thesis, like numerous other FLOSS practices,

impossible, since this thesis is written with the use of free software, namely *Zotero* (Owens 2008; Cardullo 2009b) and *Open Office* (Sun 2000), while the tools used for the practical part of the research, the Deptford.TV project, are FLOSS systems, as described in the chapter *Practice*. Patents are a legal limitation for the FLOSSTV research. In the movie *Code Rush* (Winton 2000) one of the *Netscape* (today known as *Firefox*) web-browser's coders Jamie Zawinksi warns that “we're at the beginning of an industry. Who knows where that industry will go. This could all go into Television again. It could be controlled by a small number of companies who decide what we see and hear. And there's a lot of precedent for that” (Winton 2000). Future FLOSSTV research might have to look into royalty-free standards in order not to be legally limited by software patents, an example being the *Open Commons Project* (Glidden 2008) for royalty-free video and audio codecs.

In the chapter *Methods* I looked into the tools, technologies and aesthetics of collaboration focusing on FLOSS with the methodological approach of participatory action research and practice as research (AVPhD). I argue that TV hacking is an act of producing television collaboratively through methods that empower collectives, bypassing the question of how interaction is managed and produced. Through the Deptford.TV project I put FLOSSTV into practice, demonstrating its concept, objectives and techniques. I argue that one possible analogy for free and open source code within media practices is the notion of 'found footage' and the practice of database filmmaking, with reference to Lev Manovich and Andreas Kratky's *Soft Cinema* (2005) project, and Simon Yuill's *Social Versioning System* (2005) as a framework for supporting collaborative projects by bringing code and media content together. The *Social Versioning System* was applied to the *spring\_alpha* game (figure 6-2) which is "a networked game system set in an industrialised council estate whose inhabitants are attempting to create their own autonomous society in contrast to that of the regime in which they live” (Yuill & McCail 2005).

For Matthew Fuller, the *spring\_alpha* interface routes the user “deeper into the politics of software” (2004). Matthew Fuller and Usman Haque also published the *Urban Versioning System* (2008), applying the idea of the versioning systems and the 'politics of software' to architecture. I applied the idea of *Social Versioning Systems* to Deptford.TV in order to put project files created by editing software (often XML text files), as well as all the assets linked to those file, under version control. As such the FLOSSTV methods applied within the practice of the Deptford.TV project can easily be recreated by other research projects. Through the

FLOSSTV research I follow the development of the media content, the database, the living archive as well as the development of the tools, the software used to work with the database, the production process, and the subversion methods creating semantic film and art projects in “an effort to conceptualise research that follows the medium, captures its dynamics and makes grounded claims about cultural and societal change” (R. Rogers 2009).



Fig. 6-2. Spring Alpha illustration by Chad McCail (1999). GNU Free Documentation License Version 1.3

I close the thesis with the *Practice* chapter, reflecting upon the results and achievements of the FLOSSTV research. This chapter documents these results and methods in order to enable such collaborative forms of free and open media production. I argue that this only became possible through the recent emergence of new network technologies, a copyleft attitude, and a broader acceptance of FLOSS, especially how 'freedom of use' guarantees everybody who can access Deptford.TV the possibility of reproducing the methods and the tools developed within. I argue that these methods offer an alternative to the mainstream use of participatory, interactive media.

Nevertheless I learned that the concept of applying an alternative license, a copyleft, additional to the copyright, is difficult to explain to participants who have little understanding of the copyleft attitude. For future FLOSSTV research projects it is advisable to discuss the terms and conditions under which one wants to establish a participatory media project clearly, and well in advance. Furthermore a downside of FLOSS is, because FLOSS development is a community undertaking with many coders working on a piece of software and often voluntarily, it takes much more time for certain pieces of software to become stable. Only over the last two years was it possible to edit Deptford.TV projects on *Cinelerra* without the software crashing too often. And *Cinelerra* still lacks important features, to



be found in the proprietary video-editing software such as *Final Cut Pro*, *Avid* or *Premiere*. For example *Cinelerra* lacks a razor or a frame-to-frame refining tool. Therefore I have recently started to also use the video editor *Kdenlive* (Wood 2002), which for example offers a razor tool and is easier to learn. Ideally a FLOSSTV practice is not locked into a specific piece of software, but allows for the interchange, translation and communication between different applications. The development and research into the diversity of software application in regard to participatory art and media production is a further future avenue the FLOSSTV research can take.

When I first embarked on the Deptford.TV project the aim was to implement a model of many-to-many media production. Following several years of research on this project, I am now able to acknowledge the difficulties involved in collaborative projects characterised by a wide range of different media literacy levels. It is tempting in participatory media and art projects to work primarily with the most advanced, media literate participants leading to the exclusion of certain voices, which contradicts the Brechtian ideal of an inclusive many-to-many media communication and production process. A way out of this problem is to offer workshops that provide access to technologies and know-how before embarking on complex collaborative projects. Without taking the problem of media literacy into consideration and offering accessibility to the less technically advanced participants one should be aware that participatory media and arts projects can become very exclusive. The development of FLOSSTV tool-kits and educational modules is another future research field.

Regarding the outcomes of the Deptford.TV project I noticed that the collaborations within these media production processes were much easier to initiate as 'art' projects as opposed to 'documentary film' projects. When invited to collaborate on an art project participants were more willing to participate and to experiment with each other's content than they would have been had the project been a more traditional documentary production. Also, the understanding and notion of 'hacking' as a practice encouraged many participants to let go of their personal vision and experiment with alternative approaches to media production. Another limitation for participatory media practices is that the access to databases holding AV material is very limited. It is very hard for 'amateurs' to get hold of archive material owned by big media conglomerates. The current User Generated hosting platforms offer a certain culture of remix, but this is a very limited one. The moment a copyright holder claims copyright infringement the content will be blocked or taken down from these platforms thus not offering an open cultural dialogue with AV material, as envisaged throughout the FLOSSTV thesis.

According to Tina Piazzzi and Stefan Syedel (2009; 2010) this open dialogue is also not happening because of the contradictions within the traditional one-to-many media systems, which have become so huge that we are currently in an epoch of transition in which we might soon witness an evolutionary step to a different form of media systems, by finding new leverage points (Meadows 1999). The computer and the internet are refusing connections to the traditional media system. For Piazzzi and Syedel the traditional media systems work on a subtraction basis, according to a subtraction concept. Texts, sounds, videos are subtractive if these files carry the attitude that someone searched, found and mediated those files to targeted groups, and thus subtracted everything which according to the one who mediates is unnecessary, interferes or distracts. Traditional mass media try to serve the needs of recipients. In order to serve as many needs as possible those media systems subtract all the contradictions in order to offer the smoothest form of consumption possible. But often with this subtraction the context is lost, a context which could be useful for the discussion on the contradictions of our society. Here Piazzzi and Seydel argue that the computer and the internet hold the potential to transmit those contexts through different connections and perspectives within a relational form and order, which could very well be the database film-making methods as envisaged through the FLOSSTV research. It would signify a media system which would not work on the basis of subtraction but of addition, extending the possibilities of communication, offering new connections and spheres, or after the German philosopher Hegel (1807) a sphere for the development of the 'ultimate entity' (Schenkel 2010). As I discuss in the chapter *Contextual Review* similar ideas have been formulated by Hans Magnus Enzensberger in *Constituents of a Theory of the Media* (1970) and criticised by Jean Baudrillard in *Requiem for the Media* (1981).

This transitional epoch and with it the revised contradictions and differences of our society lead to a new practice within media systems (Howell 2011). Piazzzi and Seydel thus formulate five principles of action for this new practice. First we should not only represent ourselves individually and satisfy our individual needs, but should also allow for a sphere in which intentional and unintentional contexts are represented. Second should we allow for this context to happen, it should be experienced in an inquisitive nature, through research and education. This leads to a third principle, according to which the contradictions and inconsistencies of our society are addressed and discussed. Which according to Piazzzi and Seydel means that, fourth, in order for this to happen one will have to inquire also into others' contexts, meaning that, fifth, the traditionally regulated and formatted discourses, existing within traditional media

systems, will be broken up, and an open-ended dialogue between members of society might be established within a field of new media systems.

Following Piazzzi and Seydel a future area of the FLOSSTV research, allowing for such an open-ended dialogue, might be to apply the FLOSSTV methods – developed and established within an academic context – to the context of community practices, facilitating and supporting established communities looking for participatory media production methods. On a mainstream level one possible example is a follow up project to the BBC's *Creative Archive* initiative, working with living archives. Through the Deptford.TV pilot project I anticipate the emergence of further relevant FLOSSTV practices. At the time of writing this *Conclusion* the most promising development of the FLOSSTV research is a collaboration with the curatorial agency and research platform Kurator, affiliated with the University of Plymouth, in order to create a participatory television project and television show for Kurator entitled Kurator.TV. Kurator.TV is envisaged as an online platform, with a series of workshops, a data archive and TV programme broadcast via a terrestrial signal. It would be the first time that the FLOSSTV research would receive a UK broadcasting license in order to apply the *Copyright* project to the FLOSSTV method, as already done in Brussels and Jamaica with the !Mediengruppe Bitnik collective.

I envisage further FLOSSTV research broadening the context of such participatory media production activities. Meaning that FLOSSTV methods would also engage with the curatorial vision of media and arts content, which for the curators Lisa Le Feuvre and Tom Morton is engaging with “the ways in which artists make use of histories, be they distant or proximate, longingly imagined or all too real, to illuminate our present moment” (2011). In that sense further FLOSSTV research aims at paying attention to the histories of and made by the inhabitants of other areas, where such projects as Deptford.TV could be initiated, thereby facilitating a better understanding the present. The focus of such further research would be on a mobile workshop program looking at integrating artistic practices in researching cultural and social ecosystems, sustainable documenting and archiving methods, using the FLOSSTV methods and technologies for field work. I could very well envisage that future FLOSSTV workshops would be led by members of the Deptford.TV project, !Mediengruppe Bitnik, as well as participants of the Deckspace media lab and that FLOSSTV practices would be extended by inviting artists as well as members of the public to engage in the production of these possible histories. Future FLOSSTV participants will engage in data (audio and visual) gathering during organised walks through the cities and locations where such participatory

media projects are initiated, uploading this material onto the platforms, using the data as the resource and basis for collaborative media gathering and editing. Information about the workshops and their structure will be made available online, so it can be used by others, individuals and groups, to run similar walks independently. One might even foresee a possible FLOSSTV network collaborating between the different entities of localized media production outlets. As already mentioned it could very well also be Public Broadcasters who open up their archives to allow for such participatory, democratic media practices to happen. This sketches one possible scenario that would allow a much wider access to the FLOSSTV methods and practices through collaborative community projects. It would take FLOSSTV from an academic framework into a cultural and arts institutional context.

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## **APPENDIX I**

FLOSSTV Glossary

## Appendix I: Glossary

Action Research	Action research or participatory action research – is a reflective process of progressive problem solving led by individuals working with others in teams or as part of a "community of practice" to improve the way they address issues and solve problems.
Bittorrent	BitTorrent is a peer-to-peer file sharing protocol used for distributing large amounts of data over the internet.
CCTV	Closed-circuit television (CCTV) is the use of video cameras to transmit a signal to a specific place, on a limited set of monitors.
Client	A client is an application or system that accesses a service made available by a server. The server is often (but not always) on another computer system, in which case the client accesses the service by way of a network.
CMS	A content management system (CMS) is the collection of procedures used to manage work flow in a collaborative environment.
Copyleft	Copyleft is a play on the word copyright to describe 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.
CVS	The Concurrent Versions System (CVS), also known as the Concurrent Versioning System, is a client-server free software revision control system in the field of software development. Version control system software keeps track of all work and all changes in a set of files, and allows several developers (potentially widely separated in space and/or time) to collaborate.
Data Spheres	“Over the past 20 years, an entirely new global system of digital communication has come into being, comprised of satellite relays, optical fibre and coaxial cables, and computer networks. This augments the already vast global radio traffic. This new phenomenon is referred to as the 'datasphere'.”(Penny 2003, pp.816-817)
Dérive	In psychogeography, a <i>dérive</i> is an unplanned journey through a landscape, usually urban, where an individual travels where the subtle aesthetic contours of the surrounding architecture and geography subconsciously direct them with the ultimate goal of encountering an entirely new and authentic experience.
DRM	Digital rights management (DRM) is a term for access control technologies that are used by hardware manufacturers, publishers, copyright holders and individuals to limit the use of digital content and devices. The term is used to describe any technology that inhibits uses of digital content that are not desired or intended by the content provider.
EDL	An edit decision list or EDL used in the post-production process of film editing and video editing. The list contains an ordered list of reel and timecode data representing where each video clip can be obtained in order to conform the final cut.
Fair Use	Fair use, a limitation and exception to the exclusive right granted by copyright law to the author of a creative work, is a doctrine in United States copyright law that allows limited use of copyrighted material without acquiring permission from the rights holders.
FLOSS	Free and open-source software (F/OSS, FOSS) or free/libre/open-source software (FLOSS, FL/OSS) is liberally licensed to grant the right of users to use, study, change, and improve its design through the availability of its source code.
Folksonomy	A folksonomy is a system of classification derived from the practice and method of collaboratively creating and managing tags to annotate and categorize content; this practice is also known as collaborative tagging, social classification, social indexing, and social tagging.
Fork	In software engineering, a project fork happens when developers take a legal copy of source code from one software package and start independent development on it, creating a distinct piece of software.

Found Footage	Found footage is a filmmaking term which describes a method of compiling films partly or entirely of footage which has not been created by the filmmaker, and changing its meaning by placing it in a new context. It should not be mistaken for documentary or compilation films. It is also not to be mistaken with stock footage.
FreeView	DTV Services, trading as Freeview, is the name for the collection of free-to-air services on the Digital Terrestrial Television platform in the UK. The service is jointly run by its five equal shareholders, BBC, ITV, Channel 4, Sky and transmitter operator Arqiva.
FTP	File Transfer Protocol (FTP) is a standard network protocol used to transfer files from one host to another over a TCP-based network, such as the Internet.
GNU /LINUX	Linux is a computer operating system which is based on free and open source software. Although many different varieties of Linux exist, all are Unix-like and based on the Linux kernel, an operating system kernel created in 1992 by Linus Torvalds. Linux can be installed on a wide variety of computer hardware, ranging from mobile phones, tablet computers, routers and video game consoles, to desktop computers, mainframes and supercomputers.
GPS	The Global Positioning System (GPS) is a space-based global navigation satellite system (GNSS) that provides location and time information in all weather, anywhere on or near the Earth, where there is an unobstructed line of sight to four or more GPS satellites.
H.264	H.264/MPEG-4 Part 10 or AVC (Advanced Video Coding) is a standard for video compression, and is currently one of the most commonly used formats for the recording, compression, and distribution of high definition video.
Hacker	“A hacker is someone who enjoys playful cleverness—not necessarily with computers. The programmers in the old free software community of the 60s and 70s referred to themselves as hackers. Around 1980, journalists who discovered the hacker community mistakenly took the term to mean security breaker ... People who break security are crackers.” (FSF 2011)
IP	Intellectual property (IP) is a term referring to a number of distinct types of creations of the mind for which a set of exclusive rights are recognized — and the corresponding fields of law. Under intellectual property law, owners are granted certain exclusive rights to a variety of intangible assets, such as musical, literary, and artistic works; discoveries and inventions; and words, phrases, symbols, and designs. Common types of intellectual property rights include copyrights, trademarks, patents, industrial design rights and trade secrets in some jurisdictions.
IRC	Internet Relay Chat (IRC) is a form of real-time Internet text messaging (chat) or synchronous conferencing. It is mainly designed for group communication in discussion forums, called channels, but also allows one-to-one communication via private message as well as chat and data transfer, including file sharing.
Living Archives	“Archives of public interest, providing material or documenting events and processes that are otherwise invisible to official sources of historical and archival authority. They are also subjective, specific to the practices of each group, individual and project which produces and catalogues the material in the archive” (Albert 2006)
MPEG-4	MPEG-4 is a group of audio and video coding standards introduced by the ISO/IEC Moving Pictures Experts Group (MPEG) in 1998. MPEG-4 includes support for externally-specified Digital Rights Management and requires nearly half the bandwidth needed by MPEG-2, that is 2.5Mb for video streaming.
NLE	In video, a non-linear editing system (NLE) is a video editing (NLVE) or audio editing (NLAE) digital audio workstation (DAW) system which can perform random access non-destructive editing on the source material. It is named in contrast to 20th century methods of linear video editing and film editing.
Net Art	Internet art (often referred to as net art) is a form of digital artwork distributed via the Internet. This form of art has circumvented the traditional dominance of the gallery and museum system, delivering aesthetic experiences via the Internet. In many cases, the viewer is drawn into some kind of interaction with the work of art. Artists working in this manner are sometimes referred to as net artists.

The term "net.art" is also used as a synonym for net art or Internet art and covers a much wider range of artistic practices. In this wider definition, net.art means art that uses the Internet as its medium and that cannot be experienced in any other way. Often net.art has the Internet as (part of) its subject matter but this is certainly not required.

NVoD	Near Video on Demand. This is similar to video on demand, but the same content is offered on a number of different channels with different start times.
OGV (OGG)	Theora is a free lossy video compression format. It is developed by the Xiph.Org Foundation and distributed without licensing fees alongside their other free and open media projects, including the Vorbis audio format and the Ogg container.
Open Access	Open access (OA) refers to unrestricted online access to articles published in scholarly journals, and also increasingly to book chapters or monographs
Open Content	Open content describes any kind of creative work, or content, published under an open content license that explicitly allows copying and modifying of its information by anyone, not exclusively by a single organization, firm or individual.
OS	An operating system (OS) is software, consisting of programs and data, that runs on computers, manages computer hardware resources, and provides common services for execution of various application software. The operating system is the most important type of system software in a computer system. Without an operating system, a user cannot run an application program on their computer, unless the application program is self booting.
Packaging	Packing is the process of making the raw material and the project files of the Deptford.TV database, the resources, reusable through an external interface. "By versioning the package and providing 'releases' those who reuse the packaged resource can stay using a specific (and stable) release while development and changes are made in the 'trunk' and become available in later releases. This practice of versioning and releasing is already ubiquitous in software development – so ubiquitous it is practically taken for granted – but is almost unknown in the area of open knowledge." (Walsh 2008)
PAR	Participatory action research is a form of experimental research that focuses on the effects of the researcher's direct actions of practice within a participatory community with the goal of improving the performance quality of the community or an area of concern.
Pay-Per-View	Content available to view (but not keep) for a one-off payment.
Pay-TV	Television channels that require a subscription to view.
PDA	Personal Digital Assistant. A handheld computer, typically with email and internet functionality and featuring a colour screen.
Peer-to-Peer (P2P)	A P2P computer network relying on the computing power and bandwidth of its participants, often utilised in file sharing applications.
PVR	Personal Video Recorder. A consumer electronics device for recording (PVR) television services to a hard disk in a digital format.
Point-to-Point	Refers to a type of transmission that is sent from one antenna to another (single) antenna. The signal cannot be received by multiple recipients.
Point-to-Multipoint	In point-to-multipoint transmissions, a single antenna broadcasts a signal to multiple receiving antennas simultaneously.
Portal	A website that acts as a gateway to other sites on the internet.
Post-Production	Post-production is part of filmmaking and the video production process. It occurs in the making of motion pictures, television programs, radio programs, advertising, audio recordings, photography, and digital art. It is a term for all stages of production occurring after the actual end of shooting and/or recording the completed work.

Practice Research	Practice research is a form of academic research which incorporates an element of practice in the methodology or research output.
Pre-Production	In filmmaking and video production, pre-production formally begins once a project has been greenlit. At this stage, finalizing preparations for production go into effect. Financing will generally be confirmed and many of the key elements such as principal cast members, director and cinematographer are set.
Production	In production, the video production/film is created and shot. More crew will be recruited at this stage, such as the property master, script supervisor, assistant directors, stills photographer, picture editor, and sound editors. These are just the most common roles in filmmaking; the production office will be free to create any unique blend of roles to suit the various responsibilities possible during the production of a film.
Psychogeography	Psychogeography is “the study of the precise laws and specific effects of the geographical environment, whether consciously organized or not, on the emotions and behavior of individuals” (Debord 1955)
Psychogeophysics	Psychogeophysics can be understood as “a hack of psychogeography. Just as generations of psychogeographers plotted the city only to better lose themselves, psychogeophysicists would hope to put themselves at the centre of the measurable coordinates of a cosmic mystery which is this universe’s support and regeneration of life” (Iles 2010)
Public Domain	Works are in the public domain if they are not covered by intellectual property rights at all, if the intellectual property rights have expired, or if the intellectual property rights are forfeited.
RAM	Random-access memory (RAM) is a form of computer data storage. RAM is often associated with volatile types of memory (such as DRAM memory modules), where its stored information is lost if the power is removed.
ROM	Read-only memory (ROM) is a class of storage medium used in computers and other electronic devices. Data stored in ROM cannot be modified, or can be modified only slowly or with difficulty, so it is mainly used to distribute firmware (software that is very closely tied to specific hardware, and unlikely to need frequent updates).
RSS	RSS (originally RDF Site Summary, often dubbed Really Simple Syndication) is a family of web feed formats used to publish frequently updated works—such as blog entries, news headlines, audio, and video—in a standardized format. An RSS document (which is called a “feed”, “web feed”, or “channel”) includes full or summarized text, plus metadata such as publishing dates and authorship.
Semantic Web	The Semantic Web is a “web of data” that facilitates machines to understand the semantics, or meaning, of information on the World Wide Web. It extends the network of hyperlinked human-readable web pages by inserting machine-readable metadata about pages and how they are related to each other, enabling automated agents to access the Web more intelligently and perform tasks on behalf of users.
Server	In computer networking, a server is a program that operates as a socket listener. The term server is also often generalized to describe a host that is deployed to execute one or more such programs. A server computer is a computer, or series of computers, that link other computers or electronic devices together. They often provide essential services across a network, either to private users inside a large organization or to public users via the internet.
Social Media	The term Social Media refers to the use of web-based and mobile technologies to turn communication into an interactive dialogue. Social media are media for social interaction, as a set of methods to enhance social communication, using ubiquitously accessible and scalable communication techniques.
Sousveillance	Sousveillance refers to the recording of an activity by a participant in the activity typically by way of small wearable or portable personal technologies. Sousveillance has also been described as inverse surveillance, i.e. from the word surveillance which is formed from “sur” (French for

"from above") and "veiller" (French for "to watch"), by changing "sur" to "sous" (French for "from below"). While surveillance and sousveillance both generally refer to visual monitoring (i.e. "veiller" being "to watch"), the terms also denote other forms of monitoring such as audio surveillance or sousveillance. In the audio sense (e.g. recording of phone conversations) sousveillance is referred to as "one party consent".

- Subversion Apache Subversion (often abbreviated SVN, after the command name svn) is a software versioning and a revision control system. Developers use Subversion to maintain current and historical versions of files such as source code, web pages, and documentation. Its goal is to be a mostly-compatible successor to the widely used Concurrent Versions System (CVS).
- Tagging Tagging was popularized by websites associated with Web 2.0 and is an important feature of many Web 2.0 services. It is now also part of some desktop software. In online computer systems terminology, a tag is a non-hierarchical keyword or term assigned to a piece of information (such as an Internet bookmark, digital image, or computer file). This kind of metadata helps describe an item and allows it to be found again by browsing or searching. Tags are generally chosen informally and personally by the item's creator or by its viewer, depending on the system.
- Trusted Computing Trusted Computing (TC) is a technology developed and promoted by the Trusted Computing Group. The term is taken from the field of trusted systems and has a specialized meaning. With Trusted Computing, the computer will consistently behave in expected ways, and those behaviors will be enforced by hardware and software. In practice, Trusted Computing uses cryptography to help enforce a selected behavior.
- TCP/IP The Internet Protocol Suite is the set of communications protocols used for the Internet and other similar networks. It is commonly also known as TCP/IP named from two of the most important protocols in it: the Transmission Control Protocol (TCP) and the Internet Protocol (IP), which were the first two networking protocols defined in this standard. Modern IP networking represents a synthesis of several developments that began to evolve in the 1960s and 1970s, namely the Internet and local area networks, which emerged during the 1980s, together with the advent of the World Wide Web in the early 1990s.
- Time Code In video production and filmmaking, (SMPTE) timecode is used extensively for synchronization, and for logging and identifying material in recorded media. This shot-logging process was traditionally done by hand using pen and paper, but is now typically done using shot-logging software running on a laptop computer that is connected to the time code generator or the camera itself. The SMPTE family of timecodes are almost universally used in film, video and audio production, and can be encoded in many different formats.
- UGC User generated content (UGC) covers a range of media content available in a range of modern communications technologies. It entered mainstream usage during 2005 having arisen in web publishing and new media content production circles. Its use for a wide range of applications, including problem processing, news, gossip and research, reflects the expansion of media production through new technologies that are accessible and affordable to the general public. All digital media technologies are included, such as question-answer databases, digital video, blogging, podcasting, forums, review-sites, social networking, mobile phone photography and wikis. In addition to these technologies, user generated content may also employ a combination of open source, free software, and flexible licensing or related agreements to further reduce the barriers to collaboration, skill-building and discovery. Also sometimes referred to as UCC User Created Content (Le Borgne-Bachs Schmidt et al. 2008).
- UHF/VHF antenna amplifier An antenna amplifier allows a weak radio signal to be detected, thus most devices that receive radio waves already have an RF amplifier stage in the front end that amplifies the antenna signal.
- URL In computing, a Uniform Resource Locator (URL) is a Uniform Resource Identifier (URI) that specifies where a known resource is available and the mechanism for retrieving it. It is also referred to as a Universal Resource Locator and in many technical documents and verbal discussions it is often used as a synonym for URI.
- USB flash drive A USB flash drive is a data storage device that consists of flash memory with an integrated Universal Serial Bus (USB) interface. USB flash drives are typically removable and rewritable,

and physically much smaller than a floppy disk.

VCR	The videocassette recorder (or VCR, also known as the video recorder), is a type of electro-mechanical device that uses removable videocassettes that contain magnetic tape for recording analog audio and analog video from broadcast television so that the images and sound can be played back at a more convenient time. This facility afforded by a VCR machine is commonly referred to as television program Timeshifting.
VoD	Video on Demand. A platform enabling viewers to select content and have it delivered to them over a network at any time.
Wi-Fi	A term used to describe devices that conform to the IEEE 802.11 standards for Wireless Local Area Networks (WLAN).
Wiki	A wiki is a website that allows the creation and editing of any number of interlinked web pages via a web browser using a simplified markup language or a WYSIWYG text editor. Wikis are typically powered by wiki software and are often used collaboratively by multiple users. Examples include community websites, corporate intranets, knowledge management systems, and note services.
WLAN	Wireless Local Area Network. A wireless network using radio frequencies for the communication between computer devices.
X.264	x264 is a free software library for encoding video streams into the H.264/MPEG-4 AVC format. It is released under the terms of the GNU General Public License.
XML	Extensible Markup Language (XML) is a set of rules for encoding documents in machine-readable form. It is defined in the XML 1.0 Specification produced by the W3C, and several other related specifications, all gratis open standards.

If not stated differently the primary source and recommended reference for further information is Wikipedia.



**APPENDIX II**

**DVD ONE**

## **Appendix II: DVD ONE**

This appendix contextualises the videos found on *DVD ONE*, giving specific narratives to the videos with information on the contexts, participants, roles, and materials. I have divided this appendix into three sub-sections, reflecting within each sub-section on the relation of the practice to the evolving Deptford.TV method: Documentary Practice, Performance Practice and Media Arts Practice. *DVD ONE* is a manifestation of the FLOSSTV practice-based research project Deptford.TV.

### **III.1: Documentary Practice**

*Documentary Practice* represents the beginning of the Deptford.TV project using the initial video-blogging process over the *WordPress* platform on watch.deptford.tv. In the beginning of the FLOSSTV research the methodological focus was on Practice Based Research with collective documentary film-making as practice. The first projects initiated on the Deptford.TV database documented the urban change of the Deptford, South-East London area. The participants mainly consisted of students from two departments of Goldsmiths, University of London: *MA Urban Photography* students from the Center for Urban and Community Research, and *MA Screen Documentary* students from the Media and Communications department. Both sides showed great interest in taking part in the research on the collaborative audiovisual database for Deptford.TV. The project created a spatial documentary practice as an intervention into public space, through putting content into the public domain. These documentary projects were aimed at a traditional documentary film audience.

#### **III.1.1. Voice of the Voiceless**

*The Voice of the Voiceless* was produced for *Black History Month 2008*, by students from two different departments of Goldsmiths, undertaking the *MA Urban Photography* and the *MA Screen Documentary*, who worked together for those projects. The students working on the project *Voice of the Voiceless* were Flavia Guerra, Alex Mattholie, and Nick Street. It is a short film looking at the cultural importance of sound systems for Lewisham during the 70's and 80's. The film-makers interviewed Dr. William 'Lez' Henry who was part of the Jah Shaka

and Ghettonetone sound systems. The film-makers also talked to Professor Les Back on the significance of these sound systems for that time.

### **III.1.2. Lewisham 77**

This film focuses on the 30<sup>th</sup> anniversary of the *Lewisham 77* protests, in the form of an alternative epistemology of walking. The main significance of the *Lewisham 77* protests, was that the far-right National Front march through Lewisham on the 13<sup>th</sup> of August 1977 was faced with sizeable local resistance which resulted in riots and, many claim, a 'defeat' of the National Front. This is today often referred to as the *Battle of Lewisham*. The Deptford.TV documentaries around the *Battle of Lewisham* focused on the history of this event but also on the relationship migrant communities have with urban change in the city. *Lewisham 77* films were filmed and edited by Paolo Cardullo, Anna Kautovaara, Wei Wang, Cevdet Kosenen, Rachel Flynn, Eirin Hogetveit, Bruno Ribeiro, Melissa Gomez, Mauro Lombardi, Rossella Pernia, Tim de Vere Green, Monya Pletsch, Marie Bryant, Salma Gaj, Karen Poulsen, Suan Sook Seol, Anna Kautovaara, Wei Wang, Cevdet Kosenen, Sean Robert Clark, Sophia Kosmaoglou, and Amanda Egbe.

### **III.1.3. Strategies of Sharing**

*Strategies of Sharing* is a video essay, in collaboration with Maria Chatzichristodoulou, composed of interviews with a selection of Deptford.TV participants, which provides an overview of the first two years of Deptford.TV. This video essay, which was published accompanied by a text, was collaborative on the level of both the audiovisual production, and the essay writing. Our interest was to discuss with the participants how they identified their contributions to the Deptford.TV project in terms of authorship and collaboration. All the interviews were filmed and are stored on the Deptford.TV database in their full length. The interviews took place in Summer 2006. At that time there were 54 participants signed up to the Deptford.TV database. Before conducting the interviews we started the project with a discussion around how representative for the Deptford.TV project our interview partners should be, and what would signify a 'representative sample'? Would it be categories like age, postcode, ethnic background, expertise? After discussing several ways of

organising the interviews we decided not to conduct them in a quantitative way but to choose the participants by how 'we' felt about their different forms of contributions to the Deptford.TV project (technical infrastructure, venues, expertise, video materials, and sound materials). We interviewed twelve participants: Janine Lāi a local resident, film-maker and student at Goldsmiths, University of London, Gordon Cooper a local resident and film-maker, Elvira Zaera a local resident, student and film-maker, Stephen Oldfield a local resident and sound artist, !Mediengruppe Bitnik an artist collective focusing on media systems, Camden McDonald a local resident, performer, and initiator of the *Mindsweeper* boat project, Nikki Hilton a local resident, architect, interested in the intersection between film and architecture, James Stevens the initiator of the projects *Boundless* and *Deckspace* in South-East London, Kieran McMillan and Rebecca Molina, the Chief Executives of the Raw Nerve design collective, based in Deptford, Amanda Egbe a film-maker and student at Goldsmiths, University of London.

### **III.2: Performance Practice**

This Performance Practice sub-section describes projects which happened in a 'live' or 'installation' setting contributing materials to the Deptford.TV database. These films represent a performative practice of the Deptford.TV project, either a TV show, a live performance, or an installation project. These videos serve as a documentation of those practices. The audience for these projects were the people in the spacial environments in which these performances took place, with the exception of *Symphony of Deptford II* which is a work-in-progress envisaged to be exhibited as a video installation.

#### **III.2.1. What will New Cross be?**

*What will New Cross be?* is a collaboration between the participants of Deptford.TV and the *The People Speak* media arts collective contributing their *Talkaoke* project to the event. This video is an edit of the highlights of the *Talkaoke* TV talk show focusing on the discussion around a block of houses, next to Deptford Town Hall, owned by Goldsmiths College, and squatted by fashion designers, a coffee shop owner and people living in the buildings. The *Talkaoke* format is a TV talk show around a host sitting in the middle of a UFO shaped table

passing around a microphone and facilitating a discussion around a topic, in our case about the future of New Cross. During the talk show *The People Speak* created visualisations of the discussion and showed them in real time as projections, highlighting certain moments within the conversation. All the raw material was filmed and contributed to the Deptford.TV database by *The People Speak* as Public Domain.

### **III.2.2. Symphony of Deptford I & II**

Both of these videos signify a remix practice of the the Deptford.TV database using either *Pure Data* as visual programming language or *Python/AML* as a server side scripting language in order to remix the contents of the Deptford.TV database.

*Symphony of Deptford I* documents a live performance held on the *Mindsweeper* boat, opposite of the Laban Dance Centre, in Deptford during the *Node.London* festival in spring 2006. For this performance the video artist *NRSZ* remixed contents of the Deptford.TV database using the software *Pure Data* to the live performance of the band Ampersand. The *Pure Data* patches can be found on *DVD TWO*.

*Symphony of Deptford II* represents a collaboration with the composer Rob Canning, from the GOTO10 collective, and video artist Barbara Kukovec. The Deptford.TV database was used in order to create a remix-mashup of the material. This clip shows an example of an art work envisaged as a video installation. *Symphony of Deptford II* is written in *Python*. The code for *Symphony of Deptford II* can be found on *DVD TWO*.

### **III.3: Media-Arts Practice**

This third sub-section on Media Arts Practice contextualises the projects using the critical video editing process over the *Drupal* content management system on *edit.deptford.tv*. This third part of *DVD ONE* represents the extension of the Deptford.TV project's focus from documentary based practices to media arts practices, as well as an application of the Deptford.TV method outside of the context of Deptford.TV for the DORF TV community television station in Linz, Austria. With the extension of the Deptford.TV practice from

documentary productions to media arts productions the methodology of the research is clearly revealed as a combination of Practice Based Research and Action Research, as outlined in the *Methods Chapter* in the form of first-, second-, and third-person research/practice. With the exception of the DORF TV project in Linz, the audience for these TV hacking workshops were the participants themselves. In the exceptional case of the DORF TV transmission the possible audience consisted of the around 500,000 households of northern Austria, who are within reach of the DORF TV DVB transmission signal.

### **III.3.1. Images of Ebb**

*Images of Ebb* was one of the first Deptford.TV projects entirely produced following the Deptford.TV critical video editing process with *Cinelerra* as client based editing software. After a short introduction to CCTV film-making, the participants went on a walk through Deptford in order to find CCTV images, practising 'sousveillance'. Sousveillance, French for 'subveillance,' describes the reverse process of the habitual surveillance. A workshop situation was created in which participants experienced the city through a drift (*dérive*) through the city and search for CCTV signals, transmitted over WiFi signals. The participants then worked with this found content creating *Trail of Images* videos. The project *Images of Ebb* is a resulting collaboration with Ashley Wong's critical archival project *Sound of Ebb* (2009). Wong initiated the *Sound of Ebb* project aiming at a collaborative practice by asking sound artists to respond to the question "What is the sound of Recession?" (2009b). I organised with Wong a TV hacking workshop entitled *Images of Ebb* where we merged the the *Trail of Images* visuals with the *Sound of Ebb* materials. The second-person participants were Ashley Wong and James Stevens who together with me organised the TV hacking workshops, as well as Wong initiating the *Sound of Ebb* archival project as a contribution to the Deptford.TV database. The third-person participants were the video contributors/editors: Steve Allen, Catalina Rodriguez, Marianne Holm Hansen, Rizwan Mirza, Paolo Cardullo, Anita McKeown, Natascha Sturny, and the musicians: Manuel Xastre (*Agression*), Todd Broomhead (*Online Dating during the Global Crisis*), Nankyo B (*The Opera is Closed*), Manabu Shimada (*Heels Rhythm on Brick Lane*), and Rainer Krause (*Lengua Local*).

### III.3.2. Following the Crisis

The participants of the *Following the Crisis* TV hacking workshop edited videos using the the Deptford.TV critical video editing process with *Cinelerra* as client based editing software. *Following the Crisis* is a collectively produced visual *dérive* of the *Psychogeophysics Summit 2010* using video, sound and still image raw materials generated during the *Psychogeophysics Summit 2010*. Participants of the *Psychogeophysics Summit 2010* uploaded their materials, such as sounds, videos, and images of the different workshops to the Deptford.TV database. The workshops were walks, field trips, river drifts and discussions exploring the topic of psychogeophysics. This was the first time that participants not only met face-to-face in a local environment, but also virtually. Participants joined in from Italy, Brazil, Germany and Switzerland, communicating over the #Cinelerra (2010a; 2010b; 2010c) and #Psychogeophysics (Raffa et al. 2010) IRC chat channels. The second-person participants were Lisa Haskel, Jim Prevett and Rob Canning with whom I co-organised the TV hacking workshop. The local third-person participants were: Lara Blasic and Natascha Sturny (uploading of the Psychogeophysics Summit materials by Dark Heart of Codeness workshop participants), and the editors Eleanora Oreggia, James Steven, Simon Rowe, Gabriel Menotti, Ilze Black, Laura Plana Gracia, Jay Krishner, Joel Vacheron, Manuel Vazquez, and Janka Troeber. The remote third-person participants were: Alejo Duque (Switzerland), Simon Tretter (Germany), Raffaella Traniello and Laura Camellini (Italy), Paulo Lara and Rafeal Diniz (Brazil).

### III.3.3. Austrian Surveillance Techno

The final clip on *DVD ONE* signifies an abstraction of the contingent and situated Deptford.TV method. Deptford.TV was invited to run a TV hacking workshop during the *LiWoLi* festival in Linz, Austria, in collaboration with the local DORF TV community television station, in May 2011. The *LiWoLi* workshop participants used the the Deptford.TV critical video editing process with *KdenLive* as client based editing software, producing a one minute CCTV clip entitled *Austrian Surveillance Techno*.

Dorf TV is a user-generated television distributing over a digital television signal, with the same technology that is behind the British *FreeView* service. For its server back-end DORF

TV uses FLOSS. The collaboration with DORF TV closed the once envisaged FLOSSTV production circle (see figure IV-3), by collectively producing a one minute TV program, being distributed on the same day over a television station. The second-person participants were Stefan Hatsch, running the backend of DORF TV, Rob Canning, looking after the *Pure:Dyne* USB memory stick operating systems, James Stevens and Lara Blasic with whom I co-organised the TV hacking workshop, with the third-person participants contributors/editors who were: Sebastian Pichelhofer, Sady Monsta, Vesela Mih, Alex Delasheras, Andrea Reasue, Roel Roscamabbing, Fabrizio la Moncha, Leny S., Daniel Mabrouk, and Lena Gynnevin.



**APPENDIX III**

DVD TWO

### **Appendix III: DVD TWO**

DVD TWO, is the *Appendix DVD*, it includes all the software used for the FLOSSTV research. It is a *Pure:Dyne* (GOTO10 2008) GNU/Linux operating system DVD, plus all the scripts and code written for the Deptford.TV project. One can put the DVD in any DVD drive (of a x386 processor based computer, normally referred to as PC, but also Intel Mac) and boot the system from DVD, without having to install the system. One simply needs to insert the DVD into one's computer, and reboot. One should now be booting the *Pure:Dyne* system, which should automatically log in as 'live user' (GOTO10 2011). If the computer does not automatically boot the *Pure:Dyne* system one has to change the BIOS settings so that the DVD is first in the boot sequence (on an Intel Mac one might have to press the 'C' key while restarting and booting the *Pure:Dyne* system). I chose to work with this set-up because it allows for the participants of the Deptford.TV workshops to take the software home and continue working on their own computers.

On the Desktop of DVD TWO all the raw material and project files used for the *Following the Crisis* project are available. By right clicking on the project file (and choosing to open in the editing software *Cinelerra*) the project can be opened and edited. If the web-browser is opened within the *PureDyne* system the Deptford.TV homepage will be appear first, through which the Deptford.TV database can be accessed (if the computer is connected to the internet, preferably over cable, and once the user has received an account from the Deptford.TV administrator).

On the Desktop of DVD TWO are three books I self published during the period of my FLOSSTV research; *Deptford.TV diaries I* (Hadzi 2006), *Deptford.TV diaries II* (Hadzi 2008) and *Converge: Online Video Distribution* (Hadzi 2007). This thesis will be published as *Deptford.TV diaries III*. All the *Pure Data* patches, used for the first *Symphony of Deptford* performance, can be found on DVD TWO, as well as all the code used for the Deptford.TV project and the *Symphony of Deptford* installation project.

Disclaimer:

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. (Free Software Foundation 2007)

## **APPENDIX IV**

### **Deptford.TV Work-flow**

**Appendix IV: Deptford.TV Work-flow**  
**IV.1. Deptford.TV Concept**

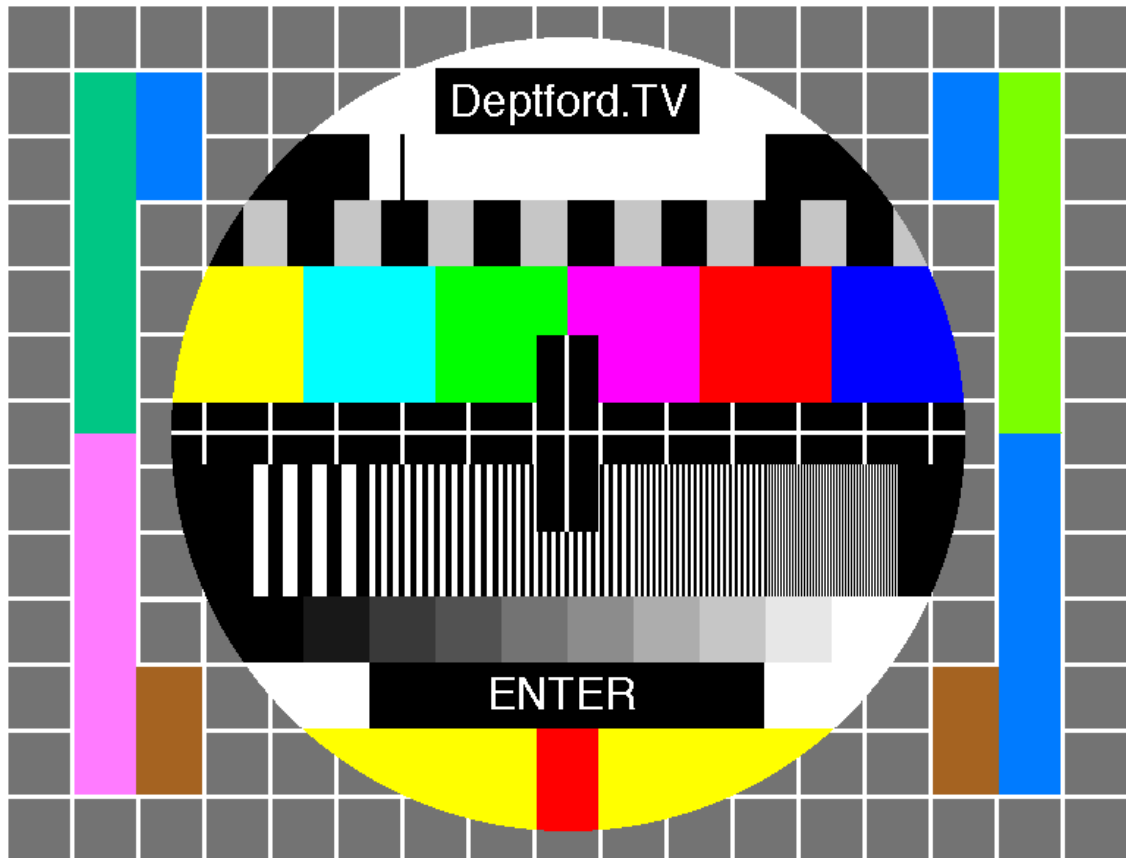


Fig. IV-1. Welcome screen of the Deptford.TV website by Adnan Hadzi, Free Art License 1.3

The physical home of the Deptford.TV project is at *Deckspace* media lab in Greenwich, which allows for face-to-face workshops as an important element within the otherwise 'virtual' setting of Deptford.TV. I first sketched a virtual setting on a napkin (figure IV-2) when explaining the envisaged method to the !Mediengruppe Bitnik collective back in 2005. This was my first sketch of the Deptford.TV project, how I envisaged the mesh-up of different tools and systems for the TV hacking workshops to follow.

The second illustration, figure IV-3, is the resulting outline for the Deptford.TV project, which is the 'mesh-up' method I followed, with its proof-of-concept being finished in November 2010. The Deptford.TV project is a proof-of-concept establishing methods for facilitating media and arts practitioners wishing to engage in collaborative media productions. Deptford.TV uses a production and distribution method based completely on FLOSS, but also allowing for compatibilities with proprietary software

elements if participants are bound to use those.

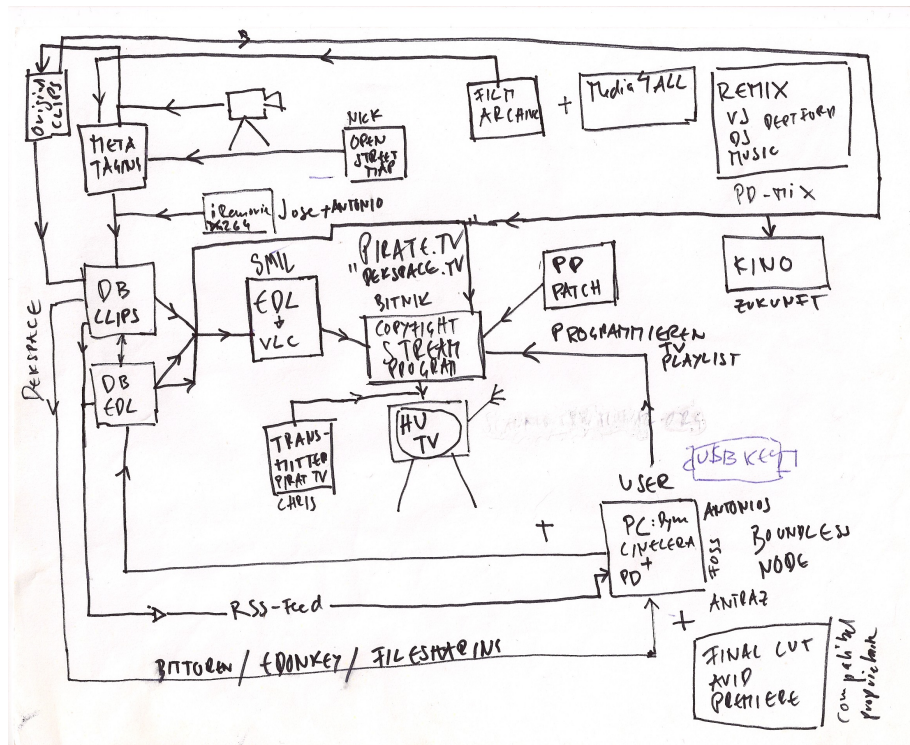


Fig. IV-2. First sketch of the Deptford.TV work-flow by Adnan Hadzi. Free Art License 1.3

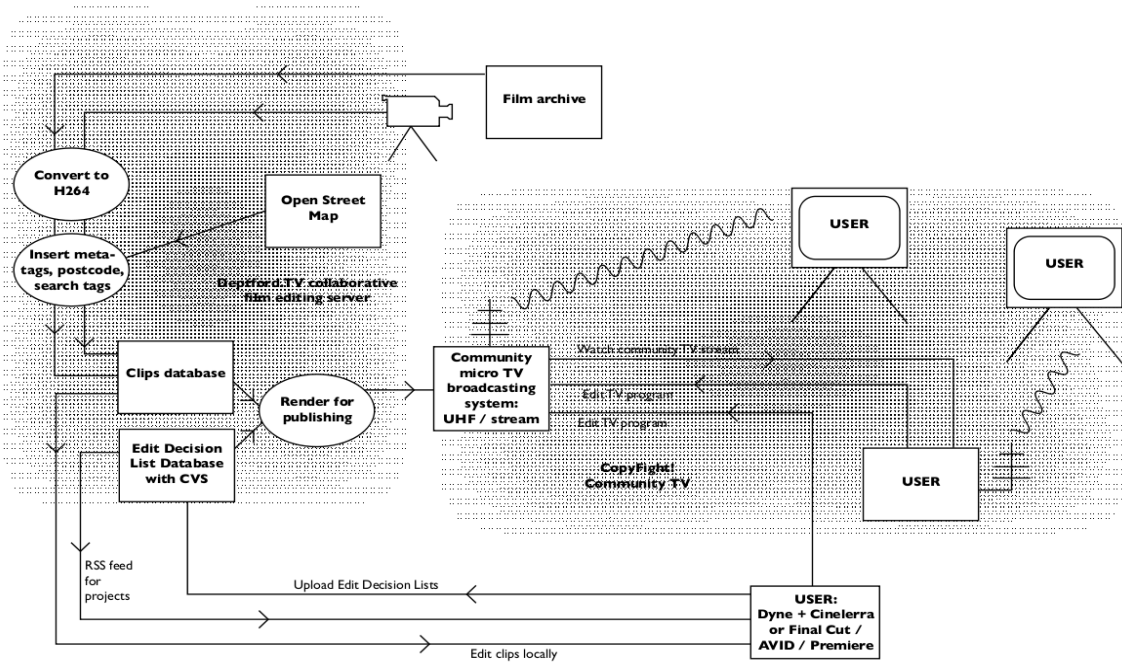


Fig. IV-3. Deptford.TV work-flow by Adnan Hadzi. Free Art License 1.3

The Deptford.TV collaborative film editing server consists of two main elements (figure IV-3): metadata-tagged raw material and version-controlled project files, which together can be rendered for publishing and broadcast on any system, offering a semantic film-editing method, a 'semantic TV' (Evain 2009). The Semantic Web is referred to as Web 3.0, where computers perform the browsing, searching and querying for the computer user, by finding through meta-data. The current Web is a “decentralized platform for distributed presentations” (Trauberer 2006) while for the World Wide Web Consortium (W3C) “Web 3.0” (2007; 2009) is a “decentralized platform for distributed knowledge” (Trauberer 2006), possible through the W3C standard *Resource Description Framework* (2004), which can be seen as an attempt at standardizing 'encoding knowledge'.

In the beginning of the FLOSSTV research I used proprietary software (such as *Final Cut*, *Avid*, *iTunes*, etc.). Having researched free and open source tools I found that for each piece of proprietary software, a relevant counter-part of FLOSS software existed, which I then implemented until all the aspects of the production method used FLOSS software only. Adam Hyde refers to such a process as FLOSSification (2008), in which software and manuals are rewritten from the perspective of replacing proprietary software/manuals with FLOSS. During this research I collaborated with *FLOSSMANUALS* (A. Hyde et al. 2010) and produced a series of tutorials, some of which I published in the book *Converge* (Hadzi 2007). This FLOSSTV thesis covers also the know-how and context that participants need in order to work with the Deptford.TV project and its underlying database.

The first platform used for hosting the clips of the Deptford.TV project was the FLOSS application *WordPress* (Douglass et al. 2006), which allows also for the blogging of FLOSS-encoded video-files (Halin 2009). The *Video Deptford TV // Uploads* wordpress plugin, see figure IV-4, was written for Deptford.TV in collaboration with !Mediengruppe Bitnik. The purpose of this plugin was to handle the meta-data tagging and the content management of the raw material. Four other plugins needed to be added to the video blog to make it functional as a living archive: *Custom Query String* (Read 2005), *Geo* (Winkler 2004), *Search All* (Cameron 2006) and *Ultimate Tag Warrior* (C. Davis 2006). Before uploading to the video blog the media content had to be tagged with metadata in a descriptive way, so to be entered into the Deptford.TV database.

## Plugin Management

Plugins extend and expand the functionality of WordPress. Once a plugin is installed, you may activate it or deactivate it here.

Plugin	Version	Description	Action
<a href="#">Akismet</a>	1.14	Akismet checks your comments against the Akismet web service to see if they look like spam or not. You need a <a href="#">WordPress.com API key</a> to use this service. You can review the spam it catches under "Manage" and it automatically deletes old spam after 15 days. Hat tip: <a href="#">Michael Hampton</a> and <a href="#">Chris J. Davis</a> for help with the plugin. By <a href="#">Matt Mullenweg</a> .	Activate
<b>Custom Query String</b>	2.7	Change the number of posts displayed when viewing different archive pages. By <a href="#">Matt Read</a> .	Deactivate
<b>Geo</b>	1.9.1	Attaches geographic coordinate information to posts. By <a href="#">Owen Winkler</a> .	Deactivate
<a href="#">Hello Dolly</a>	1.5	This is not just a plugin, it symbolizes the hope and enthusiasm of an entire generation summed up in two words sung most famously by Louis Armstrong: Hello, Dolly. When activated you will randomly see a lyric from Hello, Dolly in the upper right of your admin screen on every page. By <a href="#">Matt Mullenweg</a> .	Activate
<b>Search All</b>	0.3	Adds capability to search pages, attachments, draft posts, and comments to the WP default search, with an admin console to control options. By <a href="#">Cori Schlegel</a> .	Deactivate
<b>Ultimate Tag Warrior</b>	3.141592	Ultimate Tag Warrior is a tagging plugin, that's heavy on tag visualisation. I Like Pi! By <a href="#">Christine Davis</a> .	Deactivate
<b>Video Deptford TV // Uploads</b>	0.1	Add links to your posts and pages that open Videos in a popup window. Upload & administration via the WP admin panel By <a href="#">!Mediengruppe bitnik</a> .	Deactivate
<a href="#">WordPress Database Backup</a>	1.7	On-demand backup of your WordPress database. By <a href="#">Scott Merrill</a> .	Activate

If something goes wrong with a plugin and you can't use WordPress, delete or rename that file in the wp-content/plugins directory and it will be automatically deactivated.

## Get More Plugins

You can find additional plugins for your site in the [WordPress plugin directory](#). To install a plugin you generally just need to upload the plugin file into your wp-content/plugins directory. Once a plugin is uploaded, you may activate it here.

Fig. IV-4. Deptford.TV's WordPress plugin management. WordPress screenshot by Adnan Hadzi. GNU GPL Version 3.0

The first meta-data tagging interface I used for the Deptford.TV workshops was the *iTunes* interface (Apple 2001), figure IV-5. The participants logged the metadata as follows: NAME OF THE AUTHOR(S), KEYWORD(S), PROJECT TITLE, LOCATION, ORIGINAL SOURCE, DATE (YEAR) and a SHORT DESCRIPTION, as illustrated in figure IV-5.

The participants then uploaded those tagged clips to the server during the Deptford.TV workshop, while the WordPress plugin *Ultimate Tag Warrior* (C. Davis 2006) read out the meta-data and inserted it into the appropriate fields of the Deptford.TV database. The meta-data is crucial for a collaborative approach to semantic film production, since only through meta-data participants can search, tag, find and link raw material as well as projects. Meta-data represents the equivalent of an edit log, which film editors need in order to start editing with their directors. The first Deptford.TV content came online in the spring of 2006.

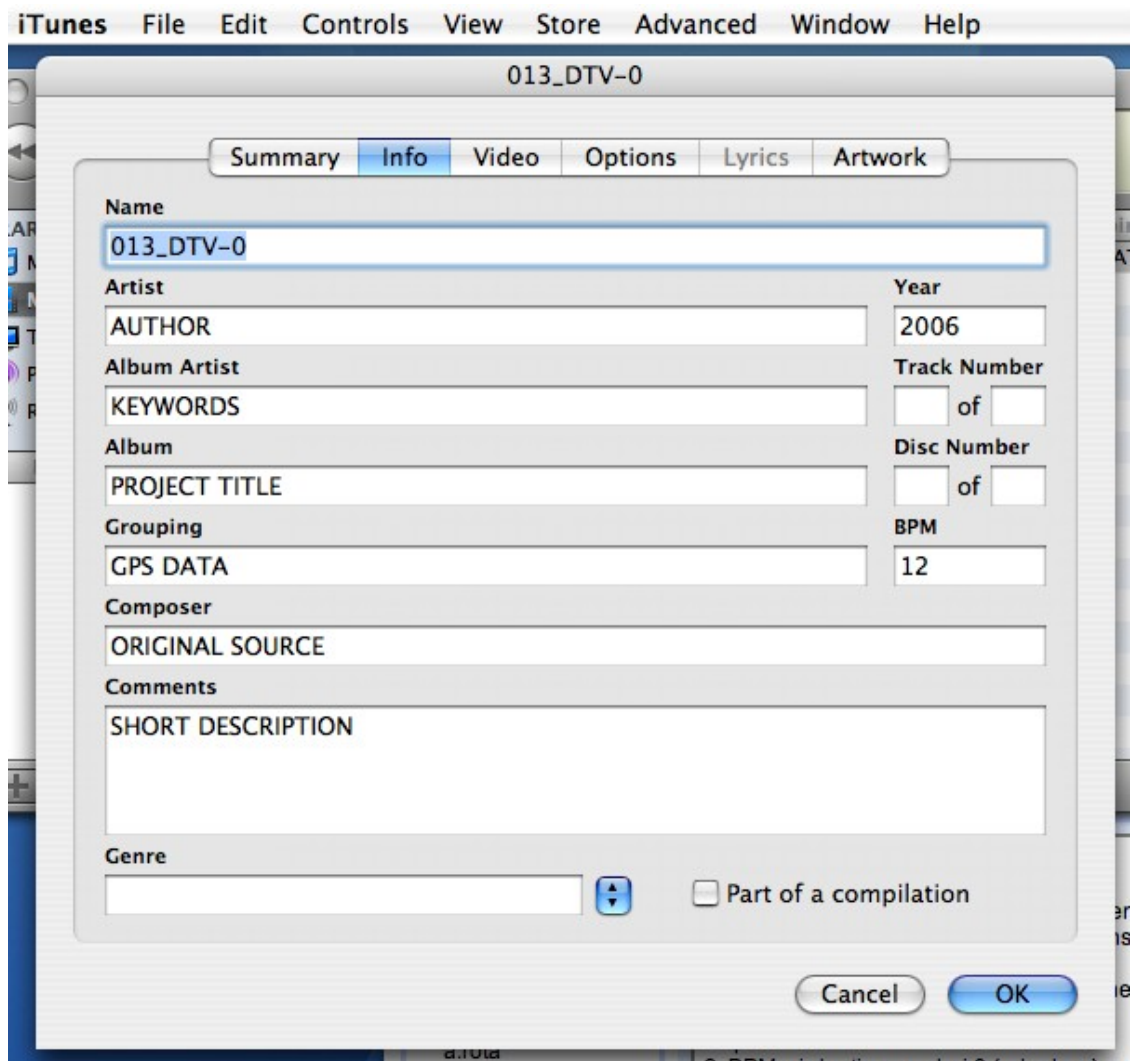


Fig. IV-5. iTunes interface for tagging. Screenshot by Adnan Hadzi, Creative Commons SA-BY 3.0

When uploading a media asset to the WordPress blog, see fig. IV-6, the metadata was read from the previously tagged files:

NAME OF THE AUTHOR(S),  
KEYWORD(S)  
PROJECT TITLE  
LOCATION  
ORIGINAL SOURCE  
DATE (YEAR)  
SHORT DESCRIPTION

Additionally the participants could define a tape number, if there was one. With the recent development of tape-less recording this field became redundant.



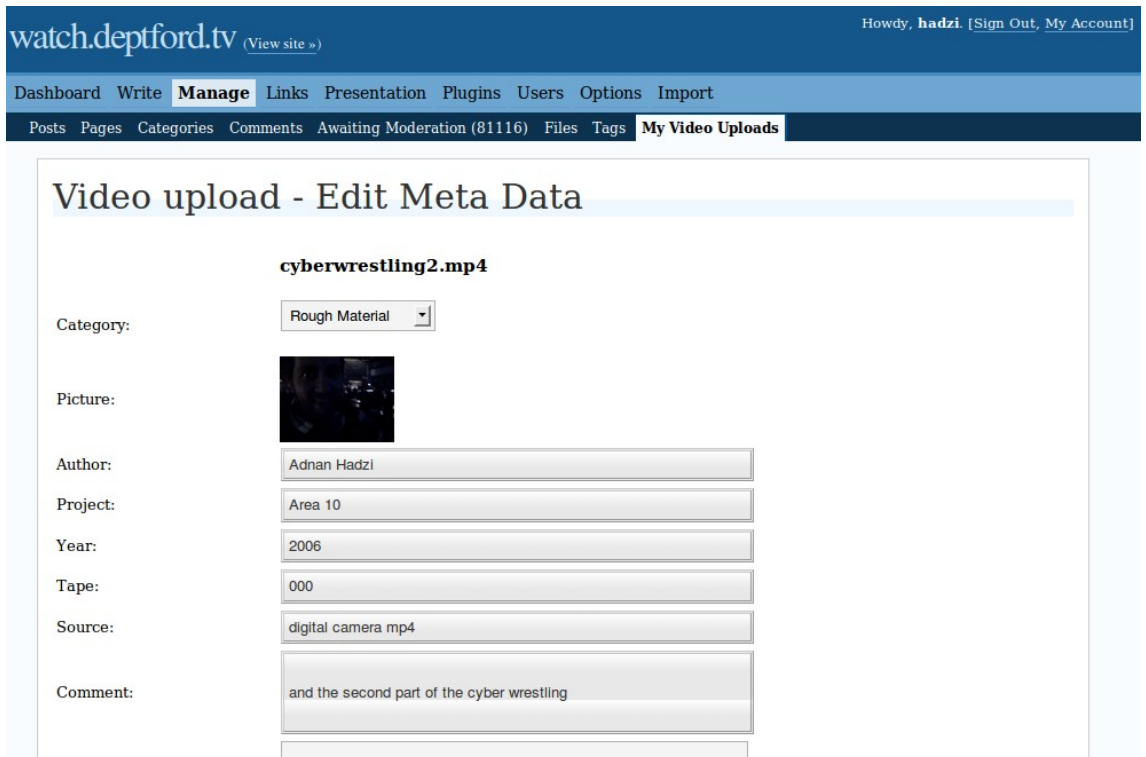


Fig. IV-6. Screenshot of editing interface by Adnan Hadzi. Creative Commons SA-BY 3.0

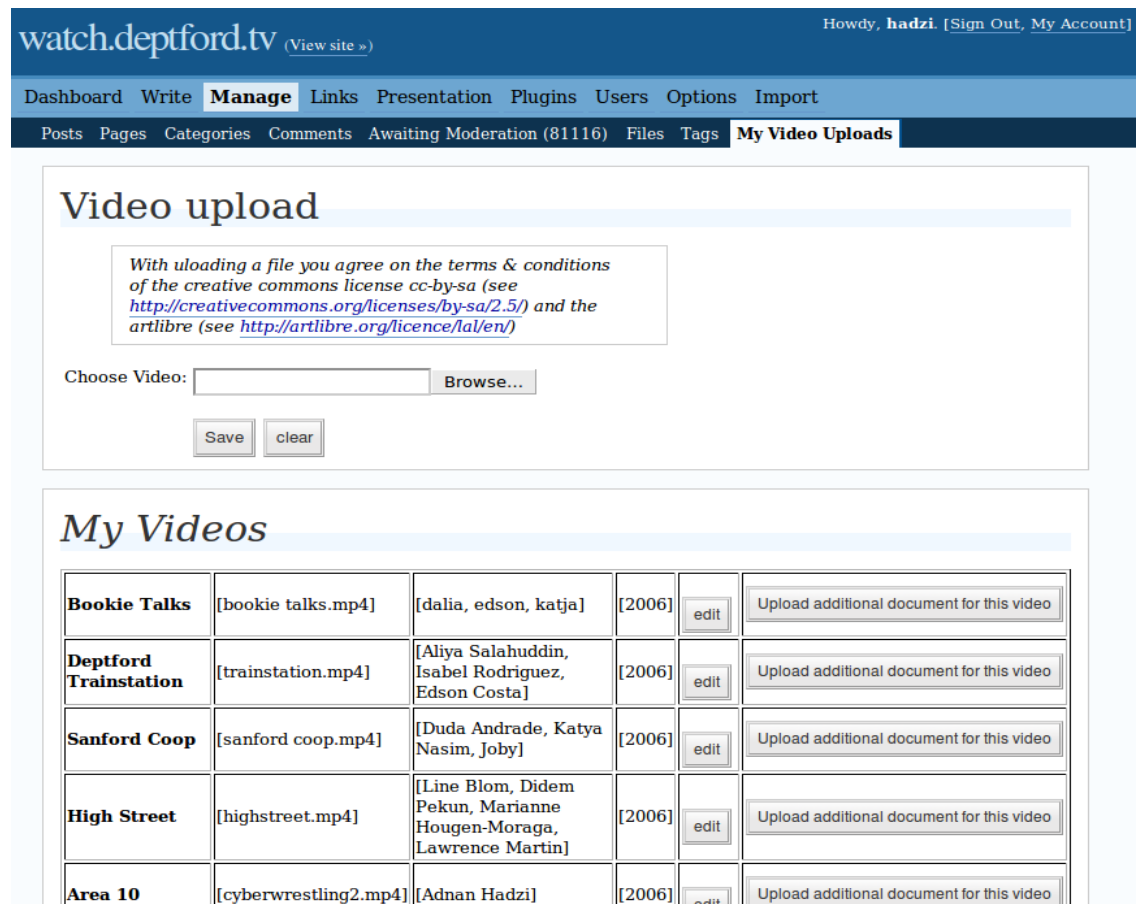


Fig. IV-7, Deptford.TV participant's home screen. Screenshot by Adnan Hadzi. Creative Commons SA-BY 3.0

Fig. IV-7, shows the welcome screen for the participants when logging into the WordPress blog, manage tab, of Deptford.TV. In order to upload any content the participants had to agree to the *Creative Commons SA-BY* and the *Free Art* licenses. Figure IV-8 shows the front end of watch.deptford.tv how the database presented itself to the public.

Project	Author	Year	Tape	Short Description	Location	Length	Size	Download	Download_ogg
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		sea horse stoned		0:00:07	5 mb	download file	
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		no valid		0:00:40	631 kb	download file	
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		moving napoleon		0:00:08	5 mb	download file	
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		head of statue		0:00:17	9 mb	download file	
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		head of statue		0:00:15	8 mb	download file	
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		stone fish decoration building		0:00:08	5 mb	download file	
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		stone crab		0:00:07	4 mb	download file	
SE14 6AF	Ruby Savage, Ben Smithies, Beccy Lock, Cristina Garrido, Francisco Calafate	2008		moving shoot goldsmiths name behind old building		0:00:07	5 mb	download file	
creek	changsyueping,debbie, michael	2008		fence to bank		0:00:50	39 mb	download file	
creek	changsyueping,debbie, michael	2008		ending toward creeksides		0:00:27	17 mb	download file	
creek	changsyueping,debbie, michael	2008		footprint view		0:00:17	20 mb	download file	
creek	changsyueping,debbie, michael	2008		pan creek view		0:01:03	51 mb	download file	
creek	changsyueping,debbie, michael	2008		fence view		0:00:55	44 mb	download file	

Fig. IV-8. Watch.Deptford.TV front end. Screenshot by Adnan Hadzi. Creative Commons SA-BY 3.0

Deptford.TV Participants simply used any editing software and uploaded all the raw materials and the project files to the Deptford.TV video blog. The problem was that all the different project files were not compatible with each other and it was impossible to have a history of edits and switch between different versions of edits. In that sense the video blog was 'read' only. I decided to research further the possibility of using a wiki form of video database and how to base the whole production flow on FLOSS methods only. The use of the video blogging platform watch.deptford.tv has been discontinued since late 2008, and is online only for archival purposes. I decided to establish the next Deptford.TV server: edit.deptford.tv.

While researching how to establish the Deptford.TV project as a FLOSS wiki-based project, and what software to use, the most promising approach I found was the *Echochamber* project (see figure IV-9). The aim of the *Echochamber* project was to create a “collaborative

documentary on the pre-war performance of the media” (Bye 2005) in the run up to the Iraq war. I saw the project's approach as relevant to the envisaged Deptford.TV's production method (see figure IV-3). The main approach of the *Echochamber* project was to use the content management system *Drupal* in order to version control film projects, a film project database allowing for collaborative editing. Unfortunately, the *Echochamber* project was relying on *Final Cut* (and thus on a mix between FLOSS software and proprietary software) for the production of collaborative documentaries. As a result contributors could often not afford the expensive Final Cut software, and often ran into incompatibilities between different versions of Final Cut. The *Echochamber* project never reached the point of becoming a prototype, nor was any source code released that one could use on a server.

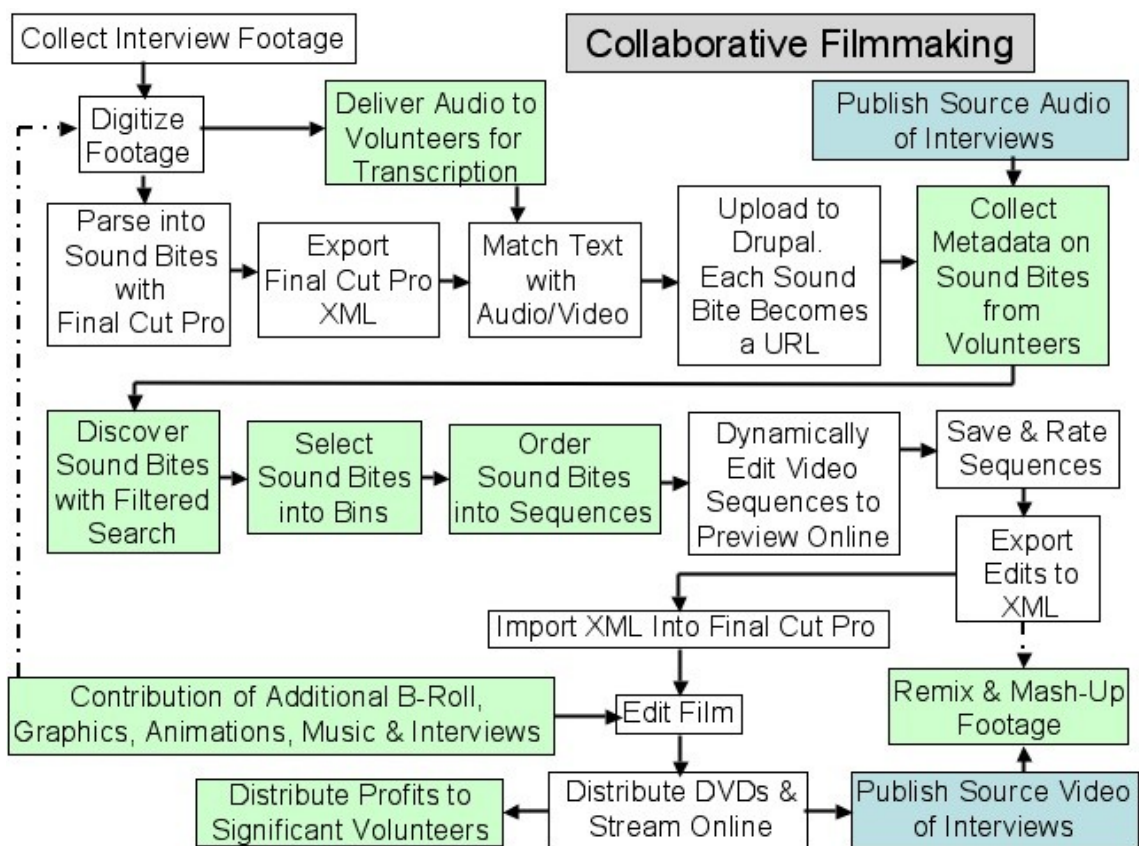


Fig. IV-9. The *Echochamber* project work-flow by Kent Bye. Creative Commons BY 2.0

As the *Echochamber* source code was not available I further researched the possibility of developing a collaborative film-making project through the use of the *Subversion* and *Drupal* software applications. *Subversion* (Collins-Sussman et al. 2004; Apache 2010) is a Free Software application which allows for control over different versions of the code being

developed at the same time; it is a version control software, allowing for contributions of code, or any kind of text files, to always be looked up and referred to in any version which once existed before the version one is working with.

The Deptford.TV participants of the edit.deptford.tv server are introduced to GNU/Linux, a computer operating system which can be installed for free on any computer, unlike the commercial operating systems like Microsoft Windows or Apple OS (Mobily 2009). All Linux source code is available to the public and anyone can freely use, modify, and redistribute it. Although this needs to be looked at critically, as the largest distributor of Linux Desktop software Ubuntu is running some 'closed source' server software, which has been criticised by the FLOSS community (Burger 2009). For Chris Atton the “continuing history of Linux is a significant working model of usufruct ... It is anarchism in action” (2004, p.102), whereby Atton refers to Ellie Clement and Charles Oppenheim for the definition of 'usufruct' as a “temporary property relationship based on utility need which meets the demands of communality” (2002, p.42), that is, replacing the notion of 'property'. Atton thereby makes us aware of Pierre-Joseph Proudhon's statement that “all property is theft” (1840).

The Linux distribution I started introducing to the Deptford.TV participants was *Dyne:Bolic*. The software artist Jaromil initiated *Dyne* as a software atelier (2000; 2011). *Dyne* develops the Linux distribution *Dyne:Bolic*, offering a whole media lab on a CD: streaming and audiovisual software. The *Dyne:Bolic* system is an operating system that gives the widest possible public access to technology, as it runs on the original Pentium series of machines with quantities of RAM that would no longer be considered sufficient for a basic PC, let alone a multimedia workstation.

The GOTO10 collective created a *Pure:Dyne* fork (2008) of the operating system *Dyne:Bolic*, meaning that currently there are two different *Dyne* base systems available. Both of the collectives (Dyne and GOTO10) presented their systems at the *Wintercamp* (Lovink 2009) conference in Amsterdam. Figure IV-10, illustrates the most convenient aspect of *Pure:Dyne*, that it can be booted from a USB memory stick, allowing Deptford.TV participants to start a read-writeable Linux system from their own computers without having to install it. This led to the decision to use GOTO10's version, *Pure:Dyne* system, for the Deptford.TV workshops as well. Included with *Dyne:Bolic* as well as *Pure:Dyne* is the editing software project *Cinelerra* (see figure

IV-11) established by Adam Williams (2002) and taken into community development by Sylvain Joyeux (2003). *Cinelerra* is one of the pieces of editing software used by the participants of Deptford.TV. Anybody taking part in the project can just copy the *Dyne:Bolic* CD, insert it into any PC, and start the *Cinelerra* editing suite. Participants can then connect to the Deptford.TV server, and continue working on their projects from wherever they can access the Internet. In early 2008, for the proof-of-concept work, the Belgian collective Constant VZW (2008a) joined the development of the Deptford.TV project (2008b). Constant VZW, who are participating in the Lab-to-Lab (2010) initiative and publishing V/J (Westenberg & Snelting 2008) and have been working within a collective laboratory setting for the production and distribution of video with open source software, especially *Cinelerra* (2006). *Cinelerra*, illustrated in fig. IV-11, in a dual screen setting (Westenberg 2008b), was once known as *Broadcast 2000* and later renamed *Cinelerra* because of worries about legal liabilities regarding trademarks (Corbet 2008). The original version was published by Adam Williams, aka Heroine Warrior. Today there exist several forks; one of them being the community version *Cinelerra CV*, and the latest being *Cinecutie* (Akirad 2010). “Cinelerra is by far the most complex – and capable – of the tools available for Linux” (Akirad 2010). An interesting project making use of *Cinelerra* is VNA's *Video in the Villages* (1987), supporting indigenous peoples in Brazil, through audiovisual collectively shared productions, in their struggles over their identities and territorial as well as cultural heritages.



Fig. IV-10. The *Pure:Dyne* USB memory stick. Photo by Rob Canning.  
GNU General Public License Version 3.0



Fig. IV-11. Screen shot of the *Cinelerra* editing software by Keykero. Public Domain (Software: GNU GPL Version 3.0)

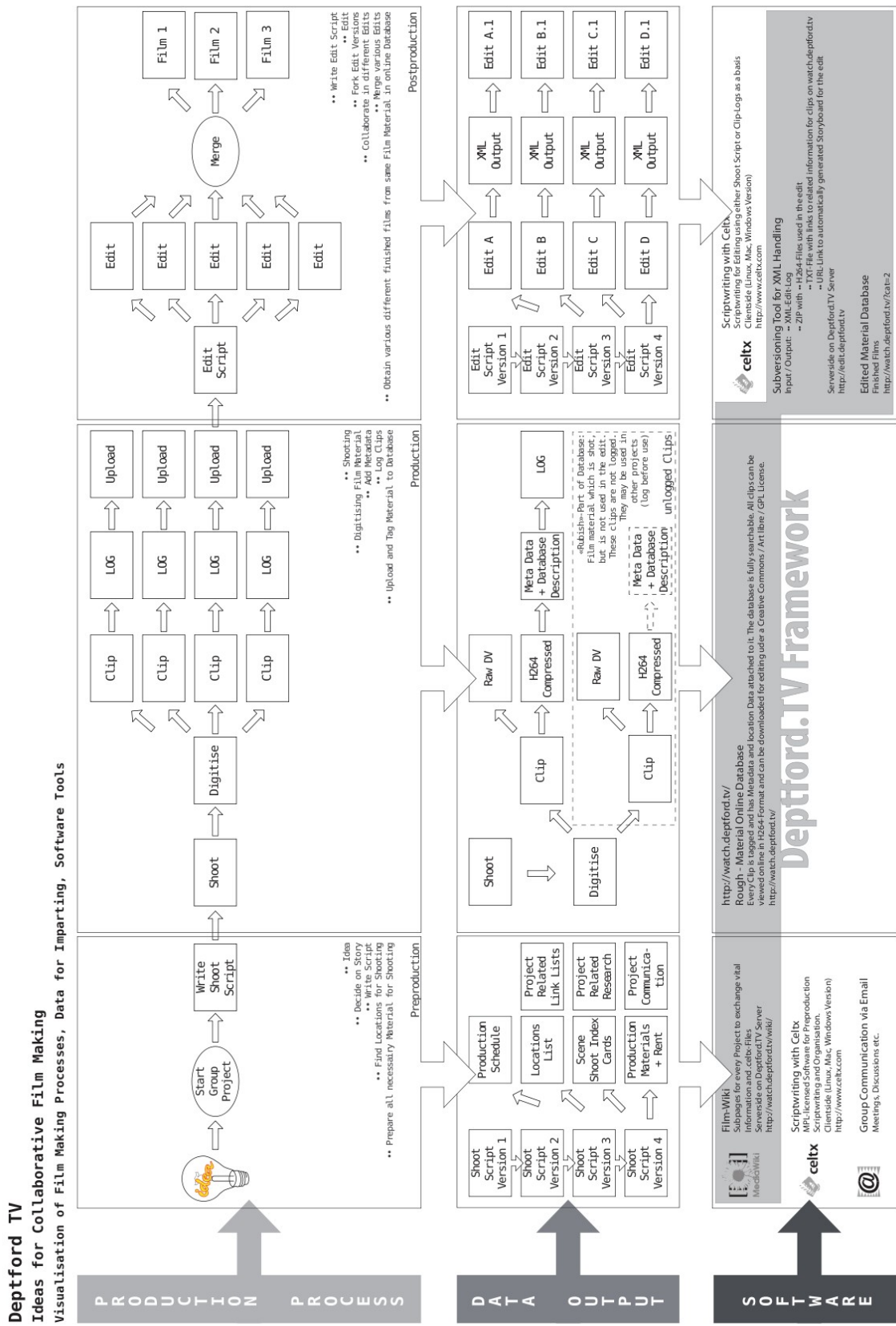


Fig. IV-12. Deptford.TV work-flow by Carmen Weisskopf. Free Art License 1.3

Figure IV-12 illustrates the initial idea for the Deptford.TV collaborative film making work-flow based on version control, using *Cinelerra* as editing software and *EasyTag* (Couderc 2000) for tagging, allowing participants to tag metadata (Oram 2001, pp.191-202) onto their raw material, the media assets with FLOSS software. This work-flow allows for a sharing of project files under a version control system, as discussed above, through its EDL files (Cinelerra 2009), which are stored as XML (W3C 2008), basically by joining all the metadata, project files and assets as nodes with the help of *Drupal*, or as Constant VZW put it a 'video wiki'.

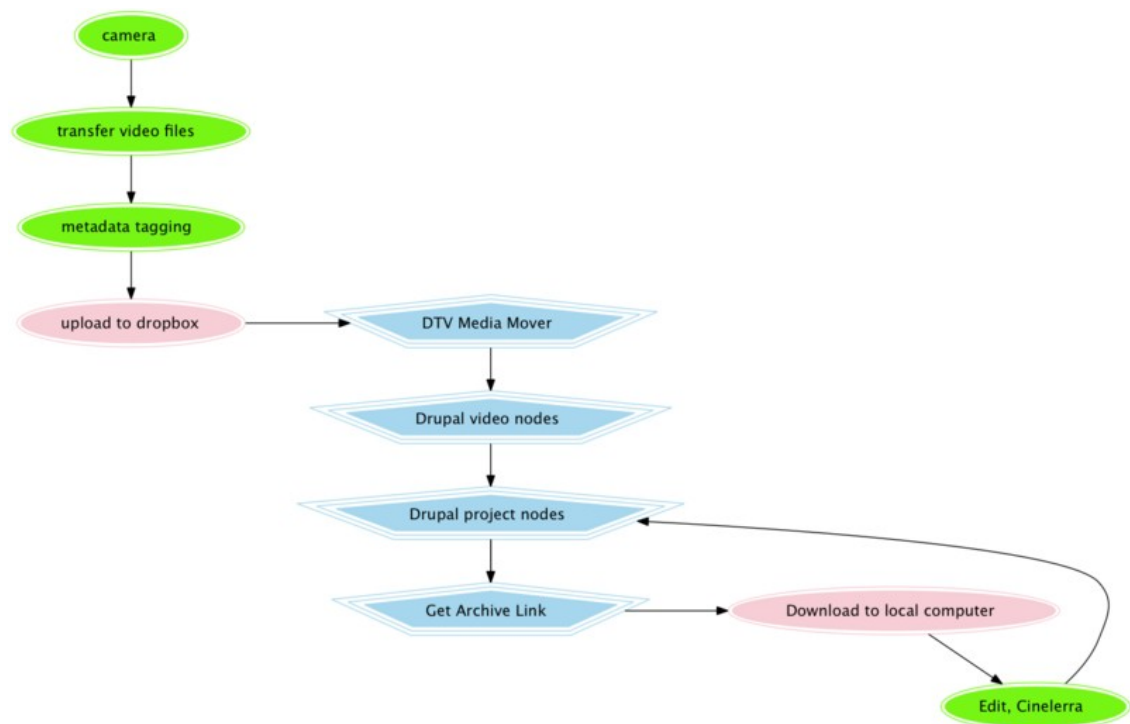


Fig. IV-13. Deptford.TV *Drupal* CMS work-flow by Adnan Hadzi & Lisa Haskel. GNU General Public License Version 3.0

Figure IV-13 illustrates the proof-of-concept Deptford.TV toolkit (Haskel & Hadzi 2008), a collection of online and offline tools, and processes that together enable the sharing and archiving of video, audio and image assets, as well as collaborative editing of that material. It assumes a group of people who have established shared aims and objectives, by attending the Deptford.TV workshops. Compared to the initial outline (figure IV-3) we decided to use *Drupal* instead of *MediaWiki* in order to handle the subversioning and content management of all the Deptford.TV assets and project files. The diagram shows the whole work-flow. Green nodes in the graph show offline processes, blue nodes are online processes (handled via a customised installation of the content management system *Drupal*). Pink nodes are processes that bridge between



online and offline tools. For the Deptford.TV proof-of-concept, only FLOSS elements have been used. I decided to use the Theora codec (.ogv) for the proof-of-concept presentation and at the *Hack Day* workshop at the *Open Video Alliance Conference*, OVA (2009a; 2009b). Unfortunately, *Cinelerra* is a bit unreliable when handling the Theora open source video codec. Thus, Deptford.TV offers both codecs, Theora and x.264, for the prototype of the Deptford.TV edit server project.

The editing software *Cinelerra* allows for a range of editing effects. Lennaart van Oldenborgh, a freelance editor, also editing for BBC documentaries, tested *Cinelerra* with his professional background, by editing the film *CCTV interviews* (van Oldenborgh 2010a) with the Deptford.TV method for an exhibition at the Watermans Gallery (2010). The interface of *Cinelerra* is not as intuitive as many common proprietary video editors, or as some FLOSS editors, as discussed later on. The main issues we came across during the editing tests (Hadzi 2009a) with *Cinelerra* were as follows:

- Bin structure: Media can not be organised into bins, of which then multiple bins can be opened in order to organise the media assets.
- It is not possible to store multiple sequences in one project.
- The keyboard short cuts are fixed. It is not possible as a user to define one's own short cuts.
- There is no short cut for 'go to in point' and 'go to out point' of edits.
- There is no overwrite 'drag and drop' mode. In many common editing software packages this is controlled by holding down the shift key during the editing process.
- One can not select multiple clips in a 'drag and drop' mode.
- Audio/Video synchronisation is difficult to maintain with *Cinelerra's* 'drag and drop' mode.
- A 'synch lock' function is missing.
- It is not possible to extend the outgoing asset and shorten the incoming assets simultaneously when trimming.
- There should be an 'overwrite paste' function in the 'insert paste' edit function when editing in the 'copy and paste' mode (so as not to loose sync along the timeline).
- There is no warning when video and audio assets from the same source get out of synch.

Herman Vosseler one of the developers of the *Cinelerra* editing software answered to my report to the *Cinelerra* mailinglist that *Cinelerra* is “lacking on all end with respect to this professional working perspective” (2009) and that the current developer team aims at improving this with the new version of *Cinelerra* entitled *Lumiera* (2008). Unfortunately, at the time of writing this thesis, *Lumiera* was not

available in a stable version. Vosseler's advice was:

As a workaround, you can use multiple session files and even open two (or more) independent instances of Cinelerra at the same time. Be sure not to confuse which window belongs where! This allows you to copy and paste selections between the separate sessions. Moreover, for our project a vital insight was that the session file is stored in plain XML. You can either hand-edit it in a text editor (that's often the only way to apply a certain set of effects in a consistent manner on multiple places). And moreover, it is very easy to do simple manipulations with python scripts this way. For example, we extracted pre-cut sound clips of several dialogue scenes with a python script and created an xml-segment, which I could hand-paste into an Ardour session to do my sound work there. Regarding the general procedure, I can just give you the advice to build up the edits very systematically. (Vosseler 2009)

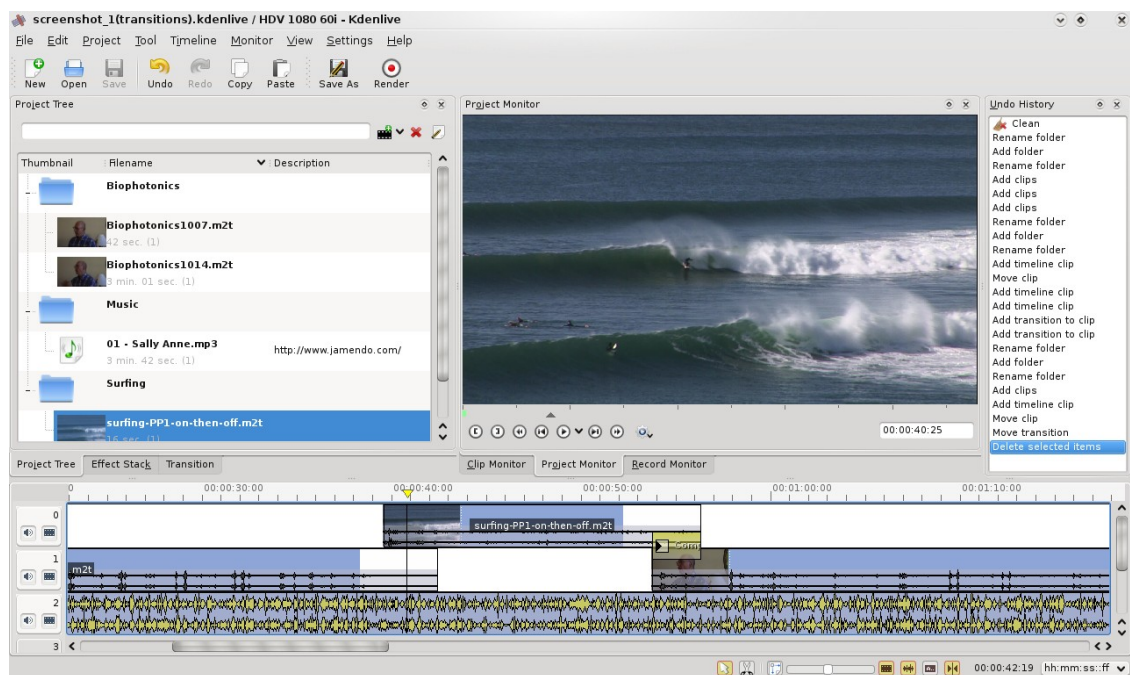


Fig. IV-14. Screen shot of *Kdenlive* by Nuno Pinheiro. GNU General Public License Version 3

For participants new to video editing the *Cinelerra* editing software is difficult to learn, especially when one has to remember the above described 'work arounds'. Therefore I tested several other free and open source editing software packages during 2009 and 2010, such as *Open Shot*, *Avidemux*, *Kdenlive*, *Jahshaka*, *Kino*, *PiTiVi*, and *Blender*. After testing the different packages with video assets from the Deptford.TV database I concluded that *Kdenlive* was the most stable and easy to use for the purpose of collaborative editing as envisaged for the Deptford.TV project. After the first Deptford.TV server prototype was established with *Cinelerra*, by the end of 2010, I

decided to extend the Deptford.TV server to accept also project files from the editing software *KdenLive* (see figure IV-14).

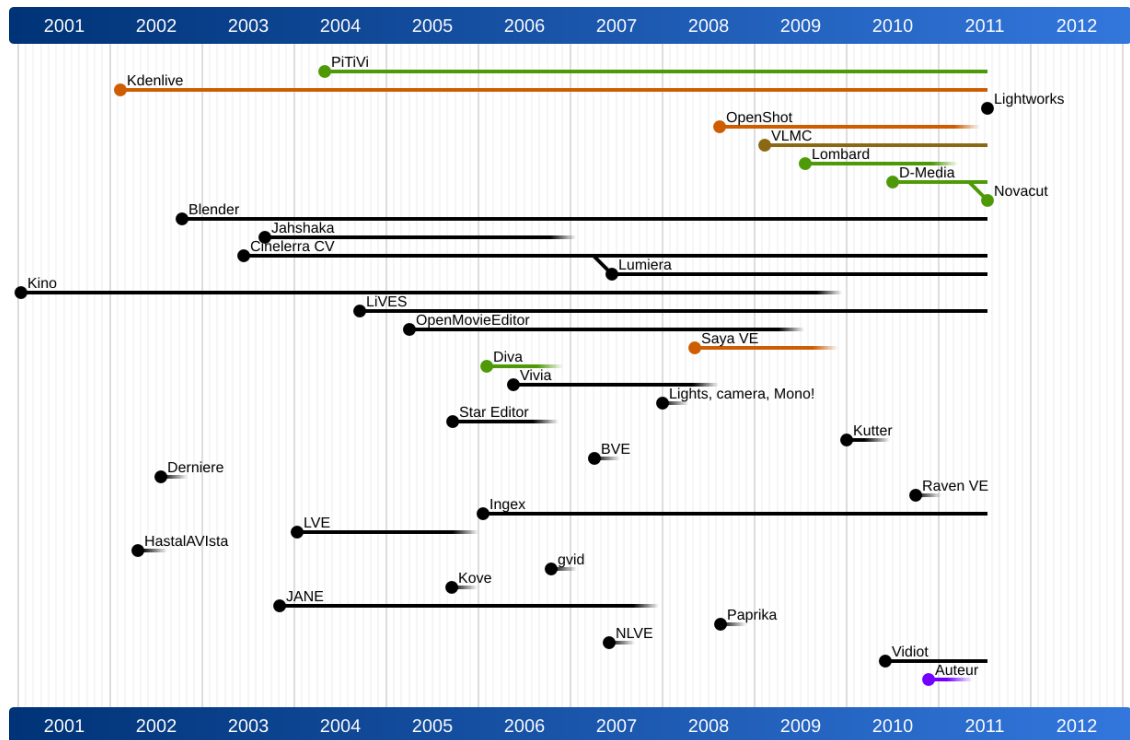


Fig. IV-15. Current state of free software video editors. Graphic by Jean-Francois Fortin (2011). GNU General Public License Version 3.0

Interestingly Apple launched *Final Cut Server* (2009) at the same time I presented the proof-of-concept of the Deptford.TV method at the *Open Video Alliance Conference*, OVA (2009c). When I started with the FLOSSTV research, in October 2005, collective video editing on Linux was almost unheard of and often referred to as impossible. Five years later I was in the position to proof my idea and method. Currently the field of video editing is advancing quickly (Ireland 2011), many new software systems have emerged, since I started with the FLOSSTV research. The FLOSSTV research focuses on a mesh-up 'method' of different software elements, rather than a specific software, making each software element replaceable. What is encouraging to me is the fact that, in April 2010, a major mainstream editing software package for high-end Hollywood productions turned to 'open-source'. The company EditShare (2010; 2011) offers their editing software *Lightworks* currently as free-ware and announced it was to publish the source code sometime in 2011, which would allow for the software to be ported onto Linux operating systems.

## IV.2. Pre-Production and Production Work-flow

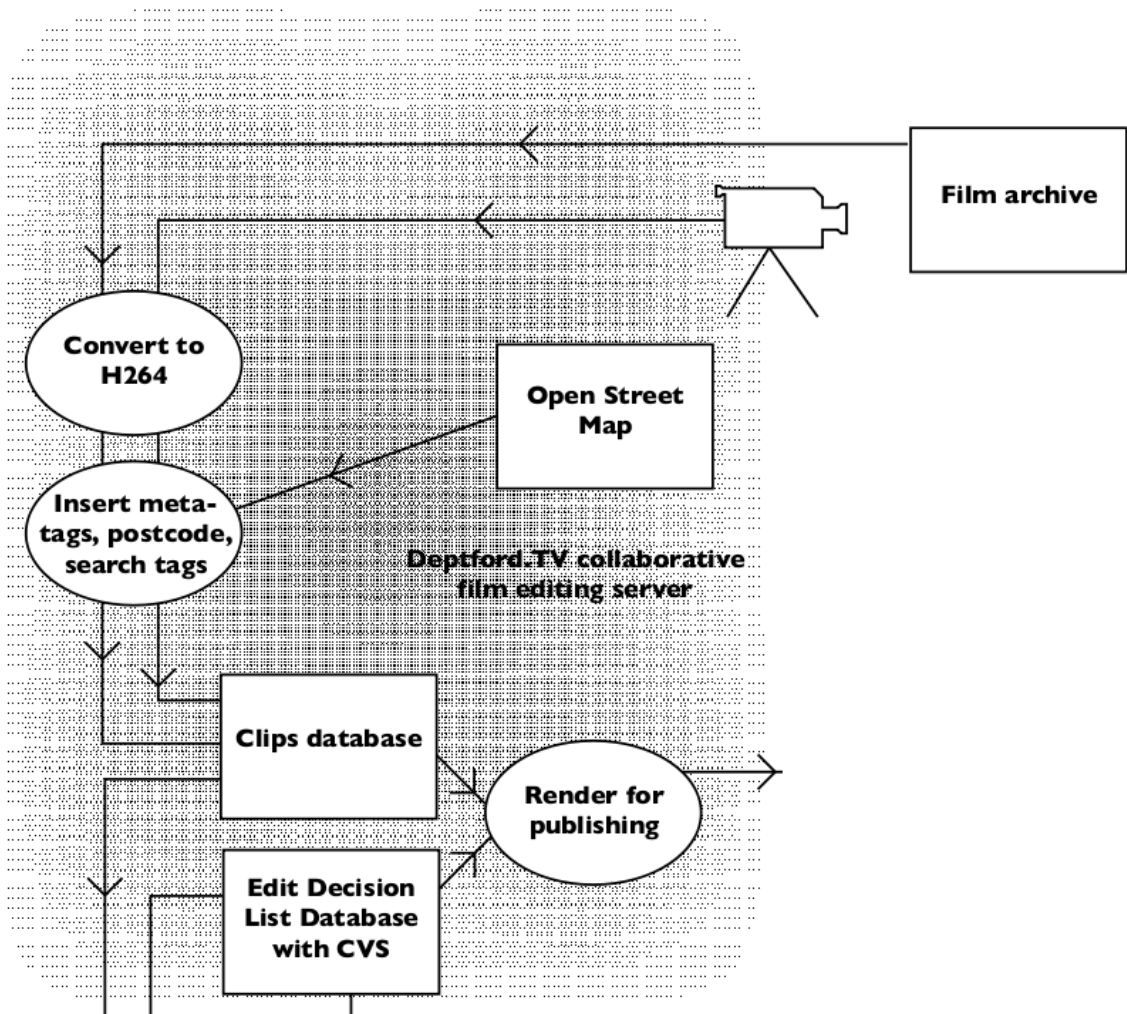


Fig. IV-16. Deptford.TV Clips Database by Adnan Hadzi. Free Art License 1.3

Deptford.TV participants either create clips or upload archive/found footage. For the work-flow I refer to those clips as smallest narrative units, a term coined by Heinz Emigholz (2002). The division of the raw material into smallest narrative units allows for the production of accurate meta-data by the participants. In the case of Deptford.TV, the smallest narrative unit signifies a clip from the beginning to the end of a recording (the period a camera operator presses the record button for recording a specific scene). In that sense, an atomization of the raw material takes place in the Deptford.TV database; Jo Walsh refers to this as componentization (2008) by breaking down resources into separate reusable packages that can be easily recombined. In coding terms, one would talk of versioning and packaging. Packaging is the process of making the raw material and the project files of the Deptford.TV database, the resources, reusable through an external interface.

By versioning the package and providing 'releases' those who reuse the packaged resource can stay using a specific (and stable) release while development and changes are made in the 'trunk' and become available in later releases. This practice of versioning and releasing is already ubiquitous in software development – so ubiquitous it is practically taken for granted – but is almost unknown in the area of open knowledge. (Walsh 2008)

These clips, the smallest narrative units, are then, in the next step, converted into the *x.264* codec (Aimar et al. 2005) (see fig. IV-16). *x.264* is a free library for encoding *H.264/MPEG-4 AVC* (Apple 2003) video streams (Apple's *iPod* video codec). *x.264* is licensed under the *General Public License*. Nevertheless, *x.264* is not likely to be incorporated into commercial products, due to the license and patent issues within the US surrounding Apple's *H.264* standard itself (Soulskill 2010). Through the introduction of electronic patenting laws (Vaidhyathan 2003), the access to the source code of the *x.264* codec is blocked within the US. Luckily, the European Parliament has so far rejected any software patent directive. I decided for the proof-of-concept phase, as described above, to supplement the *x.264* codec (Shankland 2010) with the FLOSS codec *Theora* (Xiph 2004). “Some parts of *Theora* are patented, but the owners of those patents have granted a permanent, irrevocable, royalty-free patent license to everyone. *Theora* carefully avoids any patents held by traditional patent holders” (A. Hyde 2009, p.1).

In the next step (figure IV-16) the clips are metadata tagged. In 2008 I came across the FLOSS application *EasyTag* (Couderc 2000) (see figure IV-17) which finally allowed me to FLOSSify (A. Hyde 2008) the last missing piece within the Deptford.TV work-flow, the proprietary *iTunes* software. The uploading process is done via FTP (Postel & Reynolds 1985). The command line program *AtomicParsley* allows for “reading, parsing and setting metadata into MPEG-4 files supporting these styles of metadata” (Lock 2005) and thus server-side scripted entering of the meta-data into the Deptford.TV database, once the clips are uploaded to the server.

For Deptford.TV participants new to video editing the meta-data tagging process is very often dismissed as not serving any useful purpose. Very often I had participants who simply wanted to upload all their raw materials without metadata tagging them, and to start editing straight away. The participants new to video editing want to 'play' around with the video material and don't bother with organising or categorising it. The Deptford.TV participants were happier to apply the free tagging

option rather than the above described vocabulary. But as the Deptford.TV database would become hard to navigate with search algorithms if there were no meta-data, I decided to make the tagging compulsory. The disadvantage of this compulsory tagging was that the participants didn't bother to upload all their raw assets, only those they wanted to use for the editing process. It was easier for me to communicate the need for meta-data tagging when experienced video editors took part in workshops, as they are used to the idea of keeping a log file of all the assets.

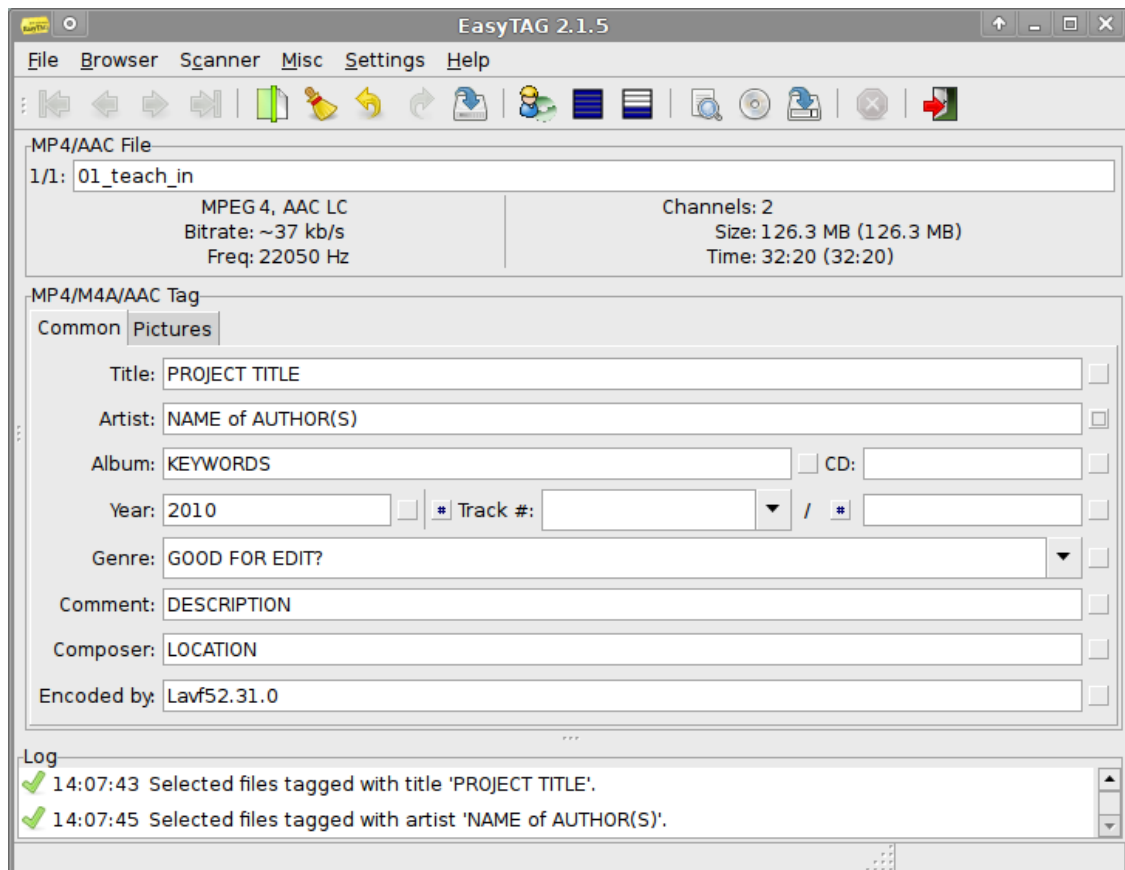


Fig. IV-17. Screenshot of *EasyTag* by Adnan Hadzi. GNU General Public License Version 3.0

### IV.3. Post-Production Work-flow

The basic Deptford.TV work-flow for post production (see figure IV-17) is as follows:

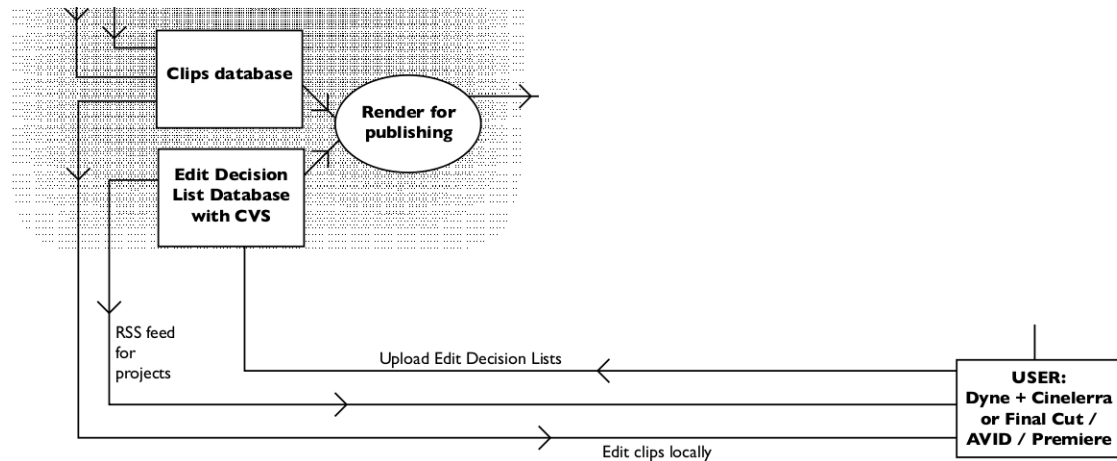


Fig. IV-18. Deptford.TV post production work-flow by Adnan Hadzi. Free Art License 1.3

Deptford.TV participants download assets plus possibly an already existing Edit Decision List (EDL), referring to a sequence of assets used for a project stored as a text file, in the 'Edit Decision List Database with CVS', versioning system (see figure IV-18).

This process of downloading the assets, as illustrated with the arrow 'Edit clips locally', is called 'checking out' in collaborative software engineering. The versioning system (CVS) ensures that the EDL and the assets (Clips database) are consistent. Common video editors such as *Cinelerra* and *Kdenlive*, but also proprietary software like *Final Cut*, *Avid* and *Premiere* warn the user if the EDL is not consistent with the assets, i.e. if the software doesn't know where to find the files needed, according to the imported EDL (Upload Edit Decision Lists).

By means of EDLs, something similar to a source code is generated which, when recompiled (rendered for publishing) once again produces a videoclip. Thus, editing and keeping track of the evolving versions very much resembles the development of computer software.

Edit.Deptford.TV, is the front-end of the Deptford.TV database (Hadzi 2009b) where the latest projects can be found and the possibility to access all the source assets is given, either via tags or the 'Source Assets' links (figure IV-19):



Fig. IV-19. Screenshot of 'front end' by Adnan Hadzi. Free Art License 1.3

The Deptford.TV participants can either upload the created content over an FTP client, or over the web interface, over the 'Create Content' page. The Create Content (figure IV-20) allows a participant to enter Audio Assets, Image Assets, Project Assets and Video Assets:



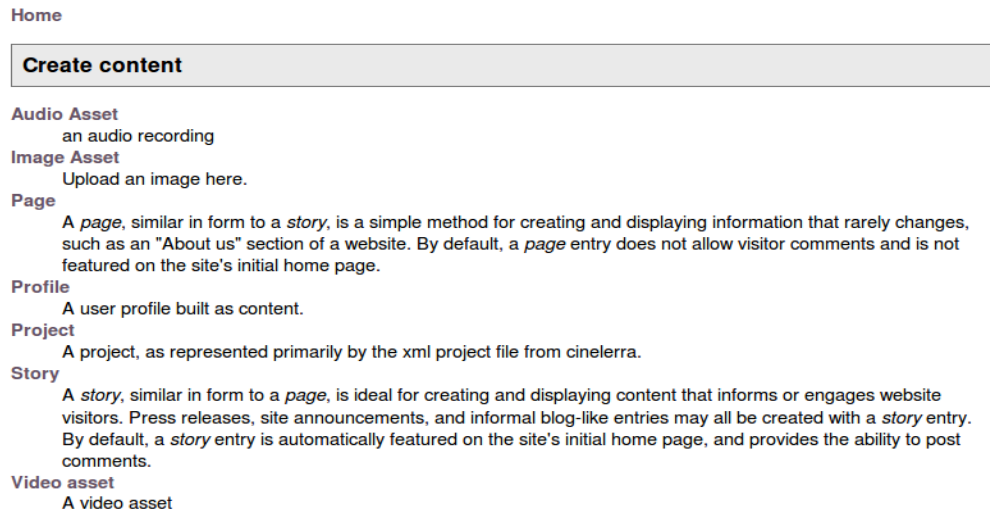


Fig. IV-20. Screenshot of 'Create content' page by Adnan Hadzi. Free Art License 1.3

When an asset is uploaded over the web-interface, the following meta-data needs to be entered (see figure IV-21): Name of the Asset / Description of the Asset / Tags / Additional Participants (if the Asset is co-authored):

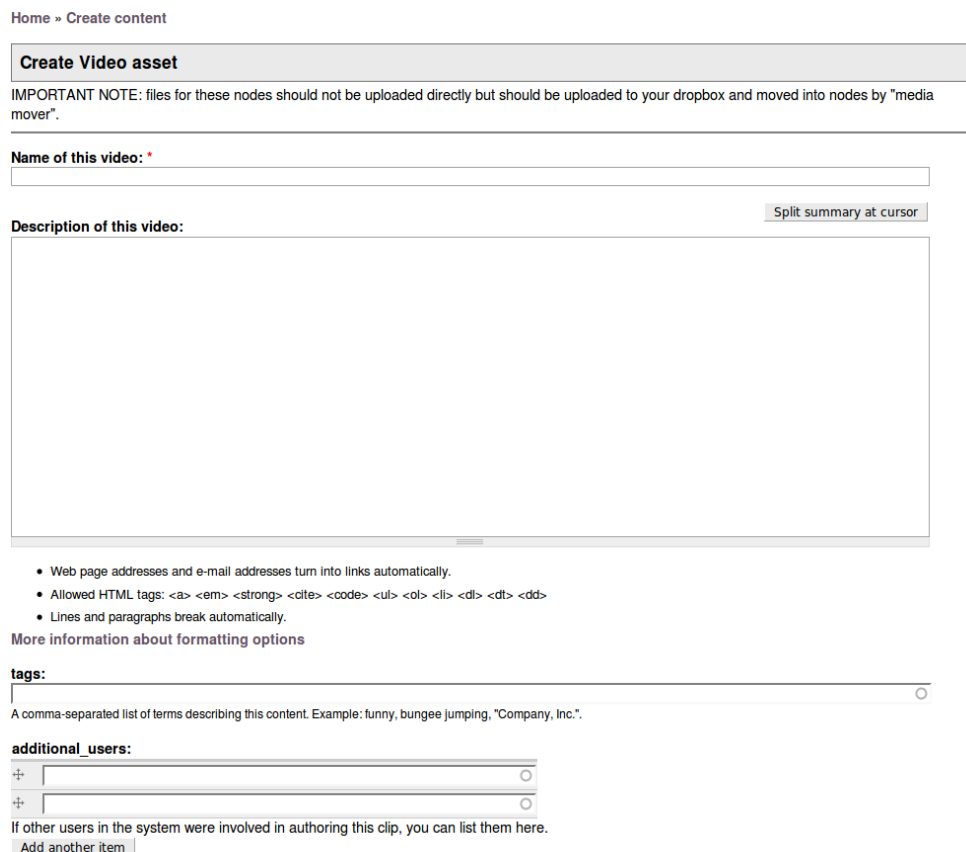


Fig. IV-21. Screenshot of 'meta-data editing' interface by Adnan Hadzi. Free Art License 1.3

and as illustrated in figure IV-22:

- Location through GPS data
- If the Asset is from an archive the original author(s)
- Creation Date
- Flag if the Asset is regarded to be good for editing
- Project Title
- The original format the Asset was produced in

▼ Location

**Country:**

**Latitude:**

**Longitude:**

If you wish to supply your own latitude and longitude, you may enter them above. If you leave these fields blank, the system will attempt to determine a latitude and longitude for you from the entered address. To have the system recalculate your location from the address, for example if you change the address, delete the values for these fields.

**Original Author:**

The originator of this asset if it was not created by a user on this system.

**creation\_date:**

Format: 2010

good for edit?  
Check this box if the material is good for editing.

► Menu settings

---

**Project Title:**

Write the name of the project or workshop in which you participated here.

**Original format:**

The original format eg. kind of tape of file

► Revision information














► Comment settings

► Authoring information

► Publishing options

Fig. IV-22. Screenshot of 'meta-data editing' interface by Adnan Hadzi, Free Art License 1.3

All the Assets are displayed in list form, figure IV-23:

Title	Type	Description	All terms	Name	Created Date	Video File	Published
090518_group2_16.ogv	Video asset	butcher deptford cctv camera on top the cash machine	sniffing butcher, cctv, deptford, sniffing, surveillance	ManuelVazquez	2009	 090518_group2_16.ogv	Yes
090518_group2_03.ogv	Video asset	chinese shop	cctv, deptford, sniffing	ManuelVazquez	2009	 090518_group2_03.ogv	Yes
090518_group2_24.ogv	Video asset	off license elephant and castle, i swithed from tw cctv cameras of the shop	cctv sniffing, elephant and castle, off license, surveillance	ManuelVazquez	2009	 090518_group2_24.ogv	Yes
090511_group1_1.ogv	Video asset	bulk uploaded video file		AnitaMckeown		 090511_group1_1.ogv	Yes
090511_group1_3.ogv	Video asset	bulk uploaded video file		AnitaMckeown		 090511_group1_3.ogv	Yes
090511_group1_5.ogv	Video asset	bulk uploaded video file		AnitaMckeown		 090511_group1_5.ogv	Yes
090511_group1_4.ogv	Video asset	bulk uploaded video file		AnitaMckeown		 090511_group1_4.ogv	Yes
090511_group1_2.ogv	Video asset	bulk uploaded video file		AnitaMckeown		 090511_group1_2.ogv	Yes
090517_group1_2.ogv	Video asset	chinese shop	cctv, deptford, sniffing	AnitaMckeown	2009	 090517_group1_2.ogv	Yes
090517_group1_1.ogv	Video asset	bulk uploaded video file		AnitaMckeown		 090517_group1_1.ogv	Yes
090518_GROUP3_03.ogv	Video asset	barber shop cctv sniffing deptford highstreet	cctv, sniffing	PaoloCardullo	2009	 090518_GROUP3_03.ogv	Yes
090518_GROUP3_02.ogv	Video asset	secondhand shop starringg3	cctv	PaoloCardullo	2009	 090518_GROUP3_02.ogv	Yes
090518_GROUP3_10.ogv	Video asset	Millwall park view from the bus	cctv	PaoloCardullo	2009	 090518_GROUP3_10.ogv	Yes

« first ‹ previous ... 136 137 138 139 140 141 142 143 144 next

Fig. IV-23. Screenshot of 'assets listing' by Adnan Hadzi. Free Art License 1.3

A specific asset can be viewed, listen or read about in detail, as illustrated in figure IV-24:

Home

**090518\_group2\_21.ogv**

[View](#) [Edit](#)

---

off licese elephant and castle, there are two cameras in the shop, i switched them.

**Video File:**  
📁 090518\_group2\_21.ogv


**Original Author:**  
manuel vazquez

**Location**  
London  
United Kingdom  
51° 29' 48.192" N, 0° 6' 10.476" E

**creation\_date:**  
2009

**Good for edit?:**  
no

**Project Title:**  
090518\_group2\_21.ogv



[Download File](#)

By ManuelVazquez at 05/25/2009 - 17:36 | [cctv sniffing](#) | [elephant and castle](#) | [off license](#)

Fig. IV-24. Screenshot of 'detail view' by Adnan Hadzi. Free Art License 1.3

Finally, having completed an edit on a project, the project files can be committed back to the Edit.Deptford.TV database. The Deptford.TV server system will then version-control the project files, comparing them with older edits and project contributions, while checking that all the assets are present. Should an asset be missing, the Deptford.TV server will ask the participants to first upload the missing asset before the project file can be committed. The server will then display the project, its versions and assets, comments of other users and the full XML file of the project file within the projects tab of Edit.Deptford.TV (see figure IV-25):

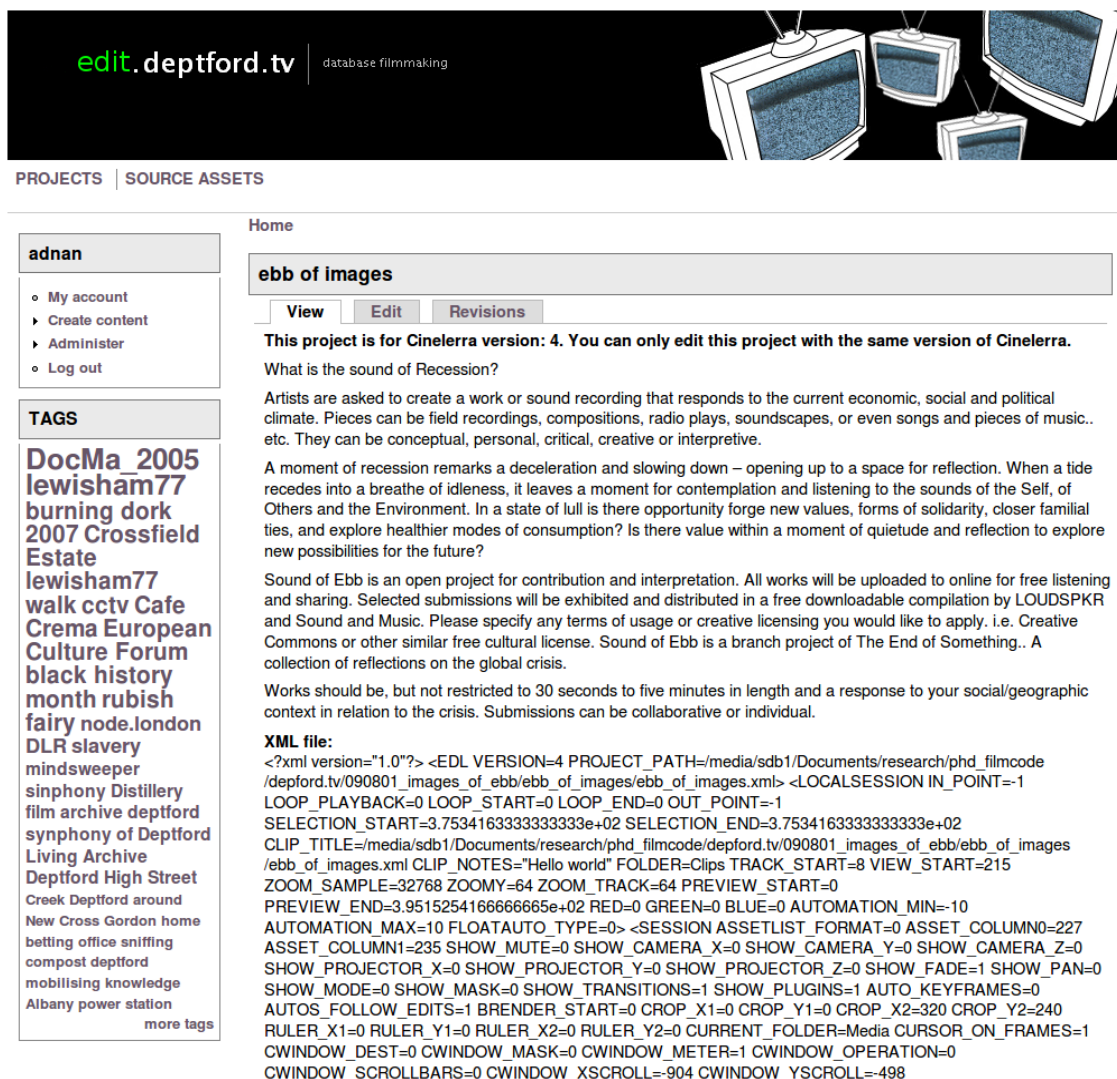


Fig. IV-25. Screenshot of 'detail view' by Adnan Hadzi. Free Art License 1.3

The idea of the Deptford.TV project becoming inclusive to all parties, as a participatory open and free media production project, could only be tackled during the FLOSSTV research. Three main reasons made it difficult: 1) *Cinelerra* being a difficult to learn editing platform. 2) The requirement of a compulsory tagging system. And 3) The understanding of how to handle the XML project files for the Deptford.TV subversioning system. Only computer literate participants, having an understanding of video editing software, easily managed to grasp the concept and to finish video projects. With the introduction of *Kdenlive* as alternative editing software, and the server side tagging, over the *Drupal* content management system, this changed and it became easier to focus on the aspect of collaborative video editing process, namely the version control of the project files on the Deptford.TV server.

## **APPENDIX V**

Free/Open Licenses

## Appendix V: Free/Open Licenses

### VI.1. GNU General Public License – Version 3, 29 June 2007

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