Peer-to-peer-based file-sharing beyond the dichotomy of 'downloading is theft' vs. 'information wants to be free': How Swedish file-sharers motivate their action

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Abstract

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This thesis aims to offer a comprehensive analysis of *peer-to-peer-based file-sharing* by focusing on the discourses about use, agency and motivation involved, and how they interrelate with the infrastructural properties of file-sharing.

Peer-to-peer-based file-sharing is here defined as *the unrestricted duplication of digitised media content between autonomous end-nodes on the Internet.* It has become an extremely popular pastime, largely involving music, film, games and other media which is copied without the permission of the copyright holders. Due to its illegality, the popular understanding of the phenomenon tends to overstate its conflictual elements, framing it within a legalistic 'copyfight'. This is most markedly manifested in the dichotomised image of file-sharers as 'pirates' allegedly opposed to the entertainment industry.

The thesis is an attempt to counter this dichotomy by using a more heterodox synthesis of perspectives, aiming to assimilate the phenomenon's complex intermingling of technological, infrastructural, economic and political factors. The geographic context of this study is Sweden, a country characterised by early broadband penetration and subsequently widespread unrestricted file-sharing, paralleled by a lively and well-informed public debate. This gives geographic specificity and further context to the file-sharers' own justificatory discourses, serving to highlight and problematise some principal assumptions about the phenomenon. The thesis thus serves as a geographically contained case study which will have analytical implications outside of its immediate local context, and as an inquiry into two aspects of file-sharer argumentation: the ontological understandings of digital technology and the notion of agency. These, in turn, relate to particular forms of sociality in late modernity. Although the agencies and normative forces involved are innumerable, controversies about agency tend to order themselves in a more comprehensive way, as they are appropriated discursively. The invocation to agency that is found in the justificatory discourses – both in the public debate and among individual respondents – thus allows for a more productive and critically attentive understanding of the phenomenon than previously.

Keywords: Internet, file-sharing, p2p, peer-to-peer, copyfight, copyright, piracy, Sweden, The Pirate Bay, discourse, technological agency, ontopolitics, technological determinism, justification, motivation, morality, convergence, actor-network theory, infrastructure, convenience, activism, opportunism

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Chapter 1: Introduction

1.1. Introduction

This thesis aims to outline a comprehensive framework of *peer-to-peer-based file-sharing* by focusing on the discourses about use, agency and motivation involved, and how they interrelate with the infrastructural properties of file-sharing, as exemplified by protocols and applications like BitTorrent, Direct Connect, Gnutella, FastTrack, and Napster. It is mainly a study of how Swedish file-sharers motivate their action. The focus is on how this justificatory discourse operates, with regard to what entities it invokes and what styles of reasoning that are to be found. It is not an ethnographic study, nor a statistical survey. The discourses exist both in public debates and among the respondents interviewed, and the aim of the thesis is to situate the various tropes, assumptions and attitudes found in these discursive accounts, both geographically and in terms of how the technological agency of this phenomenon is envisaged. From that it is possible to make further conclusions as to whether this new form of media distribution is associated with similarly new forms of morality, norms and justification. What is offered is ultimately a case study of *technological agency*. In putting forward an actual example of technological agency, I hope it will be a rewarding contribution, as a lot of the theory in this field is still hypothetical.

My thesis is also intended to give a good, comprehensive overview of the various ways the phenomenon has been approached in the literature and overall debate: metaphorically ('piracy', 'sharing', 'gifting'), technically (protocols, the nature of the infrastructure) and historically (with particular attention to historiography). Historiography is particularly important, given that the justification of the phenomenon ultimately lies with the shared image of how the Internet is constituted and how the situation became the one that it ostensibly is. Consequentially, the thesis is itself an historical account. In actual fact, the thesis refers to a distinct period of time that begins with Napster, in 2000, and ends with the Pirate Bay trial, in June 2009.

1.2. Topic of study and geographic context

Peer-to-peer-based file-sharing is here defined as *the unrestricted duplication of digitised media content between autonomous end-nodes on the Internet.* It has become an extremely popular pastime, largely involving music, film, games and other media which is copied without the permission of the copyright holders. Due to the illegality of this, the phenomenon is fraught by a widespread, superficial understanding of it, which overstates its conflictual elements, framing it within a legalistic 'copyfight' supposedly raging throughout the Western world. This is most markedly manifested in the dichotomised image of file-sharers as 'pirates' allegedly opposed to the entertainment industry.

The challenge has been to identify equitable ways to conceptualise the phenomenon that do not fall into the trap of polarisation, teleology or preconceptions about the practical implementations of p2p and file-sharing. The 'copyfight' dichotomy is thereby used as a starting point, since this particular framing of the phenomenon is ubiquitous. Yet, I aim to transcend this dichotomy, or problematise it. Similarly, the common teleological tropes shrouding the phenomenon were found to be ubiquitous. Here, a deliberate choice was to critically assess each argument, and investigate its truthfulness and validity. Some of the technical arguments which frame the overall phenomenon as "unstoppable" could nevertheless be verified, given the evidence at hand.

Likewise, the utopian undertones inherent in these teleological arguments were met with a critical eye. The futurology and utopianism found in the literature can be contrasted with the perhaps more mundane utopianism of the actual file-sharers. It is hoped that this contrast will be made apparent throughout this thesis. Thanks to the specificity of a locally situated account, those abstract statements that risk generalisation and grandeur are partly corroborated but also, as will be shown, partly contradicted.

The geographic context of this study is Sweden, a country characterised by early broadband penetration and subsequently widespread unrestricted file-sharing, paralleled by a lively and well-informed public debate. By using Sweden as a case study, a certain level of specificity is reached. Hence, my critical analysis of the file-sharers' own justificatory discourses is further contextualised, and serves to problematise some common assumptions about the phenomenon. The thesis will thus serve as a geographically contained case study which will have analytical implications outside of its immediate local context.

My chapter on Sweden also contextualises the phenomenon's specific relational tension between the individual agent and the global totality of the system as a whole, and correlates it with the particularities of Swedish sociality. It will be shown that through the systemic reliance on the totality of the state or system, a high degree of individual freedom can be attained. What is meant here by individual freedom is essentially a social-democrat, humanist concept of it, where latitude is granted to the individual, without however allowing him/her to financially excel as in the Anglo-Saxon, neo-liberal model. While this notion of individual agency can be said to be specific for Sweden as a country, the tendency towards this form of sociality (an operational dependence on system as a whole, where the aggregated size and efficiency of the system becomes what allows for the various individual advantages) is observable throughout the Western world, and is a notable feature also of digital infrastructures. However, one of the arguably controversial features of this latter freedom is its reliance on nonhuman elements, constituting a break with the traditional, humanist notion of latitude.

1.3. Research question: What *is* p2p-based file-sharing?

At first glance, the phenomenon is marked by conflict: media consumers are illegally sharing copyrighted content, and are therefore vilified by the global entertainment industry. However, this conflict serves to mask the complexity of the phenomenon,

since it is constituted along many dimensions. The factors and agents involved vary widely – in kind (technical, economic, legal, cultural, infrastructural, historical) but also in size, proximity and visibility. It might appear an overly broad question to ask for, as 'p2p-based file-sharing' is an umbrella term for a range of technologies. However, I chose this research question in order to deliberately probe this complexity. Further, the different factors at play are invoked differently by different actors involved (that is: users, legislators, entertainment industry representatives) depending on what political framing various actors want to make in this overarching conflict, commonly dubbed the 'copyfight'.

The case study approach is informed by those studies of discourses of media technology that focus on *the arguments which arise for justifying certain everyday uses* (Marvin 1988; Yar 2008; Boltanski & Thévenot 2006). Such discourses are always relational to geographical and political context, and – especially in the case of emerging, still unsettled technologies – to the understanding that the actors have of this technology. Any actor involved is, in some sense, partisan. To counter the partisan views of the file-sharers themselves, a critical approach is adopted which acknowledges that their arguments serve a rhetorical function in the larger debate. Despite being grounded in actual, everyday experience and the related technological understanding of the phenomenon that this entails, the arguments of the file-sharers themselves can be seen to be not only justificatory but partially rhetorical. Hence, also these discourses are to be treated as questionable in terms of validity. By contrasting their statements with the agential factors mentioned above, and by seriously considering the ontologically unsettled and politically contested nature of this emergent technology, a greater overall understanding should be expected.

This translates into a more specified research question, informed by the case study approach: How is p2p-based file-sharing *understood and justified* by its users, taking Swedish file-sharers as a case study?

The 'how' in this latter question has two meanings: (1) the fraught narrative of an account of file-sharing as formulated by its users; (2) the multifaceted process of reaching this understanding, given the complicating dimensions of agency involved. Two dimensions of reflexivity are enacted: (a) One which invokes the nature of the infrastructure (which in itself is constituted by human as well as nonhuman actors but tends to become reified as a prescriptive force with an agency of itself, as it were). (b) One which invokes the standpoints of other (human) users, in formulating an account of collective "will" or consensus (although this will be seen to be fractured and not coherent among all file-sharers, as various 'modes' of usage entail various moral positions as well).

1.4. Structure, epistemology, methodology and overall approach

The thesis is an attempt to synthesise different perspectives, aiming to assimilate the phenomenon's complex intermingling of technological, infrastructural, economic and political factors. It also serves as an epistemological inquiry into what forms of agency and ontological understandings of digital technology the file-sharers' motivation turns upon, and how the phenomenon relates to a particular form of sociality in late modernity. Although the agencies and normative forces involved are innumerable, controversies about agency tend to order themselves in a more comprehensive way, as they are appropriated discursively. The invocation to agency that is found in the justificatory discourses – both in the public debate and among individual respondents – thus becomes a key to understanding the phenomenon in a more productive and critically attentive way than previously.

This is not a study of actual usage, nor of the actual locus and enactment of listening, watching or playing. I am focusing on the discursive framework used to justify the act of unauthorised, p2p-based file acquisition. A theoretical perspective influenced by Boltanski & Thévenot (2006) will be adopted, where justification is understood to operate by relating one's own actions to wider, often overlapping styles

(or generalities) which in turn are constituted by more minute instances of relating to *any* kind of agent which serves to justify action: the nature of one's Internet connection; the friend or relative who recommended and installed the software; personal objections to the global entertainment conglomerates. Many things thus interrelate in the justification of such a phenomenon, and are bound together conceptually by a perceived generality. The entities that are invoked in this kind of discourse are very heterogeneous: human, nonhuman, material, discursive, small, large, banal, mundane, or momentous. Some of them might be seen as explicitly political or entirely nonpolitical, while some will become political only when taken into closer consideration, as will be done in this thesis. I will attempt to synthesise Boltanski & Thévenot's approach with influences from actor-network theory, particularly in terms of looking at how individual discourse becomes relational to larger, institutional/infrastructural entities (macro-actors) and how such entities become prescriptive of certain behaviours and thus normative in their own right. As discourse never operates in a vacuum but reacts and relates to the common debates on any phenomenon, much of the file-sharer discourse becomes relational also to the wider, extremely polarised 'copyfight' debate in itself. Hence, the file-sharer discourses often fall back on a reified notion of agency, as if the main agency (or locus of possible blame) would reside somewhere particular. This was especially the case in those modes of reasoning that were reactive to political expedience, as if "answering back" to allegations made by the enemy, or in those statements that were explicitly partisan. However, as the interviews progressed, and statements were questioned by me as researcher, a more complex reasoning often emerged, taking into account the distributed nature of the agency involved. The method chapter outlines the specific approach taken for my own fieldwork in this respect, and the various reasons for it.

In media and communication studies, the primary debate regarding technological agency stood between the social constructionism of Raymond Williams and the

technological determinism of Marshall McLuhan in the 1960s and 70s. Drawing on some central aspects of that debate, informed by later insights from actor-network theory (as epitomised by Bruno Latour) and more recent, posthumanist conceptions of agency (largely epitomised by Donna Haraway and N. Katherine Hayles), this thesis will present the following argument: *While actual technological agency might be distributed, any discursive attempt at describing and, further, justifying a specific technology serves to assign agency to some particular actors, or modes of action, more than others*. Technological agency, as a potentially fractured, never monocausal or homogeneous entity, becomes invoked and rhetorically "shifted" in order to be constituted in different ways, depending on how one wants to frame the phenomenon at large. One can blame file-sharers as being the primary agents and carriers of responsibility. Or one can, alternatively, excuse one's sharing by duly invoking this very fractured nature of the overall agency; holding that no agent carries the entire responsibility, since p2p involves so many human actors, and the entire infrastructure itself propagates the sharing.

Chapter 2 aims to critically outline the literature on the present 'copyfight' (digital piracy, gift economies, activism) while also highlighting its limitations and implicit assumptions. Some key critiques are introduced, which precede the turn to ontopolitics, technocracy and prescriptive technologies that chapter 3 expands upon. One element of the literature on 'piracy' and oppositional practices to copyright will be particularly criticised: the tendency to portray such practices as premeditated or even outright activist. Hence, I argue that the existing literature on the alleged 'copyfight' entails an "activist bias," in that file-sharers in general do not appear to be as politically motivated as those actors who argue in favour for alternative copyright systems, and/or a totally free and unrestricted sharing. As counterpoint to this tendency, I will expand upon the notion that technologies have material configurations and infrastructural properties which prompt developments in certain directions, without for that sake

being entirely determining. Hence the turn to related concepts of agency, justification and normative uses of technology.

Chapter 3 establishes the methodological choices made and the rationale for these, prompting the specific interest in how general, notional categories of justification can be observed. It also explains the choice of a rather small sample, and the means of interviewing as a research method. Further reasons for a case study approach are outlined: the importance of anonymity on behalf of both researcher and respondents; the nature of an email-mediated, structured interview and its role in examining those pre-existing discursive tropes that are invoked also by the respondents. This incidence of certain tropes in the public debate is expanded on in the various other chapters, especially as these tropes serve to technically explain as well as justify the phenomenon. Hence, besides the descriptions of some of the methodological minutiae involved, this chapter should provide an explanation as to why so much of my fieldwork consists of clarifying the technical conditions.

Chapter 4 presents an overview of the technical and historical logics allowing for mass-scale, p2p-based file-sharing. The chapter demonstrates the foundational role of file-sharing to the operability of the Internet at large, the popularity and relative ease of dedicated p2p-based sharing. As it is common to argue for the "naturalness" and "unstoppable" nature of the phenomenon when defending it, this is partially confirmed in this chapter, by reference to actual communication protocols and network architectures. However, this does not mean that any individual behaviour would be excused, nor does it imply that the file-sharers' own actions would lack negative repercussions. It nevertheless states that the existing file-sharing websites, applications, networks, and online communities do form a normative invitation to share. By critically outlining the historiography of p2p with special regard to the technological determinism and teleology in some of the accounts of its conception and development, p2p is introduced as history, architecture and technical protocol. Aspects

will be taken up that later will come to serve to explain some of the assumptions among the file-sharers themselves: the ubiquity and alleged inevitability of file-sharing on the Internet; the novel system designs that replace older ones; the problems of establishing causal links between file-sharing and declining CD sales; the inherent emphasis on convenience and acquisition. The notion of a dichotomised 'copyfight' is also expanded upon: I will note how allegedly "pure" technical accounts inevitably imply certain assumptions of thought uses and certain normative understandings of how to envisage the 'content' circulated. I will also note how the 'copyfight' entails fundamentally different approaches to how behaviour is thought be policed or not, and how there can be seen to exist a particular form of morality among the often libertarian proponents of p2p and deregulation of content distribution. This "p2p morality" appears be derive from a trope which combines strong individualism with a collective normativity that emerges out of every node's equal reliance on the overall infrastructure (which the following chapter expands upon, in a Swedish context).

Chapter 5 specifies the geographic delimitation of Sweden as a particular context in terms of: (a) technical development (early, widespread establishment of broadband); (b) a broad public debate about file-sharing; and (c) its modernity being structured in accordance with a specific theory of individual autonomy granted through strong state institutions, engendering a particular form of individualism that thrives on collectivism. This is further related to the forms of instutionalisation that are seen in an era reflexive modernity, where makeshift p2p collectives – such as The Pirate Bay (TPB) – are recognised by the polity as (semi)institutional actors. Further, a strong conceptual link between the typical Swedish social contract and the technically mediated sociality on the p2p networks is established, as both guarantee great individual latitude by harnessing the overall, universalising collective.

Chapter 6 is intended to present, summarise and make sense of the discursive tropes appearing in the fieldwork:

- The emphasis that the respondents put on *individual agency* of humans and computers, which implies a strong reliance of knowledge and skill, alongside the (paradoxical) reliance on totalised, aggregated networks.
- The trap of *determinism* when invoking these more systemic categories, and the fractured moral responsibilities this entails (especially when adding the opportunist notion that making use of the pre-existing infrastructures is up to individuals themselves).
- The *distinctions* between different ideal types of file-sharers, or 'modes' of use. The distinctions between networks and paradoxical attitudes to collectivity, to digital content and to moral/political engagement.

Often the file-sharer discourse resorts to what appears as a technologically determinist stance; the reason for illegal file-sharing flourishing simply being that the technology is so widely established, easily accessible, and *ipso facto* unstoppable. Ultimately, technological determinism thus translates into a form of monocausal historical determinism. This was generally connected to a wider recognition of digitisation as a irreversible physical force and the notion that 'information wants to be free' (which has had currency in the world of hackers and computer expert users since the 1980s and confirms the historical roots of p2p technologies in this particular setting), an expression that implicitly argues for a certain political ontology of digital information: that is has an innate will, or purpose, which is to be shared without restriction – and moreover, that it is seen as an entity untied from its material carrier (Hayles 1999). Further, it constitutes an equation of digitised artefacts with information, or works of art with data, which must be understood to have political ramifications in the presently frenzied debate around the issue of file-sharing and copyright (such as the issue whether copying is theft, or the nature of 'streaming' and files). This notion of inevitability could be categorised as a form of technicist or technocratic generality.

At other times, the file-sharers resorted to a mode of discourse where the notion of 'use' was taken up as if agency would primarily reside in individual users. The issue was here framed as if it was primarily a problem of individual users making the decision to use or abuse the system, and that it is "up to oneself" to decide whether to "keep up" with these new technologies or remain "left behind": a progressivist, individualist stance, moreover spurred by the 'Californian ideology,' 'hacker ethos' and partiality to (male) expert use and tinkering that underpins the present culture of file-sharing. Initially, some of the respondents presented little in the way of a more subtle understanding – something which was ironic given the strong collectivism and fondness for communal sharing expressed by the same respondents – but as interviews progressed, a more nuanced form of arguing emerged. This more nuanced understanding took to heart the ethos that is expressed in the idealistic slogan 'sharing is caring,' but that more realistically affirms the utilitarian notion that what is good for overall network efficiency and accessibility ultimately is good for each node involved, thus placing more value on uploading than on downloading. This individualism was shown to relate to the collectivism of aggregated p2p networks in many interesting ways; not least in the context of the Swedish social model, which involves similarly utilitarian dimensions.

However, while the utilitarian notion of collectivity was argued for in virtually all file-sharer discourse, only occasionally the notion of a *collectively based normativity* arose – despite the clear technocratic impulse (Feenberg 1999) in the above technological determinism, and the extent to which file-sharing in Sweden has become a technology of ease of access and ubiquity. Further, since file-sharing in its general meaning (as a purely technical concept) lies at the heart of all digital networking, the fact is that every Internet user is a file-sharer in a strictly technical sense. If widespread p2p-based file-sharing of copyrighted material is to be understood as an emerging technocultural condition, to which attempts for limitation, policing and control are

reactive rather than truly prohibitive, then it follows that this condition comes with an implicit normativity; expectations for use, morals and habit. Following the argument outlined in chapter 2, this normativity works partially through prescriptive agencies operating through the infrastructures, protocols and application designs themselves, and partially through human discourse expressed on and outside of the networks, something which might be tacit to varying degrees. If there is – as some commentators would argue (Larsmo 2005; Pogue 2007) – a new morality of use, acquisition and disposal of cultural products emerging along with the emergence of widespread file-sharing networks of these kinds, this morality would be expected to be interwoven not only with the above notions of agency, but also with the normativity resulting from the highlighting of certain agencies, and the implicit norms embedded in the actual daily use of these technologies.

Focusing on everyday users, my research will show that although their arguments are highly valid, they are: (1) situated in a very particular historical and geographical context, (2) imply a certain understanding of individual agency and the interconnected architecture of media distribution and consumption and (3) are relational to technologies that in themselves become normative by way of their ubiquity and resultant prescriptive agency. *The foundational role of p2p to the Internet* as well as *the widespread nature of file-sharing* makes it the token choice for media consumption among large groups of people, especially in Sweden, and *the normative weight behind discursive statements* claiming that the phenomenon "cannot be stopped" and "is here to stay" all make for the seductive argument that the individual cannot resist this new media phenomenon, especially since it has become lauded with potentially utopian promises in various discourses. Although this form of argumentation relies on observations of the infrastructure that are highly plausible and valid, it simultaneously becomes performative in that it aims to counter oppositional accounts by emphasising the collective, aggregated and monumental aspects of the

phenomenon rather than admitting to a the notable degree of opportunism and individualism also underpinning this file-sharing. As the thesis recognises how this mass utility springs from the harnessing of individual opportunism, the conclusive view of the file-sharer becomes one that admits to this while simultaneously emphasising the deferral of responsibility made possible by the infrastructure.

Besides summarising the findings and giving indications of future research directions, my conclusions (chapter 7) show that p2p-based file-sharing allows for individual expediency, by a mode of accumulation whose outcome is more than the sum of its human actors, who (in turn) are not necessarily motivated by individual activist intent, nor altruism. The file-sharers were thus found to justify their practice by way of striking alliances with various collective entities, such as *the existing Internet infrastructure* (allowing for free, anonymous exchange), *the seemingly undiminished audience interest in cultural products* (as media consumption, except for CD sales, remained high throughout the surveyed period), and what I call *the 'body politick' of the p2p network* (as a manifested, tangible 'people's movement' with occasional spokespersons and 'strategic sovereigns' like TPB).

Given the ontology of the Internet expressed by the file-sharers, they saw external regulation as a technical impossibility, involving potential authoritarianism, something which in my view would prompt discretionary, individual regulation. The term 'pirate' was found to be problematic among my respondents, as were the individual roles and different modes of usage associated with the phenomenon. I will thus begin by criticising the implicit activist bias in the current 'copyleft' literature, due to its tendency to try to detect *community*, *intent*, *novelty* and *resistance* in a phenomenon which, I will argue, is better described as an *ecological*, *conditional* and *prescriptive* one. In this latter view, file-sharers are no longer thought to be vociferous antagonists to an alleged copyright regime; instead, they are seen as everyday users whose

productive agency when consuming and re-distributing media becomes politicised, largely due to the controversial ways in which this agency is currently configured.

Consequently, I argue that many of the activist examples observed in the literature can be seen as formations of politicisation that in some ways "speak for" the multitude of users. By their very existence, these formations act as performative examples of a certain understanding of the nature of the Internet. This does not only apply to hubs which facilitate platforms for explicit political argumentation, but also to those hubs and systems which facilitate sharing without necessarily having an explicit political voice. Hubs for file-sharing thus take on autonomy of their own, serving as strategic advantages by confirming the large-scale sharing that is already continuously happening. TPB is one example (the public image of this hub is nevertheless more visible and politicised than virtually any other p2p site, and it has openly espoused autonomy and positive liberty in the face of legislators). What is more interesting for this thesis, however, is how such sites also entail a form of 'prescriptive' agency which thrives on the hidden user labour involved, as the exchange of online content is dictated by the protocols and infrastructures involved. To understand the phenomenon, it is central to see how the "nature" of this content and infrastructure is understood by the users and in the discourses that herald unregulated, p2p-based file-sharing.

As this ontological status becomes rhetorically expedient in the politicised 'copyfight' introduced below, the thesis will address some specific elements of actor-network theory (ANT), or the 'sociology of association' as it might more succinctly be called, in order to better understand material-semiotic agency. While ANT in its earlier role within science and technology studies (STS) focused primarily on the engineering and development of technologies, here it is taken up to focus more on the prescriptive agency of an already existing, yet still emerging, ontologically "unsettled" technology like p2p-based file-sharing. One key recognition is that agency is negotiated, without any specific locale, and ultimately an upshot of all the actors affecting one another in

any given situation. Other concepts within ANT that will be important are 'prescription' (how ubiquitous systems come to exert a normativity of their own) and 'oligopticon' (how digital infrastructures have a short "event horizon," lacking oversight as it were, and that users only understand the greater whole by the local clues given to them in their own everyday settings). By taking this perspective, a better understanding of the means by which users justify their own use will be reached, ultimately by turning to how justification operates by invocation of heterogeneous, overlapping styles and objects of valuation (Boltanski & Thévenot 2006).

One of my ambitions is thus to devise a way of construing 'the technological' and 'the social,' without reinforcing determinism on any respective side, as the actual field is characterised by paradoxical forces. Not only does p2p-based file-sharing involve a heterogeneous mass of users that is hard to fully overlook. Moreover, ostensibly disruptive, deterritorialising technologies like p2p simultaneously generate contextualising, stabilising relations of power in and by themselves. By utilising the French philosopher Michel de Certeau's notion of strategies and tactics, and the notions of 'delegation' and 'prescription' that ANT presents to us, we will note that the p2p architectures are not only bottom-up phenomena, from the molecular to the molar. They can also be seen as structures of power that lie pre-existing before the users, as entities not entirely of these users' own making. As will be shown in the subsequent chapters, the various opponents in the debate seem to be influenced by various forms of *technological bias*. Magnus Eriksson, spokesman for the Swedish think-tank Piratbyrån, provides a somewhat more sophisticated account of determinism than the respondents expressed. He notes that any historical situation entails forms of politics and culture made possible by technology – as well as forms made impossible – and that copyright as we know it would be largely outmoded, given the changing material conditions (Eriksson, 2009). This posits a politics which is non-metaphysical and based on observations of material reality rather than on deontological duty morality or ideals.

This was also confirmed by a debate between Fritzson (2009) and Fleischer (2009). However, any normative justification regarding technology presupposes observations that are inevitably *situated* and most likely partial: The copyright industry has its own preconceptions about what digitisation is or should be, as do the file-sharers.

Chapter 2: Literature review

2.1. Introduction

> If we want to know what words like nature and technology mean, then rather than seeking some delimited set of phenomena in the world - as though one could point to them and say "There, that's nature!" or "that's technology!" – we should be trying to discover what sorts of claims are being made with these words, and whether they are justified.
> (Ingold, in Suchman 2007: xi)

In the following, I have tried to outline the 'copyfight' with the intention to see how new technologies have tended to be the facilitators of various activist media uses. The present 'copyfight' is thus put in both a historical and a local, Swedish context. The notion of 'piracy' and gift economies is discussed, with the intention of exploring the ontological grounds for conceiving of popular culture as a gift culture. Then, some critiques of the main 'copyleft' standpoints follow, based on Henry Jenkins's concept of convergence and the realisation that the situation need not be as conflictual as the activist perspective would suggest. The history of cultural studies has the benefit of conceiving of users more as participants than as outright activists, something which is seized upon before turning to the ontopolitical dimensions of the phenomenon.

Lister et al. (2003: 82) draw on MacKenzie & Wajcman (1999) in unfolding the word 'technology'. According to their account, the ancient Greek term *techne* refers to 'art', 'craft', or 'skill', while *logos* refers to 'word' or 'knowledge'. Hence, the original meaning of the word technology should read something like "knowledge about skilful practices" – which lays bare the fact that *technology is an inherently cultural phenomenon*. The term 'technology' should thus in itself be thought of as a constantly hybrid, negotiated entity suffused by both human and nonhuman agencies, and thus never fully determined.[1]

[1] Swedish language differentiates between the terms 'teknik' and 'teknologi', where 'teknik' exclusively refers to either 1) technique or 2) the actual physical/material/observable workings of technology (technology as pure science), whereas 'teknologi' implies the metanarrative *about* the above; the system of knowledge implied. An illustration is how (the scientifical branch of) Informatics, or Information and Communication Technology (ICT), is not called 'informationsteknologi,' but simply 'informationsteknik'.

In the context of the recent debate in media studies regarding 'technological determinism' (see Lister et al. 2003), my stance is to acknowledge both Williams's apprehension towards any idealism of new technology and McLuhan's insight that the adoption of technologies have structural, ecological consequences which become ubiquitous and world-shaping, as the formal characteristics of any medium shape society in certain ways. The concept of 'technological bias' can be attributed to McLuhan's forbearer Harold Innis (see Carey 1989). Within STS, a similar concept is that of *weak determinism*. However, one element of the McLuhan reception can be questioned, in that it seems to presuppose that the nature of a technology would be "given" or unambiguous. What an appraisal of Williams would teach us is that this "nature" of a given technology is not determined by its nonhuman properties alone; it is a hybrid affair, socially renegotiated. Des Freedman (2002) points out four central tenets in Williams's approach to technology:

(1) A technology 'is always, in a full sense, social'.

(2) 'The moment of any new technology is a moment of choice.'

(3) 'The sense of some new technology as inevitable or unstoppable is a product of the overt and covert marketing of the relevant interests.'

(4) 'Unforeseen uses and unforeseen effects' may qualify the 'original intention' of those developing the technology.

This final tenet is the common one in the historiography of p2p-based file-sharing, as will be shown more clearly in chapter 4. What is more rarely seized upon, however, in the similarly common (McLuhanite) recognition of the duplicability inherent in digital networking as an allegedly 'unstoppable' force is tenet number 3; the observation that presumed ontological properties of technologies are discursively mediated. However, the Williams reception seems to incorporate a general misunderstanding of the term 'social': the renegotiation of what a technology "is," "means" or "should be" is not an

affair between naked human actors alone, it is only made possible by invocation and incorporation of nonhuman entities.

Consequently, this critical stance takes issue with the whiggish, or Panglossian thrust implicit in much McLuhanite thinking about technology. While new technical restraints and liberties are allowed into popular culture, this does not mean that these would be mute, non-negotiable or in any way historically 'unavoidable'. While there is a body of literature which elegantly presents the case for a social dimension of co-option and opposition to technology (Standage 1999; Marvin 1988; Hirsch 1998) one simultaneously has to heed simple concepts of mere 'resistance' or 'hegemony'. With infrastructural, amorphous technologies that condition everyday life rather than occasionally disrupt it, the situation is more complex and arguably not a matter of simply opting in or out.

Further, there is an impulse within cultural studies that can be argued to come from Georges Bataille via Jean Baudrillard, John Fiske, and numerous others, namely that consumption should *not* be deemed as "less worthy" or "less productive" than other areas of social life. In taking issue with both technological determinism and the 'activist bias' within many discourses surrounding p2p (introduced below), the notion of a 'general economy' of surplus, excess, convenience and individual gratification needs to be acknowledged. This hedonistic wastefulness of expenditure of superfluous resources is 'clearly a sovereign act,' (Jenks 2003: 107) which arguably gives an autonomous thrust to file-sharing as an alternative economy. Daniel Bell (1976b) has argued that this hedonistic, individualistic, self-affirmative sovereignty has been incorporated into the very core of post-industrial society, primarily by having been carried by the cultural movement of modernism, to which this truculent sovereignty is pivotal. Consequently, contemporary society is as characterised by this transgressive, protean sovereignty as it is by the utilitarianism of the Weberian work-ethic. Wasteful

consumption is not only a defining property of excessive file-sharing but of Western society at large.

As I will show in this thesis, the file-sharing world is fragmented, where different wings operate along different registers, variably productive in their own right. Some users are producing protocols and/or platforms for sharing and/or activism, many more users provide the actual data shared. To presume some uses as simply "productive" and others as nothing more than "consumptive" is a violation of this complexity. Yet, there are degrees of how *durable* any productive effort is. Traditionally, the sphere of domestic consumption has been said to lack this durability but with p2p technology some interesting changes to this are starting to be seen. Both on the English-language and Swedish-language Internet, there appears to be a dissent in regard to the commoditisation of information, often characterised as an opposition between 'net libertarianism' and neo-liberalism (see below). What unifies these ideologies, however, is their assumption of semi-institutionalised *appropriation and accumulation of information "as pure data"*.

The fact that p2p does this without monetary valuation of the material exchanged does not, however, remove it from the economic realm. It is an economic activity – having economic repercussions, generating externalities – regardless of whether money is traded or not, and it requires outposts of institutionalisation and safeguarding. The following account has been underpinned by a growing realisation that many advocates of unrestricted file-sharing in fact presuppose that file-sharing in general would be a more active, more productive form of media use than other ones, where the agents of its safeguarding and continuation are particularly active and idealist, and the terms-of-trade are coincidentally framed as less commercial and more altruistic than conventional post-Fordist regimes of accumulation. In what follows, these notions will be questioned.

2.2. Outlining the dichotomy: Is there a 'copyfight,' and how is it constituted?

> Look us up with your computer before we look you up with ours.
> (British TV Licensing campaign slogan, February 2006)

With the exception of technical manuals and the historiography of network architectures and protocols outlined in chapter 4, the established discourses on p2p-based file-sharing as a socio-cultural phenomenon tend to prioritise the legal dimension. The situation is often depicted as one of conflict between novel forms of networked, decentralised agency and older, territorialising, hierarchical modes of media production, distribution and consumption. The older regimes are thought of as being strategically implemented primarily by 'intellectual property' laws and regulations. Many authors explicitly embrace the newer mode of agency, not only because it is seen as the civic, progressive and even emancipatory side, but as it is thought to be *inevitable*, due to the technical properties of the Internet and digitisation of media content. Siva Vaidhyanathan, one such author and one of the more influential critics of the current copyright regime, assigns the success of p2p to a number of technical innovations:

- the protocols that make up the Internet (TCP/IP) and the relative openness that results from these
- the modularity and customisability of the PC
- the openness, customisability and insecurity of PC operating systems
- the openness, insecurity and portability of the digital content itself (Vaidhyanathan 2001: 8)

As I will elaborate upon below, the (perceived) nature of the digitised content is thus central to understanding the justification for sharing. On the level of individual digital files, data is malleable. What Vaidhyanathan's account seems to overlook, however, is that when networked, digital infrastructures can breed brittleness, rigidity and structuration in and by themselves. Instead, he places the technical counter-moves to digital modularity and openness exclusively with states and media corporations, which according to him strive to:

- monitor and regulate communication
- shift liability and regulatory responsibility to Internet Service Providers
- redesign the protocols that run the Internet
- neuter the customisability of the PC and other digital devices (Vaidhyanathan 2001: 8)

These latter moves are embodied by the various Digital Rights Management (DRM) initiatives by the entertainment industry, intended to counter illegal file-sharing. A dialectic is conjured, where engineering and legislation is seen to strike down on the much wider category of everyday culture; a policing that is bound to be incomplete, and largely determined by the material technologies at hand.

Thus, Laikwan Pang (2006) argues that the emergent system of global copyright control to a significant degree becomes a 'fantasy' of cultural control, marred by the logical fallacy that engineering by governments or trade organisations (exerted largely by contractual agreements with nation states) has the ability to stifle copying. Pang characterises copyright as autonomous from national sovereignty, and *copying* as a yet wider phenomenon than that which becomes regulated by 'intellectual property' management:

> Although copyright is often described as a superimposed regulating system that alienates culture, the object of its control is central to culture: the act of copying is perhaps the single most important cultural activity. Copying and culture cannot be separated; cultural boundaries can never be rigidly drawn because culture is necessarily transformed by copying, which takes place everywhere all the time. (Pang 2006: 5).

DRM is but one example of how the fight between industry and file-sharers is fought by utilising different technical protocols, for radically different ends, but what will be explored in this chapter is how institutionalisation among the file-sharers themselves (albeit largely informal and governed by *ad hoc* regulations and prescriptions) closes down some of this alleged openness.

One example of how a certain framing of the phenomenon becomes strategic is the attempt by the entertainment industry to equate illicit copying with shoplifting,

something which is frequently countered by file-sharers in recognising the material fact that with digital copying, no original is lost (Bohn 2004). This strategy of equating copyright abuse with theft was noted already before the popular establishment of the Internet (see for example Gurnsey 1995: 147), and still shapes the discourse on digital media. The basic argument is that a downloaded song is one song less sold. However, this argument would only hold true if the person that downloads the song actually had the intention to buy it, and refrains from doing so after having copied the song illegally. As Lawrence Lessig points out, there are four scenarios that are applicable to every unit of digital media downloaded:

(A) There are some who use file-sharing networks as substitutes for purchasing the content downloaded.

(B) There are also some who use file-sharing networks to sample, on the way to purchasing the content.

(C) There are some who are using file-sharing networks to get access to content that is no longer sold but is still under copyright or that would have been too cumbersome to buy.

(D) There are many who are using file-sharing networks to get access to content that is not copyrighted or to get access that is plainly allowed, even endorsed by the copyright owner. Economically, only type (A) sharing is clearly harmful, yet only type (D) sharing is legal (Lessig 2004: 68, 296–297).

Both sides of the debate repeatedly invoke *potentialities*. The proponents of copyright points to the potential sale that is lost, while the proponents of unrestricted file-sharing either point to (1) the fact that so little of the actual sharing in fact replaces a purchase, thus rendering the sharing that is actually happening relatively harmless, as is argued by Lessig (2004) and Oberholzer-Gee & Strumpf (2004), or (2) that digital data is intrinsically different from physical products and cannot simply be quantified,

reducible, bought and sold in the same way. Rasmus Fleischer, another Piratbyrån spokesman, holds that framing the issue as one of (unidirectional) 'downloading' instead of (multidirectional) exchange ultimately serves the interests of the copyright industry (Fleischer & Torsson 2005; Fleischer 2007b). Partially as a response to this rhetoric, proponents of file-sharing have, in Sweden and elsewhere, taken deliberate steps not to confuse file-sharing with the destructive, criminal, thieving connotations that the term 'piracy' can imply. Instead, what is emphasised is the active, productive, naturally thriving and ultimately unstoppable nature of digital copying; a positive connotation of 'piracy'.

Hence, this survey of the existing literature will begin by establishing not only the conflictual framing of the phenomenon, but the strong emphasis on *activism* underpinning much of the academic appraisal of p2p. By noting some serious critiques that could be pitched towards this apparent academic consensus, the chapter will subsequently turn to theories of agency, justification, and institutionalised prescription of norms.

As the copyleft/copyright divide essentially comprises a divide between control *by voluntary liability* or *by the traditional property mechanism* (Reichman in Lessig 2002: 181), the debate ultimately touches on issues of state intervention in the economy (Boyle 2003: 51). As was established already by Spinoza, policing the multitude is a task bound to be incomplete. Law theorists like James Boyle (2003) have defined the copyright regimes as a form of 'second enclosure movement'. They become a reactionary, stabilising force against what is ultimately seen as a thriving, granular, molecular force of distributed activity, arising out of the multitude. The law becomes an *intervention* into the copious, amorphous web of cultural sharing that is already in place. The copyleft critique consequently draws on this recognition, affirming sharing as the natural "state of affairs," and any policing of it as reactionary. Its main thrust is thereby in depicting the virtual commons not as a 'tragedy' (Hardin 1968) but instead

as a potential cornucopia, simply thanks to the unlimited nature of digital data compared to the more earth-bound, limited commons of yore. This view however presupposes that these new digital commons either *positively contribute to* (that is, having generally positive externalities) or *do not interfere with* (having no externalities) the established property mechanisms of copyright – presuppositions that are both probabilistic and problematic – or that the possible *negative externalities* would in any event be unavoidable or necessary.

In view of this, I would argue that the common comparison of unrestricted file-sharing to 'gift cultures' is not entirely accurate. Although file-sharing might ostensibly seem to be about sharing cultural products as gifts with fellow 'insiders' (Giesler 2006: 283), the current networks are more akin to anonymised, vast pools of content, which users can "tap in" and "tap out" of. They are more akin to public goods/services in the sense of Samuelson (1954): Nonrival and non-excludable, characterised by no scarcity, no depletion (except the possible waning of interest in a given file and thereby less concurrent uploaders) with, perhaps more significantly, no real sacrifice in copying or uploading one's files. As shared networks of common knowledge, these forms of communication are however similar to gift cultures in that they can be thought of as ritualistic (in James Carey's sense; see Giese 2004) rather than purely transmissive.

Consequently, I will argue that there is, among the defenders of unregulated file-sharing, a political necessity in framing the sharing as either having positive externalities or none at all, as the notion that the sharing would involve also some possibly negative externalities is a more painful and less marketable view. Hence, the 'copyleft' standpoint can be seen to favour narratives that emphasise explicitly productive, and thereby often activist or even altruistic examples of file-sharing culture. Oddly, the presupposed crisis of economic reimbursement mechanisms for cultural producers that is currently played out (with decreasing incomes from CD sales) has led the debate to hover towards arguments that present file-sharing not so much as a

convenient means for consumption, but rather as a furthered *incentive to production*; partially since the entertainment industry representatives speak for the traditional producers, and partially since the copyleftists seem to have taken on themselves to "prove" the productive agencies implicit to file-sharing.

2.2.1. The 'copyleft' appraisal

Following the implementation in the USA of the Digital Millennium Copyright Act (DMCA) in 1998 and the surfacing of Napster in 1999—2000, several books emerged that were critical of the copyright regime in an era that appeared to be increasingly characterised by civic empowerment by digital networking. Some influential Internet theorists like Rheingold (2000) and Castells (2001) had already established how the online world had properties that were at odds with the hierarchies of traditional industrial management, favouring organisation "from the ground up," decentralised communication, serendipitous interaction and shared creation (Castells 2001: 200). Many of the more influential copyright critics (like Lessig and Yochai Benkler) are law scholars. Already in the 1990s some important critiques surfaced, on how law has invented and upheld the category of the sole author and creates a political economy that stifles innovation and threatens freedoms central to the information society (Boyle 1996; Coombe 1998). Gurnsey (1995) is a more conventional account of the industrial management of copyright, but even here cautions are found, regarding increasing concentration of holding rights and information resources (145). Bettig (1996) is similarly an account of the political economy and industrial consolidation of copyright, framing the situation as one of industrialised domination to which counter-movements are acts of resistance. Another early account, Litman (2001), reveals vagaries and potentials implicit in the DMCA, and shows how copyright has transformed from being a mechanical imposition in the interest of authors and book

printers to now restrict the very uses of cultural products, as technologies like DRM allow media corporations to restrict usage, copying, and sharing.

Since then, a whole literature has emerged on the subject of the increasingly draconian global copyright regime and its malcontents, mainly from a U.S. perspective. Key authors are Lessig (1999; 2002; 2004), Vaidhyanathan (2001; 2004) and Benkler (2006). Alongside them, a stream of news media attention has garnered around the phenomenon, in the wake of some very notable lawsuits. The term 'copyfight' has become shorthand for the situation described in these accounts. The *Copy Fights* anthology (Thierer & Crews 2002) is one of many examples of how the term is popularly used also within academic accounts of the present situation. 'Copyfight is the broad banner to describe people who are fighting for reforms to intellectual property – trademarks, patents, copyrights and what are called "related rights" (broadcast rights and so on)' (Cory Doctorow, in Steffen 2005), or in short: The copyfight is the fight 'against bad copyright laws' (Corante 2005). Any form of complete or partial dissent against the current legislation and/or enforcement of copyright policy can be labelled thus. Also in the Swedish context, Söderberg (2008) confirms the existence of this discursive 'copyfight' dichotomy.

Very much of this conflictual situation must be attributed to the lobbyists of the copyright industry. John Logie (2006) examines how the RIAA and MPAA, in the years after 9/11, in fact made a rhetorical association between illegal file-sharing and terrorism, positioning the entertainment industry as both a victim and a target. An example would be the oversight hearing by a U.S. Judiciary Subcommittee[2] in March 2003 titled 'International Copyright Piracy: Links to Organized Crime and Terrorism' (Erway 2003). Söderberg (2008: 12) argues that the cultural industry has tried to deliberately avoid entering debates with copyright critics, due to the perceived risk that the opponents would thus be acknowledged as legitimate adversaries.

[2] The U.S. House Judiciary Committee's Subcommittee on Courts, the Internet and Intellectual Property.

Likewise, radical anti-RIAA propaganda has been spun among the more hardcore 'copyleft' activists. Logie lists examples of this too. He holds that the war metaphor became so resilient that even Jessica Litman (2002) equated the situation with warfare. This is notable, since she was an early critic of how the combatants in this 'copyfight' framed it in (sometimes arbitrary) metaphorical terms. However, in 2005, Logie points to indications of an "armistice" called from the side of the entertainment industry, coinciding with the launch of various proprietary digital music vendors such as Apple's iTunes (Logie 2006: 122).

Already in 1984, the situation began to be evident to the US Office of Technological Assessment, as noted by Chesterman & Lipman (1988):

> Just as the public became readily accustomed to photocopying books, journals and other printed materials, so it is now learning routinely to copy films, discs and tapes and to make unauthorised copies of electronic data. Software creators, producers and providers call this 'stealing'; some software users call it 'sharing'. Thus there is a growing gap between the theory of intellectual property law and its practice. This gap is likely to widen in the next several years, potentially challenging the legitimacy of the law and creating significant problems of enforcement.
> (US Office of Technological Assessment, in Chesterman & Lipman 1988: 21)

What is generally described is an intensification, on both sides. Most 'copyfighters,' with Lessig as their prime spokesman, point to how the legislation and execution of copyright laws have hardened and ultimately come to serve those multinational corporations which continue to litigate against consumers and illicit distribution hubs (where some of the file-sharing sites or networks that have been litigated against and/or shut down since Napster are Grokster, eDonkey, TPB, Oink.cd, Demonoid, and TV-Links). Meanwhile, the non-overseeable economy of the file-sharing world and other illicit distribution networks continues to thrive, arguably growing (it is however hard to survey all this with statistic certainty). The global gap appears to have widened even further in the last decades.

Like much of the contemporary discourse on the governance of the Internet, the debate around p2p has had a strong U.S. American bias and is duly influenced by abovementioned authors, especially regarding questions of legality, economic redistribution, and future prospects of the entertainment industry. The discourse recurrently makes reference to two particular antagonists. (1) The representatives of the entertainment industry or the law-enforcing 'establishment', often explicitly supported by RIAA, BPI, IFPI or the Moving Pictures Association of America (MPAA), depicted as being engaged in a veritable battle with (2) the activists of the net, often libertarian by ideology, and partially synonymous with the hacker/cracker/warez communities who willingly describe themselves as pirates, file-sharers, or "geeks" in general. At the centre of the pro-copyright argument there is a conservatory ethos which I will return to later in this thesis; namely, the Lockean ideal that cultural producers should be able to benefit from their labour, which Yar (2008) defines as a myth. Nevertheless, there appears to be a conservatory thrust also among the copyleftists, in the sense that they in many ways argue for a reversal of the expansion of copyright law to a previous state, something which seems to be paralleled by a rather artisan ideal of culture, which commentators like Keen (2007) has criticised as a 'cult of the amateur'. These issues appear to become increasingly acute the more technology becomes characterised by two extreme poles of openness and closure.

Nicholas Reville from the U.S. American pro-file-sharing, grassroots organisation *Downhill Battle* thus describes Lessig as a form of conservative, wanting to revert the law back towards its original role (Reville, in Fleischer 2004b). This impulse is related both to ideal of the First Amendment and to the romanticised notion of an untarnished vernacular culture of horizontal sharing, invoked by Jenkins (2006) and others. It can be criticised as prioritising "free flow" as the alleged default mode of Internet communication, which is partially disproved by the highly institutionalised, protocol-governed structure of the Internet (Galloway 2004). Moreover, it exclusively associates

this free flow to an allegedly "natural," pre-modern state of similarly free flows of culture, akin to Carey's notion of a mode of ritualistic, shared communication (Giese 2004).

Regarding the mythological notions of "free flow" and an "unblemished commons" of culture, Geert Lovink takes up Slavoj Zizek's observation that the post-industrial, digitised society carries its own myth. 'The idea of a pure global communication assisted by software algorithms and decentralized network architectures is itself a mythological construct, loaded with ideology' (Lovink 2003: 24). This observation is similar also to Haraway's (2004; 1997) notion of technologies being material-semiotic in that they carry their own imaginary and mythology, something which makes them inherently normative. The McLuhanite position that the formal technical properties of a medium have a *direct* bearing on society and culture as a whole (that is, a form of 'strong determinism') can be said to comprise a similar normativity, despite being based in actual observations of these formal properties. One example is McLuhan's famous assertion that 'electricity does not centralize, but decentralizes [...] it permits any place to be center' (1964: 36). This is obviously grounded in a particular observation of electricity, yet it makes claims that are normative in that they are universalising, they lay claim to an objective condition.

According to Ross (1998) and Miller & Slater (2000: 16), two types of libertarianism are typical among Internet specialists: a more free-market-oriented neo-liberalism, and a 'net libertarianism', more closely related to postmodernism and its recognition of the arbitrary, relativistic nature of information. The main difference between these flanks, since the commercial appropriation of the Net from the 1990s onwards, pivots around the idea of proprietary software and the attachment of monetary value to information (Ross 1998: 9). The doctrines of 'free information' and the unfettered, disembodied nature of the Internet (akin to the idea of 'cyberspace' as 'a place apart' duly criticised by Miller & Slater) are strong. Combined with an 'un-

trammelled individualism' (Ross 1998: 10—13) and a hedonistic embrace of the abilities and freedoms of the end-user, much of the discourse surrounding the Internet ignores the physical efforts, the 'material conditions of production', that are necessary for the preservation of the systems in question, a tendency being illustrated by John Perry Barlow's widely acknowledged "Declaration of the Independence of Cyberspace" (1996). This tendency seems to transpire also into the more recent discourses on p2p and 'Web 2.0'. Furthermore, Ross argues, this ignorance sometimes translates into a general phobia about *any* regulation or government activity – not just those relating to new media – which is ironic, since state policies everywhere have not only restricted, but also governed and even facilitated the shape of information industrialism (Ross 1998). One can thus see how 'net libertarianism' and rudimentary neo-liberalism might be more closely interrelated than initially expected, especially given the convenience and individual gratification underpinning the establishment of p2p implementations. This was confirmed by Richard Barbrook (1998), when he noted how the Net in the 1990s was believed to accommodate either untrammelled neo-liberalism or anarcho-communism, while in fact it turned out to simultaneously accommodate both.

Moreover, there is another paradox. While no notion of freedom is absolute, Miller & Slater conclude, it takes the form of a normative structure, a social order (2000: 16). Just as with other discursively mediated concepts, the nature and ideal state of 'freedom' are subjects of negotiation, where the most powerful exponents often are the ones that take semiotic command. Just as the neo-liberal argument of the advantages of unbridled freedom seems to rely on an idealistic assumption that such freedom actually exists, it also tends to obscure how freedoms are always normative, negotiated and constructed. The 'copyfight' thus appears a conflict not so much between freedom and constraint (as if these were simple, self-explanatory, singular concepts) but rather as a range of conflicts between different models of order and normativity (Miller & Slater 2000: 18), relating to what kind of freedom should be

granted to the end-user. Both sides of the debate imply that p2p brings about decentralisation and diffusion of power, emancipating the user and disturbing the established order of the entertainment industry. However, the core of the debate seems to hinge on whose vantage point to adhere to.

The early development of the Internet happened in a much less commercialised domain than today (Lovink 2003). Noting the implicit nostalgia in looking back to this era makes for a clearer understanding of the current copyleft indignation:

> As soon as the masses invaded the new-media arena, the precious public domain was overrun by "dirty" market forces and even more "evil" government regulators. Ordinary users requested easy-to-use interfaces, tailored entertainment and, above all, safe and reliable systems. Business took over, and as a result, the digital public domain vanished. Lawrence Lessig does not talk about this strange circular movement of the digital commons concept – even though he must be aware of the eternal return of the tragedy. After every legal defeat, Lessig takes up an even bigger task. His is a clear case of "pessimism of the mind, optimism of the will." (Lovink 2003: 52)

Where Lessig's critique appears to derive from industrialist concerns, Vaidhyanathan comes from a more culturalist background. He has observed an emerging interdisciplinary and 'inchoate field that considers the ways in which culture and information are regulated' (Vaidhyanathan 2006) and labels this field 'critical information studies'. A central focus here is 'semiotic democracy' and the urge to bridge the gap between cultural studies and political economy; concerns that are shared by other notable scholars in U.S. American cultural studies like Henry Jenkins and Lawrence Grossberg, who addressed the fraught relationship between cultural studies and political economy already in 1992 – a debate which was revisited in the 1990s (see Grossberg 1995; Kellner, Garnham et al. in Ferguson & Golding 1997) and more recently by Wittel (2004) and Peck (2006). Vaidhyanathan's critique is nevertheless akin to Lessig's in that he conjures a clearly dichotomised image of how conflicting 'extremes of anarchy and oligarchy' are besieging present 'information ecosystems' (Nettime 2004).

Jenkins too shares the optimism (or even utopianism) of the collective potentials facilitated by Internet technologies that many of the 'copyleft' authors embrace. Both Jenkins (2006) and Vaidhyanathan refer to Pierre Lévy's utopian concept of 'collective intelligence' (1997), the latter author allocating this as the very core of the battle (Vaidhyanathan 2004: 21—22). Not only is the 'ideology of p2p' of sharing/collaboration in opposition to an ideology of seeing content as a commodity, but this ideology of p2p is justified by the technological bias of the Internet, he argues (2005: 15—23).

Next to Vaidhyanathan's 'critical information studies' one can put Lovink's recognition of a materially oriented 'net criticism'; a successor to Silver's (2000) historiography where increasingly critical forms of 'cyberculture studies' have taken over from earlier, initially journalistic but increasingly academic accounts of virtual communities and online identities. Lovink depicts the contemporary Internet as undergoing a renewed shift from consensus to control and conflict, where dissent is dispersed under the rubric of 'multitude'. In this 'new regime,' he argues, activism has to be primarily located online (Lovink 2003: 22).

Simultaneously, a much more Panglossian acknowledgment of a revitalised digital environment is spreading through journalistic, academic, and everyday accounts. In this narrative, the Internet is the motor in a new 'post-industrial' global economy (Castells 1996). In this economy, 'social capital,' based on an ethic of trust and collaboration, is described as a key value (Leadbeater 2000). Jenkins (2006) observes a similar tendency: media corporations are increasingly learning from the insights of fan forums and grassroots media activism. What is adopted, he argues, is increasingly a strategy of *collaboration* (or, in a more critical view, exploitation) rather than outright prohibition of these consumer-led movements. Here, the media industry is seen to effectively appropriate decentralised consumer agency. Hand & Sandywell (2002) note how these developments are deeply imbued with struggles over authority. Many

accounts of the 'knowledge economy' (Leadbeater 2000; Sklair 1995) equate digital media with demographic influence and thereby prompt an opportunist desperation, a race for the most optimal appropriation of audience power: 'Whoever controls the screens controls public opinion' (Hand & Sandywell 2002: 199). This can serve to illustrate how the protagonists have tended to employ *projections of potentialities* rather than sober, limited observations of actual conditions. The accounts involve an element of futurology; current events tend to be debated with a view to their potentials of being made permanent. I will note below how structurally amorphous mass phenomena like file-sharing thus prompt a permanent state of *prediction* and *probability*. If either side is seen to take the upper hand, the fear is that their agenda might continue being the defining one, as new patterns of use become normalised and materially entrenched.

A more recent emphasis has sprung up on networks as *architectures of participation* and *user-generated content* – the shorthand term for this is 'Web 2.0,' a phrase brought into circulation by O'Reilly Media (O'Reilly 2005). Most proponents of p2p file-sharing (represented by copyleft authors but also by organisations like Downhill Battle, Zeropaid, and Piratbyrån) hold up the prospects of a 'participatory culture' implicit to these digital platforms, and hence share a general sentiment with both the hacker movements of old and the 'Web 2.0' advocates of lately. The general sentiment is that a user-led 'Web 2.0' media environment of blogs, wikis and RSS-flows is evolving, thanks to a surfacing of p2p architectures. A similar user-led approach is implicit to the Open Source models embraced by hackers for decades. As will be shown below, the roots of this broad movement are manifold; the hacker ethos of Torvalds, Himanen (2001), Raymond (1999), Wark (2004) et al. and the entrepreneurial, progressivist spirit sometimes labelled 'the Californian ideology' are often said to be related. These are not only imbued by a certain understanding of gift economies and the 'pirate' ethos, but also by the spirit of other historically preceding modes of media

activism (cassette culture, radio activism, and video activism). Here file-sharing is but one constituent of a larger movement towards radical decentralisation and end-user empowerment, largely facilitated by technology. Due to its increasing ubiquity as technical protocol for self-publishing audiovisual content, BitTorrent is often seen to facilitate grassroots filmmaking and/or alternative forms of TV broadcasting.

The expression *'information wants to be free'* is similarly rooted in the cyberpunk/ hacker movement of the 1980s and 90s. According to hacker legend, it was coined by Stewart Brand at the first Hackers' Conference in 1984. It has a strong activist thrust, both in the sense that information is presented as an agent with an active will, desire or purpose, and in the sense that humans, as agents, have an active role in maintaining the dispersal of said information. This echoes what Hayles observes as the main cultural condition of virtuality: the perception that (decontextualised) information is 'more mobile, more important, more *essential* than material forms' (Hayles 1999: 19, emphasis in original). This normativity will turn out to be significant for the individual justification of continuing to copy files in the face of disapproval and denigration.

2.2.2. New technology as facilitator of activist media uses

What authors like Lessig, Vaidhyanathan, and others have in common is that they take as their principal examples those spheres of agency where a certain self-reflexive stance is pronounced among the actors involved: that of deliberately creating alternative platforms of peer-production or business models of user-generated content, or of using platforms like blogs and wikis for expression (grassroots media production). Strangelove (2005) advances the proposition even further in his diatribe against the established copyright regimes, suggesting a polarity between allegedly "active" (radical) and "passive" (pacified) use, by embracing and arguably overestimating the 'expressive freedoms' of Internet users. Urrichio (2004) is another author who equates the

architectural structure of p2p with a 'larger participatory turn in culture' (86), where p2p-based organisational models beget a more collaborative culture. Michel Bauwens (2002), one of the founders of the *P2P Foundation*,[3] presents a similar narrative of comparing the new, innovative practices of cooperative intellectual work by today's 'class of knowledge workers' with the solidarity of the labour movement that originated from the industrial working class of the past. He cites several commentators in order to argue for an analytical extension of the idea of p2p as technical paradigm to the socio-cultural sphere at large. Like Lévy (1997), Bauwens appears to believe in a form of 'evolution's arrow' (this exact phrase Bauwens has borrowed from evolutionary psychologist John Stewart), pointing towards a future of mass-cooperation, self-organisation and sharing. When he quotes Dutch academic Kim Veltman in stating that 'the advent of Internet marks a radical increase in this trend towards sharing', what is presented is a teleological account, a pre-destined history. The idealism implicit in much of this praise of p2p is observable in Röttgers' formulation 'P2P: Power to the people' (2003) and the P2Pnet.net slogan: 'person-to-person, people-to-people, peer-to-peer, 'puter-to-'puter'.

Hayles (1999: 9) observes an implicit regenerative reflexivity in technology, which forms part of its accumulated normative weight. To onlookers, the visible, actual use of p2p thus appears to re-generate the p2p world, thereby amplifying its destructive illegality or, depending on the political affiliations of the beholder, its productive activism. As a leading exponent of a posthumanist direction within social theory, Hayles shows how reflexivity in recent developments within social theory (like ANT, for example) has come to assume a constructive dimension in the discourses of subjects; the scientists in Latour's laboratory in a sense inventing "nature" as they set out to investigate this presumed realm. In a similar way, the 'trend towards sharing' observed by Veltman might constitute a self-fulfilling prophecy, justifying what is happening by

[3] See http://www.p2pfoundation.net.

observing that it is happening. The slogan 'information wants to be free' can be said to have a similar function, according to Hayles, in that it justifies the cultural interpretation that *information is an entity that is inherently separate from materiality*. Seeing information this way, 'viewed as a pattern and not tied to a particular instantiation' (Hayles 1999: 13) is appealing, since it frees information from the constraints of time and space. This is a grand feat, close at heart to the mythology of the 'Californian ideology,' and a harbinger of utopianism in that it promises a condition of virtuality freed from any material constraints – that is, freed from conventional societal or economical concerns.

Any major instance of mobilisation and/or deliberation by the actors involved is bound to form some kind of consensus like this, and to become reflexive in that it becomes potentially expedient to some utopian thrust or, reversibly, as a retort to any accusations from the opposite "camp". One could for example look at a movement like Open Source (FLOSS) within programming and how it has to strategically assume that its own mode of production and distribution is preferable to any oppositional one. The justifications for FLOSS operate by invoking a microcosm of entities rather different from the microcosm invoked by proponents of proprietary software. The two "camps" discursively reinforce themselves as such by invoking moral and normative claims – yet, in actual business practice, the two modes of production are becoming increasingly mixed (Economist 2009).

The mainstream 'copyleft' literature – which is defined by a loose consensus against copyright in its current form – rarely talks about the continually ongoing, individualised and largely invisible consumption of culture that takes place in the quotidian, domestic realm, except in those notorious cases when litigation strikes against unassuming music consumers or when consumers go together and make claims against the industry. This, while p2p-based file-sharing has become so ubiquitous for everyday media use, especially in a country like Sweden, that watching a TV might

often involve illicit copies without the viewer even thinking much about it. This mundane and often non-deliberate consumption of cultural goods is tricky to translate into anecdotal form, and lacks the necessary dimensions of deliberate 'resistance' and thus does not lend itself to exciting narrative. Nevertheless, this consumption is potentially as productive as those explicit 'Web 2.0' or p2p ventures embraced by the above authors, and nonetheless political.

A way to tackle this dilemma is presented by Couldry (2003), in suggesting an approach that focuses on new hybrid forms of *consumption-production*, since this 'would challenge precisely the entrenched division of labour (producer of stories versus consumer of stories) that is the essence of media power' (45). As Claude (2007) points out, although this hybrid interpretation of media use is not new, it tends to be applied to digital media practices like remixing music, collaboratively developing software, making websites – activities where it is probable that the user at some point violates copyright, wittingly or unwittingly. Yet, these are often activities that are expressly active or productive to begin with, and that are branded as even more contrarian to established economies of media use due to legal, political and economic controversy.

Although these activities are the common examples, the emphasis should not necessarily always be on activism *per se*. It might more realistic to acknowledge infrastructures that increasingly favour modes of use which give possibilities for everyone to become *occasional activists*, in 'smart mobs' (Rheingold 2003) or 'adhocracies' (Doctorow, in Jenkins 2006: 251). Given the current legal climate, some of these uses are made explicitly illegal and thereby labelled radical, although the initial intent behind these ad-hoc groupings might be entirely different, or even absent. For example, after having depicted a scenario similar to Lessig's where the Internet is 'bit by bit' made secure, reterritorialised and freed of dissent and obstacles to commoditisation, Lovink (2003: 14) emphasises how Internet activists are the main agents to

upholding vital forms of alternative organisation, yet how any non-sanctioned activity can be labelled dissent in relation to 'intellectual property':

> With the technical and law enforcement measures in place, any bit can be labelled "dissent." Radical pragmatists like myself believe that the picture is not gloomy, that there's still enough space for intervention and freedom for off-the-radar initiatives. This confidence is built on the presumption of an active minority of Net users who are willing to act, skilled enough to lobby, and equipped with enough experience to build social alliances in order to uphold or indefinitely circumvent closed systems based on profit through control and scarcity, while reinforcing open, innovative standards situated in the public domain that anyone can access and modify.
> (Lovink 2003: 14)

Any online behaviour is here defined by its standing in relation to the sanctioned modes of usage. *Not* adhering to DRM restrictions thus becomes unorthodox, if not a violation. Hence, one of the key tasks recognised by the activists appears to be creating alternative institutions that sanction these unorthodox uses, making *these* the "natural choice". This can be done by action (the establishment of web communities and forums tied to real infrastructures of sharing) and by discourse (discursively encouraging tinkering, or re-appropriating terms like 'pirate'). Since the infrastructures remain open, the argument is that anyone can join in to act and/or talk.

In the case of Sweden, the discourses of the loosely-organised but influential Piratbyrån do not only exemplify the re-appropriation of the 'pirate' label that is happening, but it is in part also highly motivated by a Deleuzean approach where the copyfight dialectic described above is, in fact, partially problematised. Their attempt at changing the terms of debate reached an apex in the organisation's 2007 Walpurgis performance.[4] Here, Piratbyrån stated that 'we want to stop explaining why file-sharing is righteous or not – as if there was a choice between copying and non-copying' and thus asserted the abovementioned normalisation of copying as an inherent premise for digital networking.

[4] See Fleischer & Torsson (2005) and http://piratbyran.org/walpurgis/. See also *Piratbyrån*'s exchange with Bill Drummond from the KLF: http://piratbyran.org/index.php?view=articles&id=114&cat=3.

There is a whole literature depicting a loose multitude of self-appointed hackers and 'cyber activists' opposing hegemonic, capitalist interests. Examples include Strangelove (2005), Atton (2004), Jordan & Taylor (2004) and Critical Arts Ensemble (1996). Levy (2001) outlines the early beginnings of this political stance, and an anti-establishment strain forms part of the 'hacker ethos' outlined by Himanen, Raymond, and Wark, although not in as explicit terms as for example Jordan & Taylor (2004). Although Jordan & Taylor never truly break out of the typically polarised narrative, they admittedly note the ambivalence of hacker culture: while it expresses alienating aspects towards established society and the military-industrial roots of technology, it operates by simultaneously co-opting other (often highly masculinised) aspects of said established structures. Media activism can thus be defined by this oscillation between co-option and opposition, utilising existing power structures (thereby relying on them) yet occasionally altering them. However, attempts are being made to increasingly break out of this inevitable dialectic by creating self-reliant platforms, self-sufficient infrastructures. Two other Swedish scholars, Otto von Busch and Karl Palmås (2006), point to this transformed notion of 'hacktivism' as something different than reactive antagonism, resistance or politicised defacement of existing structures:

> The traditional, cracker-inspired meaning of hacktivism is, after all, largely an extrapolation of the 1968 ideas (culture jamming, detournement, and more recently deconstruction). [...] contemporary theorists are increasingly moving towards a break with this era.
> (von Busch & Palmås 2006: 17)

What becomes central to this break is to 'create well-functioning self-organised structures (self-consistent aggregates) which can replace the previous structures' (19); a sentiment akin to Raymond's notion of 'homesteading in the noosphere' (1999) by which code becomes generative of new entities of form that are expedient and operational, thus comparable to spatial settlement in the digital 'frontier'. It echoes the above notion of facilitating platforms for everyone to become an "occasional" activist.

Von Busch & Palmås thus display the close link between the hacking ethos, the Open Source/GNU one, do-it-yourself culture and, as this thesis will come to show, the everyday activities of p2p file-sharers:

> Hacking in this sense could then be said to centre around some topics close connected to DIY culture and connoting mastery in a most literal sense. Making a computer (or any tool or system) do what the hacker wants, whether the computer wants it or not.
> (von Busch & Palmås 2006: 30)

Galloway (2004: 167) similarly characterises hacking as relying on effective 'exploits' where, tellingly, both of the above ideologies of 'net libertarianism' versus neo-liberalism benefit from structures of mutual exploitation; the malleability of digital content however being used to radically different ends. What 'net libertarianism' and neo-liberalism have in common is that they institutionalise and to some extent industrialise information, inserting it into a 'basic assembly structure' (Ross 1998: 80) involving processing, copying, replication and simulation. By having opened up access to technology, empowered users and decentralised control, hacking as well as 'Web 2.0' is often equated with an archetypal mode of control over technology and information that is 'democratic,' man-centred, relatively weak yet resourceful and durable, compared to the preceding mode which is 'authoritarian,' system-centred, immensely powerful and restraining, yet inherently unstable (see Mumford 1963; 1967). Manuel de Landa (1997) turns to Braudel's historiography in outlining 'meshwork' market structures that emerge in opposition to the more rigid 'counter-markets' or hierarchical 'strata' that define much of what is conventionally labelled capitalism. However, Jaron Lanier (2006; 2010) shows that also networked and distributed technical structures entail rigidity. What will be shown next is how the current 'pirate' ethos is often presented as a harbinger of breaking this rigidity. Still, this ethos should not be confused with totally altruistic gift economies, nor be seen as an innocent role open for

everyone. Its agency relies on technical expertise and lends itself to notions of prowess and self-assertion.

The activist bias in much of the copyleft critique draws on older modes of such media-related activism – movements which were often borne out of the concept of an articulated counterculture (Roszak 1970; Bell 1976b). Parallels can be made with the audio and video cassette cultures of the 1970s and 80s (see Bolin 2000; Keen 1987; Jones 1990; Moore 2004); guerrilla filmmaking / 'third cinema' (Solanas & Getino 1997); the early attempts at video activism in the early 70s ('Radical Software'); and even with the community radio ethos pioneered by Bertolt Brecht in the early 1920s. In the early days of radio, the new "wireless" was embraced as a harbinger of enlightenment and clarity of communication – essentially, a two-way medium. Brecht was one of the early enthusiasts of this conception of radio, believing that a collective approach to production could be applied to both radio and film (Silberman 2001). He was also convinced that involving the audiences as participators was paramount. This position was however rebuffed in the early 1970s by Hans Magnus Enzensberger (2003) in his critique of what he saw as a naively utopian and impossibly non-organized cacophony of splintered interests. Essentially, Enzensberger argues that singular, technically facilitated means of media production will not go far in terms of posing a viable, grassroots/activist system:

> The contradiction between producers and consumers is not inherent in the electronic media; on the contrary, it has to be artificially reinforced by economic and administrative measures.
> (Enzensberger 2003: 266)

Without determined collective organisation, 'the individual, so long as he remains isolated, can become with their help at best an amateur but not a producer' (266). To mobilise the inherent productive powers in the new, granular, dispersed media in any effective way, these powers need to be systematised. For a reader of Enzensberger, the fact that new, 'Web 2.0'-derived channels are so widely promoted and made easily

accessible is actually proof of their relative political impotence, reduced to harmless and inconsequential hobby projects.

It is vital to add how such subcultures of tinkering and activism have traditionally had a masculine bias, either by operating in typically masculinised environments or by explicitly favouring traditionally male values like expertise, competitiveness, obsessive-compulsive devotion. This has been noted by critics of the ideologically charged 'imaginary' that surrounds any new medium (see Boddy, in Lister et al 2003: 66—67). As for example Covert (1984), Spigel (1990) and Moores (1993) have argued (using the examples of 'radio hams' in the 1920s, or PC enthusiasts in the 1970s and 80s), much of the early adoption and tinkering with new, interactive media forms was popularised in mass media discourses as typically masculine pastimes. Often the domestication of a medium was seen as somewhat "emasculating" its activist, transgressive agency: 'once radio became a domestic medium, men lost their place as active agents. Now they were shown to sit passively, listening to a one-way communication system' (Spigel 1990: 87). Also in Jenkins's more current account of consumer participation below, the actors involved were disproportionately white, male, middle-class and college educated. The introduction of any new technology similarly tends to incorporate imaginaries of a frontier (Eubanks 1999) or avant-garde, 'taming' it or exploring its possibilities. Kevin Robins connects this impulse with a Western techno-culture that is expansionist and transcendental in that it never seeks solutions to emerging problems in less, but always in *yet more* extensive technical innovation (Robins 1996; Lister et al 2003: 63—64).

Further, a critique was pitched in the mid-90s against the short-sighted progressivism that not only fuelled exaggerations about 'information highways' but in fact reinforced the elitist nature of the political economy of the Internet. Barbrook and others were criticised as exponents of the 'Californian ideology' which fuelled much of the Internet hype of this era (given the vast expansion and imminent commercialisation of the Internet at the time). Writing about the reactions to this debate, Nick Dyer-

Witheford (1999) notes that much of the criticism against the commercial 'recolonization' of the Internet actually came 'not from the usual centers of the Left but rather from technoscientific workers most familiar with the radical potentialities of the new technologies' (205). A central exponent illustrating this clash of world-views is the overturn of the 1996 Communications Decency Act (see Singel 2006). This U.S. Congress act would have effected a radical containment of the Internet, to which Barlow (1996) was but one, fierce, hyperbolic protest. The defence used in the court proceedings very much hinged on the assertion that the Internet is ontologically different than other media technologies. See also the "World of Ends" manifesto (Searls & Weinberger 2003) for a comprehensive summary of this standpoint. 'Couched in idioms that combine liberalism, libertarianism, and undeniably communist impulses,' (Dyer-Witheford 1999: 205) an 'unmistakable' challenge to the prerogatives of corporate media empires was formed within the very 'Californian ideology' that in was in part embodied by these very idioms.

Consequently, the consensus of 'free' (as in monetarily gratis) that runs parallel to the strong support of open, participatory, democratic platforms and protocols noted above does not necessitate an altogether anti-commercial stance. On the contrary, many Internet libertarians are strongly in favour of entrepreneurship. In fact, the libertarian 'Californian ideology' typical for much of the Internet discourse is constituted by a view of the individual as protean, industrious and ultimately autonomous, entering collectives only when there is personal gain to be had. This tends to be coupled by a bohemian anti-authoritarianism and the conviction that technology is essentially progressive and beneficial (Barbrook & Cameron 1995). This is important to know when investigating the motives and justifications for file-sharing, while maintaining a critical approach to any overly enthusiastic claims to altruism or benevolence.

2.3. 'Piracy' and gift economies

The term 'pirate' is derived from an ancient Greek word meaning 'to attempt, attack, or assault' and hence the notion of theft by force or at least the threat of force is embedded into the term (Logie 2006: 68). Logie argues that 'counterfeiting' would be a more apt metaphor for much of what is deemed 'piracy' in today's copyfight, as those forms of 'piracy' do not involve active violence and/or bodily harm but merely damage economic interests.

Pre-Internet accounts of piracy (Chesterman & Lipman 1988; Gurnsey 1995) largely presuppose the role of pirates as *intermediaries*. Although consumers were becoming increasingly technologically empowered (not least by the proliferation of VCRs) throughout the 1980s, Chesterman & Lipman's examples are mainly of semi-professional, often shrewdly profiteering agents who mass-produce copies for retail purposes. Gurnsey's account differs not only in that it talks more about digital artefacts like software and video games, but in that it explicitly mentions *usage* as a category. However, since Gurnsey's focus is on the industrial management of copyright and measurable rates of semi-industrial counterfeiting, his analysis never contemplates mass-dissemination of copies in the hands of end-users. As Litman notes, 'piracy' used to be about people who made and sold large numbers of counterfeit copies. Today, the term seems to describe any unlicensed activity – especially if the person engaging in it is a teenager (Litman 2001: 85).

If the rhetoric of the proponents and opponents of file-sharing is to be taken as a more recent, post-Internet example of 'piracy,' it becomes clear that the term takes on a secondary meaning. If what was noted by said pre-Internet authors was characterised more by the traditional, literal meaning of the term, the connotations of the pirate *imaginary* or *persona* become its secondary, more rhetorically malleable meaning. The 'pirate' becomes an archetype that can be applied differently according to how one wants to frame the issue. In fact, the choice to label illegal file-sharing 'piracy' has had some rhetorically productive consequences for the file-sharers themselves:

> "Outlaw" activities have a demonstrable appeal. A variation of the same anti-authoritarian impulse that drives hackers, rockers, and rappers manifests itself in the grey markets of the American metropolis
> (Logie 2006: 74)

The 'piratology' of Armin Medosch (2003) exemplifies this more contemporary pro-file-sharing stance. He argues that while 'piracy' might from a local viewpoint appear to fit the traditional meaning of the term – an act of economic retaliation – it is actually something which does not exploit existing markets as much as creating new ones. He holds up the Open Source ethos as a productive, locally situated alternative to the neo-liberal hegemony of what he calls the 'data lords'. Piracy, emerging 'whenever there is a hegemonic power that asserts itself by establishing a trade monopoly,' becomes a proactive means, characterised by positive liberty (freedom *to*) rather than negative (freedom *from*; see Berlin 1969; von Hayek 2006). This positive conception of piracy is one that is related not only to 'hacktivism' but to the infamous writings of Hakim Bey (1991). Bey emphasises two central aspects of piracy: (1) its radical, emancipatory autonomism, and (2) its constructive agency in generating alternative (underground/illegal) economies. Even the early Internet communities were acknowledged as being expedient to 'gift economies,' (Barbrook 1998) and the theme is continued in what Vaidhyanathan calls the 'ideology of p2p' – most concisely expressed by its slogan 'sharing is caring'.

What can be concluded about gift economies is that 'gifting' is however only expressed in a compromised form on the Internet. 'Money-commodity and gift relations are not just in conflict with each other, but also co-exist in symbiosis' (Barbrook 1998) and the duplicability of digital data lends these gift economies overwhelmingly positive externalities; something which is invoked by the term 'cornucopia of the commons' (Bollier 2001) where every user is gaining more than will be contributed in return. The initial concept of 'gift economies,' formulated by anthropologist Marcel Mauss (2002), does not lend it any such altruistic

characteristics. In Mauss's fieldwork, sharing and giving were status-laden acts with direct consequences as for what hierarchical gains would be made by social actors as a result of their gift giving. For Mauss, the important implication is that a gift must be returned (83), and thus issues a bond of mutual obligations. According to de Certeau (1984), this economic logic of nonconformist sharing precedes capitalist accumulation – it is even seen as incompatible with it, since the imposition of subjects into alienating modes of mass production and wage labour distorts this intimate role of cultural products. For de Certeau, the productive agency in consumption is its ability to regain this mundane, close-range, idiosyncratic dimension to those cultural relations that in capitalist societies become part-industrialised, part-commodified.

The hi-tech gift economies of the Net seem to be thought to primarily accommodate the overall efficacy of networks, rather than being implemented for such *gemeinschaftlich* purposes (Barbrook 1998; Skågeby 2006) although what remains unique to gift economies is their indeterminacy, flexibility and informality (Skågeby 2006: 4–5). As shown by Slater (2002), degrees of formal order are hence imposed and different forms of valorisation introduced, so as to sustain some kind of normative framework, guiding online behaviour. Despite the lack of scarcity in digital objects, scarcity is somehow "invented" in order to maintain a moral order; this scarcity is subsequently invoked by normative terms like 'leeching'. Despite this imposition of market-like terms like 'exchange ratios' and 'leeching,' it is important to see how traditional market logics are hard to apply to 'fictitious commodities' (Polanyi 1944) – that is, goods that are not necessarily of the same type as what is termed 'commodities' in economic theory. According to Polanyi, work, money and land are all examples of 'fictitious products'. Due to the vastness of this networked stranger-to-stranger exchange, and the accumulated character of a 'pool' or 'commons' of content, norms of reciprocity, rituals and symbolisms should not be expected to apply here in the traditional, anthropological, essentially dyadic sense (Giesler 2006):

> Gift giving traditionally has been conceived of as an aggregate of dyadic gift exchange rituals. First developed in Sherry's (1983) influential analysis of consumer gift giving in anthropological perspective, this reductionist theoretical perspective has become ubiquitous in consumer research on gift giving.
> (Giesler 2006: 283)

> The peer doesn't care who will download from him, as it matters in gift-giving, since every peer is a complete stranger and no exceptions are made once a peer enters the network. The peer is interested in the music that represents his personal taste. Therefore, whereas in gift-giving the dependent variable is the recipient and the independent is the gift, in file-sharing the opposite occurs. Corporate groups of digital commons are being created around each mp3 file; they do not pre-exist.
> (Zerva 2008)

The files circulated can be seen as public goods that are non-perishable and superabundant. They are in this sense akin to common knowledge which citizens can "tap into" and form clusters of collective affiliations around. This mode of communication resembles Carey's view of communication as *ritualistic and shared* more than the view of communication as *pure transmission of discrete units* (Giese 2004). Information in this view, as a resource that 'can be used but not used up' (Mosco 1989), begets arbitrary regulatory impositions in that it must be bounded or claimed – kept proprietary – for it to retain its economic value, by copyrights and patents as delineators of artificial scarcity and proprietary control (Giese 2004).

Such corporate impositions thus generate control and artificial scarcity by invoking ontological categories of what digital information is, and how it is to be regulated. Meanwhile, 'piracy' and the peculiar gift economies of the Net also generate autonomous, productive entities by employing ontological categories, albeit of a different kind.

2.3.1. Ontological presuppositions underpinning the notion of 'gift economies'

As has for example been shown in the case of blood donations (Titmuss 1970), traditional monetary reimbursement can in fact act to the detriment of the efficacy of a

distribution system. The blood donors in Titmuss' study who received money for blood were generally poorer and tended to donate out of economic desperation, thus having more incentive to lie about the quality of their blood. Conversely, 'unpaid voluntary action [coupled with para-state institutions] was more conducive to trust than self-interest was' (Steiner 2003). Titmuss shows that *economic logics are determined by the ontological status of the product that is disseminated.* As with the fallacy of 'externalities' in neoclassical economics, the perceived nature of a disseminated product is not only a matter of disagreement among the agents involved. In fact, the settlements around what the product is and how it is therefore thought to be managed actually *determine how it is managed* (Callon 1998).

File-sharing is similar to blood donation in that it is a decidedly stranger-to-stranger form of exchange of a commodity that can be defined as 'fictitious'. Furthermore, this exchange is only made possible thanks to complex institutional actors (in the case of file-sharing, hardware-software assemblages; in the case of blood donation, mutually cooperating medical clinics). File-sharing differs from blood donation, however, and becomes more similar to the ancient gift exchange of Mauss and de Certeau, when noting that on many p2p networks direct personal gains are to be had from sharing volumes of material, and that individual peers can at least potentially be judged by the collections they present to the wider network (this was partially confirmed by my fieldwork).

Giesler & Pohlmann (2003) present four predominant modes of gifting motivation in the case of file-sharing: *realisation, participation, purification* and *renovation*. The two latter (*gifting as purification* and *as renovation*) can be interpreted as more explicitly political/partisan forms of motivation, whereas the two former (*realisation* and *participation*) can be seen as more utilitarian/convenience-based:

- *Gifting as realisation (of the self)*: 'The primary motivation is the functional benefit' of the p2p networks in question (2003: 12). The peer is interested only in the self and the acquisition of the desired music, wishing to influence other peers, receiving the recognition of their offer.
- *Gifting as participation*: The peer tries to create, belong and integrate into social groups, adding altruistically value to others.

The two politicised modes presume an oppositional stance, derived from the dichotomous 'copyfight' dualism. This risks reifying the notion that file-sharing of copyrighted material would constitute 'resistance' to an allegedly harmful political economy of the entertainment industry.

- *Gifting as purification*: 'Self-orientation means self-extension' (13); a policing of the self in the Foucauldian sense (personal harmony and ethical hygiene). Extremely self-orientated; 'a way to come closer to one's "ideal" self' (13).
- *Gifting as renovation*: The community of peers is fighting for a social change against capitalist society, emphasizing the importance of 'freedom of information'.

In the archaic societies of Mauss, 'gifting' is built into a set of social rules, whereas blood transfusions are not embedded in tradition and *gemeinschaftlich* obligations. Unregulated file-sharing as a domestic technology falls between these two extremes, yet it is often depicted as devoid of any links to customary or *gemeinschaftlich* propensities in the sharing, both when the sharing is depicted as a ruthless retaliation against the traditional entertainment industry complex, and when it is depicted as a merely technical fact, an 'unavoidable' outcome of the technical nature of the Internet. While Medosch's 'piratology' and Barbrook's zeal for the anarcho-communitarianism of sharing depict online activity as productive and generative of actual communities, the online communities are of a more optional, arbitrary, ad hoc character than the

gemeinschaft of old. Here, the cohesion is maintained primarily by *gifting as participation* (in Giesler & Pohlmann's sense) that is in part subjectively deliberate, in part a functional outcome of the infrastructure in question. Only by way of exception, some communities would be characterised by *gifting as (explicit) renovation*; a deliberate stand "on the barricades" as if it were. The slogan 'sharing is caring' can be seen as an attempt to make up for this lack of *gemeinschaft*. Moreover, it embodies a Net libertarianism wary of the commodification of information but keen on stressing the positive externalities of it when freely accumulated and available; a public good. However, like the slogan 'Web 2.0,' 'sharing is caring' veers close to Panglossianism in its reliance on actual collaborative agency; the confidence that individual *gifting as realisation* generates real, collectively beneficial systems despite primarily being a consequence of individual selfishness.

In Medosch's notion of 'piracy' as autonomous emancipation, positive liberty becomes appeasing since this form of liberty is non-reactionary. However, this positive autonomy carries a similar reflexivity as the 'information wants to be free' consensus criticised by Hayles above, where the positive liberty becomes world-making in its own right, when formulated as such by its proponents. Pirates make utopias, but these become utopian only in the discourse of the pirates themselves, and largely by emphasising certain characteristics of digital information and overlooking certain other ones. If sharing is in fact constituted by large degrees of *gifting as realisation of the self*, the utopian thrust of it might even be largely illusory, not so much since a lot of sharing appears to lack directly altruistic intent and that many of the beneficial effects of sharing occur regardless of user intent, but rather since the glut of 'content' on the whole reinforces the society-wide, common penchant for big-budget/Hollywood-created software and relies on mass-adoption of similarly corporate, proprietary hardware. This is in part confirmed when engaging with the specificities of the phenomenon.

To summarise, a key difference between the copyright-related piracy of the mainly analogue era of the 1980s and 90s and with p2p is that now the copying and dissemination are put into the hands of the computer *end-users* – that is, the consumers – and it occurs on a much larger scale, with more ease. To account for this, a renewed framework is needed; not simply one of active re-producers or media activists, as Strangelove (2005) stipulates, but one that admits also the tacit complacency with the existing output of the cultural industries, since the products circulated do not tend to be 'user-generated content' but the very Hollywood films and recordings by established artists that are said to be 'pirated'. Moreover, from this end-user perspective, the systems of dissemination that are becoming most easily available are no longer the industry-dominated ones, notably so in Sweden. The systems that people are becoming increasingly used to and complacent with are the p2p networks in question. P2p presents itself as a normative platform, inviting certain prescribed behaviours, in part inscribed as a result of a dedicated effort to encourage activist uses. As Williams (1981) pointed out, there is a tendency that the discursively defined qualities of a certain medium become reified and in turn actually shape reality; this does not only pertain to the differing ideologies of how the Internet is to be understood and thereby managed, but suffuses the entire issue of file-sharing down to the case of the diverging views of what type of digital 'content' mp3 files can be said to constitute, something which will be made evident further below.

2.4. Critiques of the main 'copyleft' standpoints

Henry Jenkins is regarded as one of the prime scholars in the narrow sub-field of cultural studies that focuses on fandom. The category of fandom has in the last decade turned out to be useful in discussions around media participation and convergence, since the category does not presuppose as much of an activist thrust as the above 'copyleft' literature. In a sense, every media consumer is an occasional fan when it comes to his/her preferences, and this is not usually a political category inasmuch as

the dedicated stand required by the copyleftists in the present debate over copyright. Fandom fosters participation and knowledgeability, but not necessarily activism. Thus, Jenkins argues is that the present media landscape is characterised primarily by *convergence*:

> A move from medium-specific content toward content that flows across multiple media channels, toward the increased interdependence of communications systems, toward multiple ways of accessing media content, and toward ever more complex relations between top-down corporate media and bottom-up participatory culture.
> (Jenkins 2006: 243)

Here, consumer and producer roles are blurred and occasionally clash, as media consumers become more like participants and co-creators of trans-media narratives, infrastructures and communities, and traditional media producers try to harness this participatory agency. The argument is congruent with Chris Anderson's concept (2006) of a 'long tail' of accessible media back catalogues, which assumes a savvy media consumer, actively seeking out content and recommending it to peers. What is important is that convergence is a process, not yet an end-point. It is the paradigmatic backdrop against which phenomena like the 'copyfight' are played out (Jenkins 2006: 16). In this view, the fight is about what principles the future cultural infrastructure should be based upon.

Jenkins takes a relatively sympathetic stance towards the media corporations, which he sees as equally important drivers of convergence as the grassroots consumer agencies. In this renewed corporate ideology, consumers are seen as active not passive, migratory not predictable, socially connected not isolated, and noisy not silent (18—19). Simultaneously, Jenkins applauds the authenticity of fan participation and, as noted above, the potentials for 'collective intelligence' facilitated by the Internet. Freedman (2006: 281) also emphasises this ability of p2p networks in having created more 'thriving and "authentic" fan communities in opposition to the perception of the record companies as bureaucratic, conservative and profit-led'.

As part of a reaction to the digital media revolution, conservative commentators and leftist ones alike have been arguing for an increased specialisation, personalisation, and individualism. For conservative critiques, see George Gilder (1994) or Keen (2007). For more leftist critique, see Oscar Gandy (2001), or Peter Dahlgren (2001). For a general argument on increased individualisation, see Beck & Beck-Gernsheim (2001). Instead, Jenkins emphasises the communal nature of media convergence, how it 'encourages participation and collective intelligence' (2006: 245). However, his account has a similarity with the main 'copyleft' literature: the examples given are almost exclusively about dedicated communities of fans and/or activists, in which "peak" communities or elites arise. He reveals how his account is one which does not address masses of consumers but is based in particular, localised instantiations of activists, fan communities, religious groups, artists, educators and advertising executives (12). They are, in the main, 'early adopters' and 'disproportionately white, male, middle class, and college educated' (23). In Jenkins's account of 'spoiler communities' (fan communities which specialise in predicting the outcomes of reality-TV shows) hierarchies were frequent, most notably in the exclusive 'brain trusts' (39) that demanded elite positions as arbitrators of expertise. This is but one example where Lévy's utopia of 'collective intelligence' (1997) in fact becomes challenged by traditional notions of expertise as bounded bodies of knowledge, mastered by individuals (Jenkins 2006: 52). There are further problems with the total openness of networks characterised by 'collective intelligence,' Jenkins points out: the ability for any member to dump any type of information (defamatory, misleading, distasteful, or hateful) 'holds a deeply totalitarian dimension' (55).

The communitarianism embraced by Jenkins, Rheingold, Lessig et al. is one which is couched in a predominantly U.S. American ideology of libertarianism, which is not entirely compatible with a Swedish approach to individualism and collectivism. The roots of this U.S. American, technologically progressivist communitarianism are

traceable not only to McLuhan but to Amitai Etzioni's (1968) visions of an 'active' society of mass participation and community-based media (Mattelart 2003: 89—91). Also Alvin Toffler expressed similar visions of an impending 'de-massification' of the media thanks to an all-encompassing digitisation. As the term *community* in this ideology is regarded as foundational to society, it is no wonder analysts are trying to seek this quality in online milieus, ever since Rheingold's groundbreaking virtual community thesis in 1994. Perhaps this is why the amorphous mass phenomenon of p2p is often described in the activist terms above, fuelled by the narrative seduction offered by the often anecdotal tales of *de facto* instances of innovation and establishment in the digital frontier. Activism implicates a strong emphasis on individual agency, and serves to tell those stories of ground-breaking innovation that the historiography of culture is so keen on capturing (like art historians always value *the first* of whatever style of expression). But as the preferred uses and behaviours become embedded into the emergent infrastructure by these pioneering hacktivists, another narrative is needed for capturing the experience of making-do with what is already in place. As Freedman observes:

> While the figures for downloading music are almost certainly understated, the low levels of 'creative' behaviour are more surprising and do little support to the notion that the Internet is an intrinsically more sympathetic environment for mediated activity. Blogging and online discussions are undertaken vigorously but, thus far, only by a minority of enthusiasts rather than the general online population. The figures demonstrate that the Internet is more commonly used as a tool of individual research and connection rather than as a site of mass-mediated production and interaction.
> (Freedman 2006: 285)

Similar figures are presented in chapter 4. A note from de Certeau (1984) springs to mind, and serves as an entry point to the chosen set of theories that will follow later in this chapter. De Certeau argues that in the field of cultural consumption (whose productive forces are not disputed here), the majority of subjects are located in the margins:

> Marginality is today no longer limited to minority groups, but is rather massive and pervasive; this cultural activity of the non-producers of culture [...]. Marginality is becoming universal.
> (de Certeau 1984: xvii)

In elaborating upon this, de Certeau suggests that in order to understand 'the relation of procedures to the fields of force in which they act' requires a 'polemological analysis of culture' (xvii). In other words, acknowledging the conflict at hand, yet not imagining it as a fight between two *a priori*, clearly defined, similarly equipped and equally strong opponents. The agents are shifting; just as one needs to avoid the view of the entertainment industry as a monolithic, singular entity, the collective of file-sharers is similarly heterogeneous, consisting of hard-core fractions of activists as well as masses of non-producers in the margins, whom the activist centre sometimes chooses to speak for.

Bauwens (2002) quotes Michael Hardt (2002): 'The traditional parties and centralized organizations have spokespeople who represent them and conduct their battles, but no one speaks for a network. How do you argue with a network?' Hardt argues that network contains movements that are too disparate, seemingly too contradictory, to form a unified opposition in the traditional sense, and he implies that the force of networks is instead exerted as a form of undertow. What could be observed, though, is how this "undertow" takes on material form by being manifested in the very infrastructures and discourses embedded in user forums, FAQs and "how to" documents, which despite being moderated by elite groupings often allow for an open discourse, more representative of the file-sharing body at large.

De Certeau characterises consumption as a form of production which is clandestine, poaching, fragmented, unrecognised – ultimately 'quasi-invisible' (1984: 31). With p2p, a complicating factor is introduced in that this quasi-invisibility is compromised in that the distributive agency of the peers is reinforced in the physical exchanges, thus reinforcing the material networks – although in an amorphous, ever-

changing manner. At its macro level, p2p remains a mass phenomenon (Cooper 2001); fleeting, *never-fully-overseeable* – similar to the IRC exchange described by Slater (2002). Yet, if observing the micro level (either chronologically or spatially), actual traces are left such as IP addresses and observable content archives among the peers. These traces are also what the authorities make use of when trying to police certain networks (see chapter 4). As Latour (2007) argues: digitally mediated uses and imaginations *leave traces*.

There is, within cultural studies, a heritage of formulating consumer agency in terms of 'resistance' to power, something which is fraught with many problems and paradoxes, as pointed out by Brown (1995), Lehtonen (2007), Lash (2007) and many others. This would be problematic for p2p-based file-sharing, for a number of reasons. To begin with, it is not clear which side would allegedly dominate the 'copyfight': do the file-sharers or the copyright industry have the upper hand? Secondly, as agency is distributed, it is not clear where the locus of the actual 'sharing' is. Is it in the machines, the protocols, or in the deliberate actions of the file-sharers? A presupposed agency of 'resistance' or 'empowerment' would traditionally entail human intent. While one could argue that human intent drives the launching and upkeep of hubs and indexes like TPB, the globalised and distributed character of the Internet means that there will always be a number of sites available for users to visit, many of these practically run as networks of servers placed in different countries. Further, there are fraught internal relations within the file-sharing movement. The occasional pro-file-sharing representatives may display internal differences and disagreements; the standpoints of Piratbyrån might for example partly differ from the standpoints of other actors involved. Subtitling sites like undertexter.nu have been seen to make profit from the uncredited work of other non-profit subtitlers (Västerbro 2009). There are also, as will be shown, unexpected externalities involved in the exchange of digital files.

In sum, it is analytically useful to trace a shift from a reactive mode of activism which is always the enemy's opposite, in other words characterised by *tactics* or by 'negative liberty' (Berlin 1969), to a more *strategic*, enunciated, autonomous stance ('positive liberty'). The latter stance is dependent on the recognition of one's own stance being based in a dominant condition rather than merely being an occasional act of defiance. Hence, it might be worth differentiating between 'resistance' and 'coping' (Garnham 1997: 67—68). De Certeau's concept of 'making do' seems appropriate, as it implies a scenario which is utilitarian and pragmatic, without predetermined outcomes. As we will see in chapter 3, the metaphor of 'a game' is useful, as it defines the players' range of action without determining their moves.

2.5. Conclusion

Mauss's original concept of the gift economy and Titmuss's study of 'fictitious commodities' show that gift economies are more calculating and less benevolent than many of the popularised discourses on the Internet would have it. Moreover, the management of 'fictitious commodities' entirely depends on the ontological closure reached in defining their fundamental characteristics. How this interpretive closure is upheld by institutions/macro-actors will be elaborated upon below. As both Lessig (1999) and Galloway (2004) show, a degree of standardisation (control) is necessary to facilitate openness and inclusion of technical networks. This logic of individual autonomy enabled by collective accumulation will in chapter 5 be shown to underpin not only the network logic of the Internet but in fact be a key historical attribute to reflexive modernity in general, and Sweden in particular.

As Enzensberger argued, the chaos and disorganisation of multitudes risks favouring autocracy and highly active, discerning, well-connected individuals over less connected ones. In this perspective, the formation of more (semi)institutional actors acting as portals to the file-sharing multitude could be read as an in part democratic phenomenon, easing access to technologies that were once at the behest of "geeks"

only. However, that does not necessarily mean that this institutionalisation is conditioned on altruism or entirely democratic agendas, although they act in the defence of unrestricted file-sharing; many of these formations are enterprises that have some commercial gains, although modest. Sites like TPB and undertexter.nu do profit from adverts.

More importantly, this increase in access comes with a double-bind. To begin with, with the convenience of integrated systems – it is important to note here how cybertechnology can historically be read primarily as facilitator for bodily convenience – the system blends into the everyday life of the user, and increases his/her reliance on it. It becomes a contextual background to everyday action; one of the many things affecting everyday life. This is of methodological concern for any anthropological account of media use. In addition, the convenience is facilitated by the unrecognised labour of decentralised users involved. Jenkins (2007) notes how this 'quasi-invisible,' free labour of users is increasingly appropriated by media corporations, in ways that harness large amounts of work without making it clear who would benefit monetarily from this. Many 'Web 2.0'-type applications like Wikipedia and the Internet Movie Database are remarkable in commercial terms yet built almost entirely on such unpaid user labour. Behind discourses of 'prosumers,' 'loyals,' and 'media actives' lays a corporate intention to harness the activity exercised by these fans, Jenkins implies. The alleged dichotomy between non-commercial and corporate interests is thus contested, as a (semi)institutional actor like TPB here appears more as a typical Internet entrepreneur than a subversive. Moreover, such fans are increasingly seen as 'lead users' of media content, and more committed to brands and products, something which is corroborated by the case study (chapter 6) and other studies. Jenkins argues that the erratic, unorthodox behaviour of such pernickety consumers is increasingly seized upon by media institutions. Corporations learn to accept that customers are reworking core

premises of the means of production and (more central to the case of file-sharing) distribution in order to accommodate their own interests.

Medosch's more recent stance mirrors this recognition of the cultural industries as increasingly adept at harnessing the "open," distributed paradigm heralded by the FLOSS and Creative Commons movements, but he remains more pessimistic: the norm is for cultural workers to be increasingly expected to work for free, he argues (Medosch 2008). More leftist, emphatically post-Marxist critiques (Terranova 2000; Söderberg 2004) have similarly emphasised the immaterial, unpaid labour involved in the continuation of Internet infrastructure, while Lanier (below) focuses on the technical aspects of the same tendency. The common factor here is accumulation that is *non-obvious, 'quasi-invisible'* and, arguably, *largely non-intentional.* Political force and expedience is in this sense built up "behind" the interfaces of these user-led applications, implying that users need not necessarily be expected to be motivated by activist intent. The present infrastructures erected to facilitate file-sharing thus allow for high degrees of comfortable, relatively passive use and consumption, while the "work" that begets uploading, seeding and further sharing is embedded in the protocols and architectures rather than in deliberate human action. This is not to dismiss the general consensus of 'active audiences' within cultural studies in the last 20 years; the assumption that audiences are always active, and that texts are inherently polysemic (Evans 1990) still remains. What is more interesting is the degree to which this audience activity leaves a mark on the communicative infrastructure in question (Hine 2000). According to de Certeau, the problem with audience activity (as an everyday, tactical, decentralised mode of productivity) is that it remains hidden, not manifested in spatiality (Buchanan 2000: 93). While not being directly observable, the usage that p2p begets gives rise to entirely 'reworked' infrastructures – to the point that the diagram of media consumption is now shifted so that for many people it is the norm to illicitly download before paying. In other words, the user agency is hard to translate as

mere 'resistance'. The opposite could even be argued, where user agency is a form of co-option or hidden employment in the service of an expanding circulation of content.

Chapter 3: Method

3.1. Introduction

The fieldwork consisted of two things: (1) A general overview of the mediated discourse on Internet forums, blogs, and comment boards. (2) Interviews with Swedish file-sharers by way of continual email exchange, with the intention of assessing the discursive tropes. After a pilot study (winter 2005—2006) the main fieldwork was conducted during the summer of 2006. The interviews were semi-structured, and followed a tentative questionnaire regarding the users' subjective experiences, interpretations and justifications. Both interviewer and respondents were practically anonymous to one another. In what follows, I will outline the particularity of my approach, and subsequently the reasons for it – from general epistemological foundations to more specific practicalities.

3.2. Not a traditional ethnographic method

Although the focus is on the individual users, the intention was *not* to make use of a traditional ethnographic method, for various reasons. Epistemologically, the phenomenon of p2p-based file-sharing is not only a product of human intentions, discourses, and habits. Hence, what can be learned about the phenomenon is not complete unless nonhuman factors are given substantial attention, alongside the complex interaction emerging between these concomitant factors. Traditional ethnography cannot account for these nonhuman, infrastructural factors – instead I have chosen to adopt an understanding of agency as a multifaceted, distributed and non-essential phenomenon, situated in the connection, the *association* between human and nonhuman entities. Agency is never exclusively held by any of the participating actors, but arises in the various interactions involved in the phenomenon at large.

However, I am not investigating the actual use. Effectively, what I am investigating are *discourses about use* and how these are *interlinked* with this complex

notion of agency. They are 'interlinked' in the sense of Haraway's 'material-semiotic accounts': the discourses not only mirror what they relate to, they are at the same time performative in that technologies are also largely constituted through discourse. The very ways we relate to technologies through discourses serve to formulate what our conception of the agency and ontology involved actually *is* like. In other words, discourse tends to relate to normative standpoints which dictate how we should understand what a certain technology "is;" how it works, what its general purpose is, and so on. At the same time, these standpoints help to form the actual use and development of the technology, since we normally use technologies in the ways we imagine them to be used. This is an ongoing process, which posits that a technology is ever-changing (transmuting) at least until its properties are so taken-for-granted ('black-boxed') that they are no longer questioned, and the character of the technology is thus no longer negotiated. File-sharing in its present incarnation is a clear example of a technology still in an emergent phase, where its character is fundamentally disputed. Hence this focus on discourses about technologies.

Within this discursive dimension, my more specific focus lies with general, notional categories for justification. Here, what is interesting is both *what* is invoked and *how* it is invoked. What is invoked varies significantly, some factors and entities having more unsettled ontological status than others (like, for example, the notion of the Internet as premised on a broadcasting diagram or a p2p one). The individual respondent accounts are thus read as "openers" into these categories for justification; found operators in the argumentation for file-sharing of copyrighted material (in a Swedish, contemporary context). They have significance as general standpoints in what could be seen as a nascent file-sharer "morality" among Swedish Internet users, if that is what one wants to argue for.

My method has similarities with an ethnographic (or more generally, anthropological) approach in that it argues for an inductive 'grounded theory' whose

method is qualitative rather than quantitative. More specifically, the approach is based on reflexive, critical interpretation of the users' own accounts, leading to what can hopefully serve as a 'thick description' (Geertz 1993). This rich, elaborate description goes beyond mere non-explanatory depiction, in that it *by extensive questioning of the respondents' own discourses* generates an analytical dimension which aims to show also how causal explanations are made through these discourses. I would still label this approach 'descriptive' instead of 'explanatory' since, in correspondence with Latour's 'sociology of association,' I do not want to impose any *a priori*, potentially arbitrary and predetermining abstractions, but instead acknowledge how general justificatory rationalisations arise from the users' own accounts.

Further, as the references to Law & Mol (2002) below suggest, this thesis is for all intents and purposes a *case study* of Swedish file-sharers. I do not attempt to answer to some general 'grand theory' which would be forever valid in all situations, everywhere. The specific rationalisations of the respondents are bound to a debate which is, to some extents, unique to Sweden and the given time period – but still with the potential, implicit to all situated accounts, that what is described could be transposed to other geographical settings or time periods. As an anthropologist would say that some observations might "symbolise" more general tendencies, not by being 'generally applicable' but open for transposition and/or translation (Law & Mol 2002: 15), this case study could be said to present a narrative which is in some aspects limited, but in other aspects potentially transferable.

Given that the users' accounts could to some extent be partisan (see 'activist bias,' chapter 2) a critical approach is necessary, where their claims are measured not only against both infrastructural and economical factors, but in terms of the internal argumentative strength of each claim *vis-à-vis* any other. One cannot take statements "at face value": each claim must be judged in terms of validity and normativity.

However, when I deem certain tropes either 'valid' or 'ill-informed,' this is inevitably a situated and subjectively articulated judgement which could itself be similarly judged.

It is therefore important to elucidate my own standpoint as researcher, since I stand as an arbiter for many of these judgments. Which discursive constituents could be deemed political, normative or tendentious, and to what degree? This can only be accounted for by my own textual reasoning, which in itself becomes a partial account, however with the intention to be balanced, reflexive, and respectful towards the different opinions that weigh against one another in the debate – but at the same time irreverent enough to criticise claims which lack validity or relevance. Moreover, technical and historical evidence becomes important, as evident in chapter 4.

Since the file-sharing world is characterised by a culture of (semi)anonymity, it was important to maintain a high degree of anonymity among my respondents, both in terms of me being anonymous to them, and of them being anonymous to me. Hopefully this meant that neither my nor their discussions were coloured by interpersonal influences, and that we could be more forthright in our email exchange. Their understanding of my standpoint in the debate would be elucidated by the short description of myself and my position at Goldsmiths College posted online, including some links to my personal blogs and articles. Whether they visited these was up to them, but it was generally clear from the beginning of our exchange that I did not have any bias towards any side of the alleged 'copyfight'. Moreover, my own standpoint would have emerged gradually as our exchange proceeded. Thus, my identity was not entirely cloaked, but our exchange on the whole was characterised by what McCracken (1988) et al. typify as a semi-structured, questionnaire-based process where, on balance, the respondents and researchers never meet face to face.

The purpose of an email-mediated method was not only to bridge geographical distance but, most of all, to maintain those degrees of anonymity that are already common to the online setting, and the potential discursive frankness following from

this. However, a key difference is that a 'long interview' also involves follow-up questions and thus an inquiry regarding the relevance and validity of some of the arguments. This inquiry is also thought to be exempt from bodily presence or personal influence.

The choice to work with a relatively small group of respondents also needs explanation. After the preparatory and pilot studies, it transpired that many of the tropes which repeatedly appeared in the public debate (both in mass media and in more specialised web-based fora dealing with issues of file-sharing and net culture) soon reappeared also among the respondents in question. Since my focus is on the nature of these notional arguments, not on exactly who presents them and not on their statistical frequency, the choice was to keep the group of respondents relatively limited, and instead probe the actual wording and the claims made, in relation to the complex notion of agency adopted. See 3.4.2. for further discussion regarding the selection of respondents.

3.3. Methodology – from theoretical standpoint to practical implementation

What follows is a systematic summary of my choice of method, from more general epistemological foundations to more specific, practical circumstances.

3.3.1. The notion of agency, and how justificatory discourses relate to it

> If agencies are innumerable, *controversies* about agency have a nice way of ordering themselves.
> (Latour 2005: 52, emphasis in original)

As the user discourses – like the discourses in the public debate – make use of various ideas of *what causes file-sharing* and *what can and should be done about it*, they ultimately invoke *what notions of agency that are involved.* By way of investigating these justificatory discourses, the complex character of the *technological agency* of p2p-based file-sharing can thus be shown and further explored. According to Boltanski

& Thévenot (2006) this form of justification is understood to operate by people relating their actions to larger, often overlapping generalities. Here, *all* sorts of heterogeneous agents which justify actions are invoked, in other words not only human ones: the nature of one's Internet connection; the friend or neighbour who introduced oneself to file-sharing; one's political opinion of the copyright industry; perceived "rights" and so on. The agents can be human, nonhuman, material, discursive, small, large, banal, mundane, or momentous. The process of invoking them can be both reflexive, performative, and creative, as successful justification hinges on juxtaposition and combination of the references involved.

A corollary of this is the notion of *technological agency*, which is central to my argument. While everyday discourse often aims to frame agency in more easily manageable terms of linear causality ("*this* made me do *that*"), especially when applied to more morally/politically controversial phenomena, there is a growing insight within philosophy and the social sciences that the nature of agency is much more complicated than that. Agency is never situated in only one place; it is inevitably always distributed. This has been most effectively demonstrated in the McLuhan-Williams debate on 'technological determinism' and 'social constructionism' (see Lister et al. 2003; Freedman 2002) and in more recent ANT (especially Latour 2005) alongside a growing posthumanist conception of agency (most notably Haraway; Suchman; Hayles). As agency arises out of interaction, or 'intra-action' (Barad 1996; 2007; Suchman 2007: 285), any interaction always involves forces exerting more influence than others. Some interactions are directly contingent upon material limitations, which often prompts a commonsensical labelling of such interactions as "machinic" or "technical". However, as I understand both Haraway and Suchman, an interaction is not dependent on one of its limitations alone. Rather, the declaration that a certain situation is characterised by "machinic agency" should be read as a situation which can be broken down into innumerable forces interacting – which is *not* to say there are no limitations (or at least

bias) favouring certain material properties, giving the instantiation a certain coloration, at least to the casual onlooker. The onlooker deems the situation as monocausal or monodimensional, simply as a means to simplify things and make everyday life more navigable. But that does not necessarily mean that the onlooker's judgment is right; most situations are in fact characterised by at least two conflicting modes of agency. The way I understand Haraway's and Suchman's questioning of reified 'agency' is as a heuristic that helps explode the presupposition of who is acting, and who is acted upon.

When someone relates to agency, it takes on a *figuration* of some form. One says that "the duplicability of a file makes it susceptible to be freely copied" but the same event – the unrestricted duplication of a file – could just as well be expressed as "the greed and lack of patience of today's youth makes them copy without restraint". These claims relate to the same event, but dress it in different modes of expression, each invoking entirely different registers of thought, and hence implying entirely different political repercussions. The former claim would by a traditional sociologist be labelled technological determinism, while the later could be characterised as Durkheimian social constructionism where collective explanations are prioritised. The crucial point is that *both* claims could be seen as valid and relevant, and what is of interest is who makes the claim, what entities and registers of thought are invoked, how and why. ANT uses the term 'actant' for these different figurations of the same event; we can speak of *ideo-* as well as *techno-* and *bio*morphisms (Latour 2005: 52—55) of the same phenomenon. An actant is a functional operator, the "mover" of action; be it an actor, a conglomerate or a system.

> Actants have a kind of phonemic rather than a phonetic role: they operate on the level of function, rather than content. That is, an actant may embody itself in a particular character (termed an *acteur*) or it may reside in the function of more than one character in respect of their common role in the story's underlying 'oppositional' structure.
> (Hawkes 1977: 89)

What limits the potentially limitless range of ways by which one and the same phenomenon can be figured are the ways in which agents credit or discredit certain agencies in their explanations of what makes them act (Latour 2005: 52). When agencies are given figuration, this always happens through accounts:

> If you mention an agency, you have to provide the account of its action, and to do so you need to make more or less explicit which trials have produced which observable traces.
> (Latour 2005: 53)

In turn, Latour says, these accounts are always based on two things: (1) an exclusion or dismissal of the competing agencies put forth by other actors and (2) an explicit theory of action. Here, I would directly compare Latour to Boltanski & Thévenot (whom he also credits in the reference above). Their concept of larger generalities aims to show precisely how etiological explanation models virtually always tend to depend on pre-existing ideological contexts. That is also why we are capable of categorising certain modes of causal explanation as 'technologically determinist' or as products of political activism, technical progress, and so forth.

Law & Mol (2002) similarly show how different discourses and rationalisations constitute 'orderings' of objects, topics and fields which may resemble one another but operate in different ways. They have two key points regarding complexity. The first point (a) is that we always simplify complexity. The simplification or simplifications we attend to and create relegate different things to the background or foreground, respectively. The second point (b) is that complexity arises even when different simplifications meet. Different modes of ordering (styles, logics) might conflict or correspond. It is important not to oversimplify our descriptions of the actors' own explanatory models. These actors too can be very attentive to the complexity at hand. This was actually seen in the respondents' accounts: they rarely invoked only one ideological construction, but all the more often developed a mix of many, often contradictory explanatory models.

Since discourse never operates in a vacuum, but reacts and relates to public debates, much of the file-sharer discourse did relate to the broader, largely polarised debate. Hence, the respondents often held that the agency of the phenomenon was situated in specific sites or situations; mainly in the physical properties of computer files and the simplicity and intentional design of the systems being directly appropriate for unrestricted file-sharing. This was especially the case in the modes of reasoning which were reactive to political accusations, as if the respondents felt required to "answer back" regardless of agreeing or disagreeing with the pre-existing claims, and in the accounts I interpreted as directly partisan. However, as the interviews proceeded and claims were questioned by me as a researcher, more complex modes of reasoning emerged, which partly and implicitly acknowledged the above problems.

Often the file-sharer discourse fell back on a technologically determinist position where, once again, the reason for sharing was seen as a product of the widespread, easily accessible and *ipso facto* unstoppable "nature" of the technology. Sure, part of this might be tautological, as the "technology" referred to is *unrestricted* file-sharing. Yet, accounts that equate this p2p diagram with *the Internet at large* run the risk of advocating a form of monocausal historical determinism, generally associated to a wider notion of digitisation as an irreversible physical force and the notion that 'information wants to be free'.

At other times, the respondents fell back on a notion of 'use' that appeared to assume agency as *primarily residing in individual users*. The issue was here framed as if it was mainly a problem of individual users making the decision to use or abuse the system, and that it was "up to oneself" to decide whether one wanted to "keep up" with these new technologies or remain "left behind": an individualist stance, furthering the heritage apparent in the 'Californian ideology,' the 'hacker ethos' and the partiality to (male) expert use and tinkering that appear to underpin the present culture of file-sharing. Initially, some respondents expressed rather little in terms of a more subtle

explanation of the phenomenon than this very individualism – something which might appear ironic given the strong emphasis on collectivism and communal sharing that was also expressed, often by the same respondents – but as the interviews proceeded the argumentation became more nuanced. These more thoughtful accounts also assumed the ethos which is superficially collapsed in the slogan 'sharing is caring' but which came to be practically translated into a more utilitarian approach in that *what is good for overall network efficiency and accessibility is ultimately good for each node involved*, and that uploading hence becomes valued more than downloading.

However, while this utilitarian notion of collectivity is argued for in virtually all file-sharer discourse (publicly and privately), only occasionally did the notion of a *collectively based normativity* appear – that is, the idea that the institutions and assemblages of file-sharing come to exert 'prescriptive' agencies of their own. This was surprising, given two things: (1) the fact that unauthorised file-sharing can be seen as significantly technocratic, despite its initial countercultural impulse (this will be elaborated upon below), and (2) the extent to which p2p-based file-sharing in Sweden has become a widely embraced technology, ubiquitous to the point of being normative. However, there also seemed to be methodological reasons for the respondents' reluctance to describe the phenomenon as normative. For example, more complex or controversial modes of reasoning tend to appear only after an escalation of the interview process.

There could be – as some commentators have hinted – a burgeoning morality of usage, acquisition and disposal of cultural products in an era of increasing digitisation and widespread, casual file-sharing. This morality could also be expected to be interlinked not only with the above complex and distributed notion of agency, but with the normativity which results from the highlighting of certain figurations of agency above others and the implicit norms which are embedded in the actual everyday use of these technologies.

These norms, and the claims to truth and rightness they comprise, will make a significant part of what follows, not least in that the respondents' claims always operate in relation to pre-existing public discourses.

3.3.2. Prescriptive formations and material alliances

In an ecological view, when some ontological premises are introduced – for example, the fact that films and music can be acquired virtually for free – this becomes a touchstone which all competing systems have to relate to. As the shift from analogue to digital carriers enabled a full-scale digitisation into duplicable, discrete files, these were beset by an unexpected externality: as pure data they contain their own, radically eased means of duplication and dispersion. If new media do not only incorporate older ones but actually, by their very existence, re-shape the nature of also these older media (Bolter & Grusin 1999) – then Lash's argument (2002) that the digitization of 'old' media forms brackets these forms within an informational (data-based) regime would mean that this regime would come to haunt also the original, not-yet-digitized 'old' media in question. P2p-based file-sharing, as *mass phenomenon* and *infrastructure*, thus becomes a condition. Star & Bowker (2002) note that infrastructure is *embedded*, *transparent*, and *becomes taken-for-granted* in the sense that it starts out as a practice which is extraordinary at first, becomes learned by continuous use, and thus made mundane. Further, they argue, it *links with conventions of practice* and becomes an *embodiment of standards*. Cooper (2001: 17) draws on Simmel (1971) in acknowledging that *mass* – both as an aggregate of human agents or of cultural objects – usually appears to be ever-fleeting, transient. The aggregates generated in p2p infrastructures have this amorphous, never fully overseeable character. It can be invoked but never fully substantive; a circulation into which one taps in and out. In other words, the network becomes a given entity which is blurry and never entirely delimited, but something which one can relate ones own individual actions and

behaviour against. In terms of relating to such vast electronically connected masses, Cooper (2001: 34) argues that one is forced to resort to *probabilities* rather than certainties. Consumers searching for particular content on a file-sharing network have to rely on the probability of finding it, while the police searching for proofs of delinquent behaviour similarly have to make estimates and "shots in the dark". As is shown in chapter 4, the technical configurations of contemporary p2p networks never guarantee the sustained availability of any given cultural product – and likewise, the user presence is never permanent, only transitory as users go on- and offline.

The 'copyfight' debate ultimately resorts to these probabilities time and again: the entertainment industry argument that file-sharing is hurting sales relies on a probability calculation, while the debates regarding possible legalisation or increased crackdowns on file-sharing makes similar estimates, and the file-sharing subjects themselves keep referring to these approximations while making their own estimates of the possible risks, damages or benefits effected by file-sharing. The complexity and lack of overseeability begets an uncertainty which, in turn, begets argumentation and reflexivity among the various actors.

This reflexivity turns on invocation of said ontological premises, which is not to say that these premises are pre-given, non-disputed or in entirely transparent. They can be invoked differently, depending on viewpoint and what register of valuation one utilises, what values one believes should take precedence over others. The newer, the more unpredictable or overseeable a technology is, and the wider its societal impact, the more pertinent the concept of 'ontopolitics' seems to be. An example is John Shiga's (2006) application of ANT to mp3s as artefacts and protocol and the iPod/iTunes as design diagram. This approach primarily focuses on the site of production, yet still shows the advantage of treating agency as 'inseparable from the distribution of action across heterogeneous materials' (Shiga 2006: 46). In other words, unsettling of

concepts like 'content,' 'infrastructure,' and 'property' brought about by digitisation encourage an ANT-influenced epistemology.

The local interactions enacted in everyday file-sharing practices thrive on a range of agencies, not only the human activity of the users but the ways in which mp3 files and torrents become invoked as agents which shape the nature of the interaction, in turn shaped by the perceived nature of the larger collective of the file-sharing infrastructure. Alongside the notion of 'actants,' two other concepts within ANT, 'delegation' and 'prescription,' become instrumental. Another useful term is 'black-boxing'. In Langdon Winner's (1977: 279—305) influential argument, the ubiquity of technology in late modernity constitutes a complexity that is by and large concealed to individuals as laypersons: 'One becomes accustomed to the idea that systems are too large, too complex, and too distant to permit all but experts an inside view' (Winner 1977: 288). Access to the 'black boxes' of technology is thus linked to power, and to methodology. As a power dimension, here is where the file-sharers' active usage becomes a means to "open up" a technology for their own gain.

'Black-boxing' can also mean the closure of controversy; how social meanings of actors become settled (Whittle & Spicer 2005, drawing on Latour & Woolgar 1986). As a heuristic, 'black-boxing' is a means of deliberately focusing on certain aspects of a technology; this thesis, for example, prioritises the perspective of the end-user, not the network administrator. Overly exhaustive technical detail is shunned in favour of a perspective that tries to integrate also human discourse and agency into the analysis. Despite making a thorough account of the protocols that facilitate the sharing, I deliberately overlook the manual construction of these protocols (the work of administrators, programmers, and engineers), as this would lie outside of the scope for this thesis and make my account overly complex. This is not to ignore the complexity of agency that ANT apprises us to, nor the insight from Winner that 'behind modernization are always modernizers, behind industrialization, [...] industrialists'

(1977: 53) – but rather, it is a response which takes its cue from ANT in recognising that the structures generated on the whole tend to outlive the conscious human agents who instigate them; like ants in an ant-hill, the accumulated efforts of its builders far outlive the individual free agents themselves. As Moores (1993: 74) and Mackay & Gillespie (1992) have pointed out, the SCOT perspective (which preceded ANT) tended to focus too exclusively on the invention, design and management of technologies, overlooking issues of appropriation and signification. The terms used by ANT theorists for these phenomena are 'delegation' for when humans delegate tasks to nonhuman objects, and 'prescription' for when technologies prescribe certain behaviours back to humans. Consequently, the latter term will be of more relevance to this thesis, and what is partially black-boxed are the institutionalised instantiations of the former. Interestingly, as Slack & Wise (2002) note, technology usually prescribes behaviours back to *all* who encounter them, not just those who initially delegate the task. 'In this way,' Slack & Wise hold, 'technologies are moral. They impose "correct" behaviour and foster "good" habits. [...] In addition, the technology may be discriminatory' (494).

ANT can be criticised for being unwieldy, since its analytical heuristic is entirely based on letting the entities involved remain ontologically uncertain. As Latour argues, if it was reduced to the view that, say, technical objects causally exert forces onto human agents, that would be 'a clear return to technological determinism' (2005: 70). Instead, the constant ambition is *not* to 'pre-define what the building blocks of the social consist of' (40) and therefore ANT texts can be criticised as sometimes appearing extremely abstract, overly complex and descriptive.

In that view, the scope of this thesis is limited by focusing on how users justify and relate to their everyday uses of already pre-existing networks. Although the p2p network's operability is directly reliant on the co-distribution of peers, and that its partitions are porous, in some aspects malleable and open to participant co-production, on the whole it becomes a "given"; a pre-existing collective, an institutionalised mass

entity which these individuals relate to. As Lanier (2006; 2010) argues, in some aspects digital networks are in fact the opposite of malleable. Despite their genealogy within the 'counterculture,' p2p networks exert a technocratic influence of their own – however, not in any necessarily malevolent way.

Ithiel de Sola Pool (1983) argued that distributed, de-centralised media technologies have a greater bias towards freedom than centralised, broadcasting-like ones. However, Pool did not presume the outcome of technological change as inevitable and/or stable – instead, he 'predicted a period of prolonged transition' where stability would always be eluded (Jenkins 2006: 10—11). Andrew Feenberg (1999) critiques technocracy on similar grounds. Here restraining, technocratic organisation (increasingly) immanent to modern societies is seen to be countered by user interventions which challenge undemocratic power structures as it were "from below". The escape from technocracy does not lie outside of the technical sphere but in a specific form of 'technical micropolitics' (108) where individuals driven by civic enlightenment become lay activists through individual, non-mandatory engagement. By appropriating technologies creatively, making use of the "interpretive flexibility" of technology, these individuals can make *a posteriori* interventions to the already-established technocracy at hand – 'hacking' the system. These interventions are themselves made possible through technology, often even the same technology as the one appropriated by the dominant polity, however appropriated differently. Moreover, this model does not presuppose a dedicated activist identity or predisposition among these individuals, but comes into place only in the instances where conflict is at hand:

> Who are the actors involved in this new type of [micro]politics? Not citizens as such, but individuals who are directly affected by a particular technical decision. (Feenberg 1999: 120)

The 'file-sharer' actant could be interpreted as the outcome of such effects. According to Feenberg, this type of emancipation has also been key to the development and extension of today's Internet, increasingly 'adding human communication functions to

systems that were originally destined to handle data' (121, 126). In other words, entirely 'black-boxed' technical systems can be changed, given enough accumulation of micropolitical acts. And due to the accumulated, totalising functioning of systems and networks, their renewed agency can become dominant in its own way. Given enough people illicitly copying for their own use, this quickly becomes the norm in itself.

De Certeau's theory of strategies and tactics is useful, since it helps outlining a model of hegemonic struggle without succumbing to determinism: 'Games define the players' range of action without determining their moves' (Feenberg 1999: 112). Related to technology, 'the technical code is the most general rule of the game, biasing the play toward the dominant contestant' (112). This is how I understand technological 'prescription' – not only as a game of "making do" with the rules at hand, but also invoking these rules by way of argument and claims for validity. Conflicts are in this sense productive:

> the way disputes develop, when violence is avoided, brings to light powerful constraints in the search for well-founded arguments based on solid proofs, a search that thus manifests efforts toward convergence at the very heart of disagreement.
> (Boltanski & Thévenot 2006: 13)

As with Latour's 'actants,' the proofs gain their validity and weight by way of striking *alliances* with aspects of the infrastructure, offering ontological stability and generality. The more connected, the more real; the less connected, the less real.

> Proofs oriented towards the sense of what is just have in common with scientific proofs the fact that they both rely not only on mental states, in the form of convictions or beliefs, but also on stable and coherent arrangements, and thus on objects subject to general assessment.
> (Boltanski & Thévenot 2006: 12)

However, as the same authors point out, such proofs tend to operate within epistemological and ethical registers ('domestic' styles for consumption/ households/ families, or 'industrial' styles for production/work/institutionalisation). Nevertheless,

every specific situation incorporates several such partially overlapping styles; they are not mutually exclusive.

3.3.3. To infer general claims from situated particularities, and the reliance on pre-existing accounts

Qualitative knowledge production is by its character "messy," and an ever-ongoing task – especially so when the studied phenomenon is still in a phase of change and shrouded in controversy. The practical experience of engaging with a technology (to gain insight into its technical modalities by reflexively engaging with its construction) is contrasted with the discursive approach which also makes part of this insight (to examine the existing written documentation, alongside the accounts of the different actors involved). Hence, this thesis is an attempt at reflexive analysis of the interpretations that I as a researcher make of other people's discursively mediated interpretations (see Geertz 1993) – inevitably coloured by my own direct experiences, but with the ambition of being independent and maintaining a critical distance.

Through personal, self-reflexive interaction with the technology, the researcher can gain introductory insight into the minutiae, practicalities and technicalities involved. David Silverman (2001: 286) advocates a 'constantly comparative method' implicit to qualitative methodology. He mentions the ever-present opportunities this gives in terms of making use of data which is 'naturally occurring'. Hence, the making of this thesis has gained from pre-existing texts such as blog posts, web forums, articles and chat exchanges that have occurred on networks and sites of interest. In terms of chat functions on actual p2p networks, this was most notable on SoulSeek. I have personally taken part in chat exchanges online, and have perused various forums (like the Piratbyrån website) which gave me an indicative view of the existing arguments. Such experiences, which by and large prefigured the main fieldwork in itself, were also useful for finding respondents: the respondents were either linked to Piratbyrån, to the comments functions of blogs or articles, or found to be repeatedly frequenting certain

networks. Hine (2000) emphasises the importance of previous experience by arguing that there is often a fear among cultural studies scholars of 'going native' or losing their sceptical edge by becoming too familiar with their object of study:

> This may explain why ethnographers often develop only limited competences in the technical work which their informants do, as if incompetence was in some way strategic in maintaining strangeness.
> (Hine 2000: 54)

In contrast, she maintains, one can gain from being competent. Reflexive engagement with Internet technologies can give good insight into the interpretive problems that users in general might have. The cultural researcher might not imagine the situation of *every* user, but can at least reflexively experience what it is to be *a* user (Hine 2000: 23). This begs the question of what can be "taken for granted" in the researched environment: If enough reflexivity, clarity, and argumentative honesty is maintained in the initial, "rudimentary" fieldwork that this previous personal experience could be said to constitute, the factors which become "given" in this environment can be elucidated in the fieldwork proper. *Without* preceding, personal experience, it would be hard for the social scientist to know what to hypothetically expect, where and what to look for, and what questions to ask in order to generate interesting answers. By reading blogs, surfing the web and investigating the practicalities at hand, it was possible to locate the actors involved, the primary research questions and respondents to ask; initial decisions which were later questioned and problematised.

Despite us being bound to certain, situated points of view, Sandra Harding (1991; 2004) points to the valuable political and intellectual history of 'objectivity' as a term, as it has referred to accounts with explicit claims to truth rather than mere opinions (Harding 1991: 160; Wylie 2004). Even in feminist standpoint theory, there is an appraisal of 'strategic distance' or 'passionate detachment' as a goal or (unattainable) ideal, at least in situations marked by seemingly strong commitments and/or partisan beliefs. By way of detached inquiry by the researcher, such commitments among the

subjects might be rendered different: the firm defence of "the right to share" might, for example, turn out to be more of a logical interpretation of technical properties than a political attachment in the romantic sense.

Attempting a 'detached' inquiry might therefore change the interpretation of standpoints and agencies, as these things become gradually reconsidered. Alison Wylie associates this dilemma to interactive technologies in general, where p2p-based file-sharing is but one example:

> There is no reason to assume that the qualities of empirical adequacy, consistency, explanatory probity and the rest cannot be realized, in some combination, in the investigation of objects of knowledge that are not "really real", for example, in the study of social phenomena that are *interactive*. Certainly objectivity in these cases may be sharply domain-limited; *empirically adequate knowledge about an interactive social kind that transforms itself in the course of investigation will not travel very far, but is no less objective for all that.*
> (Wylie 2004: 345, emphasis added)

The concept of 'truth' is routinely assumed to be a singular one, while in reality *many* truths could be found to coexist, each one with specific applicability and specific to the knowing subject and his/her truth claims (especially so within the social sciences, and all the more so with regard to phenomena whose nature is still debated and in a mode of change). Within pragmatist epistemology (Rorty 1991) the strength of each truth claim is ultimately dependent upon epistemic standards which are context-bound – they are historically contingent and also culturally and linguistically specific. This applies also to the supposedly objective truths and explanatory models within "hard" science, at least in that they are formulated in a context-bound discourse (whether their non-discursive, nonhuman referents have objective existence or not is a question for an extensive philosophical discussion for which there is no room in this thesis). In short, p2p-based file-sharing is but one of many contemporary issues (alongside those of surveillance, integrity and copyright) around which citizens are gathered in temporary 'publics' in the sense initially formulated by Dewey (1927), where truths are contingent

rather than "objective" in a positivist sense. As can be gathered especially from the debate around Söderberg (2008), traditional ideological standpoints would not necessarily determine different actors' views on these issues; market libertarians on the right as well as anarchists on the left can be seen to defend free file-sharing, on different grounds. One can make parallels between pragmatism and the institutional theory of art (Danto 1964; Dickie, 1974; 1997). What determines the nature and status of an artwork is ultimately the *art world* (in all its complexity and often-contested character). Correspondingly, what determines the status of a truth claim, and the nature of the phenomenon it refers to, is the *epistemic community* (arguably even more complex, albeit highly institutionalised in the academia). As Stanley Fish (1989) maintains, the *empirical practice of making claims about phenomena* is different from the *epistemological practice of theorising the possibility of these claims*. Empirical "home truths" thereby tend to hold their ground – at least in the short term – regardless of how questionable their possibility is in epistemological terms of validity, situatedness and so on.

> Where then does this leave us? Precisely where we have always been, making cases for the significance and shape of historical events with the help of whatever evidence appears to us to be relevant or weighty. The reasons that a piece of evidence will seem weighty or relevant will have to do with the way in which we are situated as historians and observers, that is, what we *see* as evidence from whatever angle or perspective we inhabit.
> (Fish 1989: 312, emphasis in original)

If knowledge is always to some extent partial, then *relativism* – something which standpoint theorists tend to be repeatedly accused of – becomes a practical impossibility. To deem all claims to be equally meaningful or meaningless, as a radical form of relativism would imply, would itself entail a positioning that would be esoterically removed from all other standpoints; something only possible for gods and not humans. Thus, disproving the partiality, constructedness, and conditionality of knowledge would only be possible as a forcefully dominant 'god trick' (Haraway 2004).

Accordingly, Silverman (2001: 295—296) labels the orthodoxy a 'divine' one where the social scientist thinks him- or herself always "knowing best" and "looking through" the respondents' views. Here, people are merely 'cultural dopes,' and their behaviour repeatedly measured against normative, allegedly 'objective' measures of for example "optimal communication".

In sum, the fact that one's insights are text-based, locally situated and politically charged does not necessarily make them lose relevance or validity, since there does not exist any external, universal, *a priori* measure of validity. The measures used are, also they, inevitably text-based, situated and political. Stanley & Wise (1990) argue that part of the problem with the inevitably contingent nature of truth claims is that people tend to fall into a dichotomised understanding: *either* you are seen as a relativist *or* you are seen as a foundationalist/essentialist. Instead they argue for a 'fractured foundationalism,' where 'there are truths, which speak to the existence of different, overlapping but not coterminous material realities' (41). The problem with conventional understandings of objectivity, Harding continues, is that it is *not rigorous or objectifying enough* (2004: 128). As soon as one admits that all perspectives involve partiality in some way, and that 'our best claims are themselves situated' (Tanesini 1999: 152), one sees that also the dominant discourses within each field are themselves to some extent partisan, and to some extent arbitrary. By taking differing perspectives into account and by illuminating the topic from points which may be marginal to the hegemonic centre, one can investigate exactly that 'combination of nearness and remoteness, concern and indifference, that are central to *maximizing objectivity*' (Harding 1991: 124, emphasis added).

Hence my epistemological choice of focusing on user discourses. Many coterminous truths can be thought to exist, alongside each other, partially conflicting. Neither the copyright industry nor the illegal file-sharers would in this sense be totally wrong; they can both be (partially) right, depending on which epistemological (and by

extension, ontological) understanding one has of the phenomenon. To make some practical examples: epistemologically, can the record industry *know* that illicit file-sharing of their copyrighted products would harm their business? Can the file-sharers *know* that their activity does not harm the copyright industry? Ontologically, what *is* a digital file? Is it an artefact which can be exchanged, bought and sold, or is data more akin to informational or communicative flows? Many epistemological dimensions thus coalesce, each one important in their own right: the lack of academic studies of the technologically constituted life-world of the users; the specific material-semiotic accounts of motivation, habits and norms thus generated; and the inevitably political meaning of all this, given the current copyright legislation.

Given this, I will nevertheless argue here that by maintaining a high standard in terms of epistemological honesty, openness, reflexivity, 'passionate detachment' (or 'manufactured distance') – in other words, traditional constituents to the ideal of objectivity – one is capable of making an analytical leap from the particular to the general. In his seminal, constructionist account of ethnographic fieldwork, Geertz (1993) proposes a distinction between 'inscription' ('thick description') and 'specification' ('diagnosis'), but also points to the arbitrariness of distinguishing between the two. 'What we call our data are really our own constructions of other people's constructions of what they and their compatriots are up to' (9). 'Inscription' would here be to *fix* the meaning that particular social actions have for the actors who perform them, while 'specification' is to *elucidate*, as clearly as possible, what the knowledge 'demonstrates about the society in which it is found and, beyond that, about social life as such' (27). Herein, Geertz argues, lies a double task: (a) to uncover the structures that inform the actions of different subjects, and (b) to construct a system of analysis which is capable of revealing what is unique for these particular subjects in relation to human behaviour in general. He thus describes a strategy for how to correlate specific observations with broader truth claims without falling into the trap of

believing these truth claims to be universal and totalising. What follows is an attempt of sketching a heuristically useful version of this strategy, mainly by synthesising it with the problem of technological agency. Moreover, I will also problematise the fact that due to the mediated character (email, web) of the respondents' claims, these constitute textual artefacts rather than verbal speech acts.

3.3.4. Reflexivity: the researcher's own account of other people's accounts of the world

If one sees knowledge as constructed, situated and subjectively formulated, questions of reflexivity become unavoidable. The alternative – "non-reflexivity" – would not be compatible with the above insights. Further, reflexivity should not be misinterpreted as an excuse for methodological confusion, as is sometimes implied when reflexivity is portrayed as a synonym for self-indulgence, non-specificity and relativism, or a meandering on details which never leaps from particular to general.

Internet-based discourse analysis is special, in that it requires a focus also on its specific material environment. Once again, the researcher's own account of his/her personal experience of the technology becomes important, since this experience is assumed to shape both his/her formulation of questions and interpretation of respondent claims. The only way one can make visible this individual understanding of the specific material architecture at hand is by detailed accounts of what this understanding looks like. Such accounts should clarify how p2p-based file-sharing is understood by the researcher, and for what reasons. The challenge lies in *confronting* these preliminary understandings rather than eliminating them, since it would be impossible to fully eliminate them. Only by making them visible, we can investigate them, influence them and expose them to demands for validity and reasonability. This applies both to publicised discourses, to respondent claims and to my own conclusions.

According to Hammersley & Atkinson (1983: 103—105) there are two central approaches for interpreting claims: (1) Claims should be read for what they say about

the phenomenon they refer to. Everyone, both researcher and respondents, are in this sense a participant observer. (2) Claims should be read for what they say about the actor making them. My thesis does not aim for biographical information, but rather defines respondents as actors/actants highlighting certain *figurations* of agency in their justification of their actions. Respondent claims could thus be used as indicators of what specific groups or categories the actors interviewed are invoking. In both cases, the claims should however never be seen as simple one-to-one representations of the world; they are part of the world they describe and are thus shaped by their contexts.

The problematic idea that the respondent's *account of what he/she does* would be analogous to *what he/she actually does* can be assigned to what Alasuutari (1995) calls a 'factist' perspective; the idea that by making claims about an external reality, we can come to know this reality. He criticises the humanist notion of how 'rapport' with respondents is seen to prompt testimonies of varying validity, depending on the respondents' ability to disclose an external "truth" which they have exclusive access to. 'Here the humanistic version of the factist perspective misses the point that dishonesty or pretension is itself interesting data' (1995: 53). Accordingly, there are no essentially 'true' or 'false' claims; what is more interesting is whether the respondents' claims say anything about the surrounding socio-cultural context and what their feelings and perceptions are towards this context (see also Hammersley & Atkinson 1983). As an alternative to this 'factist' perspective Alasuutari promotes one which focuses on narrativity, interaction and cultural distinctions. Claims are here seen as part of the researched context; they constitute specimens which in different ways may represent a larger entity (1995: 63). These discursive specimens can reveal *how* concepts are formulated, not whether they are universally true or false. The researcher must also heed the risk of entirely taking on the respondents' repertoire – and conversely, of imposing his/her own academic repertoire on their claims.

This issue did inform the compilation of questionnaires and analysis of the fieldwork. Case studies, Law & Mol (2002: 15) argue, can work in a number of different ways, not necessarily as simple extracts illustrating a larger phenomenon. They are 'transferable, translatable,' and should thus be seen as well-grounded arguments, at a crossroads between already existing discourses and standpoints. As new interpretations are formulated, they operate for or against such pre-existing discourses; something which was apparent in the clash between file-sharer world-views and the normative discourses of established societal institutions. One example is the refusal to agree with the *myth of digital files as property* (Yar 2008). This refusal was expressed not only by my respondents, but can also be found in found accounts online and in public forums.

But discourse does not operate in a wholly discursive universe – instinctively, accounts are thought to say something about the world around us, outside of linguistics. The recognition that the respondents' accounts sometimes contained actual factual errors is indicative of this. As with Jürgen Habermas's concept of 'universal pragmatics' (Habermas 1984; 1996), ANT and Boltanski & Thévenot's theory of justification differ from sociolinguistics, since while the former is interested in *all utterances in their social contexts*, the latter is interested in the meanings of utterances *if they have to do with claims about truth or rightness* (Habermas 1979: 31—33). Given all of the above, the use of the term 'validity' must in this thesis be understood to never imply any claims to objective, universal authority; it is a validity which is constructed in the local exchange subjects in-between, drawing on heterogeneous entities, and making claims that are always contestable. However, this might not stop subjects from claiming to be fully certain of their claims, and neither does it stop me as a researcher to deem certain claims more valid than others. The question is *on what grounds* this is done.

3.3.5. World-views of subjective respondents versus world-views implicit in normative formations

In the case of file-sharing one can see how the everyday users of this technology see it as habitual, normalised, and – this was clear among the respondents – unstoppable. Its popularity seems to reform earlier societal norms and moral standpoints regarding media artefacts. Moreover, it is obvious how this widespread, everyday civic use is scorned and even attacked by dominant groups in society. In other words, what is at hand appears to be a direct confrontation between different norm systems; on the one hand in the legal/moral sphere (the law as it stands in Sweden and elsewhere is routinely ignored and, in effect, not legitimised by the citizens) and on the other in the epistemic sphere (the ways in which this technology actually *has become known* seem to differ fundamentally).

Norms are upheld in a complex interplay with the world at large, the technical system facilitating the use, and the individual users. There is good reason to take the users' own accounts as a methodological starting point, as the public debate has seen a relative absence of these accounts and the arguments they employ, while a "feedback loop" exists, as these accounts constantly refer back to and reinforce the existing norms. If one is to take on these claims critically it is however important to note how moral/normative arguments are always made in relation to an observed, outside world, and make use of claims to trustworthiness and truth. Moreover, the users need to be seen as in some ways partial, since it is in their interest to defend what they are doing.

Everyday language does not rely solely on representative or factual functions; all the purposes of language here play a role, and the spectrum of validity claims is dependent on more than pure truth claims (Habermas 1996: 16). Human everyday language is never purely clinical or concise; it almost never allows any purely "clean" factual statements. Tacit preconceptions and norms – together with real experiences – are implicit in every utterance. The respondent discourse is therefore never wholly cognitive, or wholly analytical: every validity claim makes use of more than pure argumentative logic. It, so to speak, "employs" more elements than that. As the

respondent discourse comprised a reflexive exchange based upon individual experiences and worldviews, it relies on already existing norms, tropes and ideals. In assessing the internal logic of this discourse, it is important not to be mislead by the ostensible claims to certainty, truthfulness and rightness that everyday language turns upon. In fact, such apparent transparencies *also* rely on discursive justification, and all the more so on practical, daily experiences which form the basis for claims that might initially appear independent or subjective.

The statement ***'I refuse to pay for digital content'*** could thus be assessed for validity in various ways, where the initial dimension appears to entail a form of idealised, shared stance of *sternness*, as if the respondent stood alongside his/her file-sharing peers, all agreeing to this refusal. This standpoint becomes defendable in that it resonates with what everyone else is expected to do. However, it entails more references, some of them to more tangible factors: the pragmatic reasons (ease, habit, economy; *"why pay if you can avoid it?"*); the valuation of digital content (*"it is simply not worth as much as a packaged product"*); and the intolerable stance of the copyright industry (*"why support companies who persecute their own customers?"*).

Further (and more interesting, given the context for this thesis), some of the respondents' notions actually appear congruent with both sides of the 'copyfight,' despite their main arguments being radically different from those of the lawmakers and the copyright industry. One example is the key role given to an active, knowledgeable, discerning, technically skilled and arguably opportunist *consumer-subject*. Another one is the notion of the potential role of free audiovisual material as a *promotional/marketing tool* (which implies some form of value also for this type of material).

Above modes of reasoning can serve as examples of how respondents' claims of what they do are rarely analogous to what they actually do. However, I would argue that their statements *make claims for validity* in specific ways; claims which directly relate

to the respondent's personal experiences of the phenomenon, his/her perceptions of the debate, and expectations of what to say in the actual interview situation. This latter aspect is what the remainder of this chapter will elaborate upon.

3.4. The actual fieldwork: development and motivation

The initial, exploratory phase aimed at answering questions like the following: What constitutes and defines p2p-based file-sharing and what are its particular elements? What human and nonhuman agents and histories are involved? Which are the main aspects and agents in the construction of this technology; that which makes it *what it is*? To formulate and start answering these questions, this initial phase consisted of research into the historical and technical conditions of the phenomenon (chapter 4), which involved an assessment of printed information and large amounts of Internet-mediated text on the subject, alongside the constantly evolving, still-ongoing 'participant observation' that my own reflexive use of various Internet technologies amounts to.

However, trying to point out what constitutes file-sharing in this way could open up for a form of essentialism in the same way that the current dichotomised understandings of the phenomenon risk to demote a potentially broader understanding into a sequence of preconfigured categories. Two critical questions were required: (1) How are these specific systemic, technical and historical modalities contrasted with the actual users' own accounts? (2) Can the ways in which these important modalities are experienced, understood and justified by the users also enrich and balance a more general account of the phenomenon? Hence, a further step was required; the initial questions could, to be effective, only be answered in conjunction with the users themselves. In the winter of 2005—2006 a pilot study was conducted, which deliberately covered a range of aspects relating to the above questions, and was in turn preceded by my MA dissertation (2003), based on a similarly exploratory but less

comprehensive approach. Some themes and arguments were taken up and expanded upon in the pilot study, and were assessed as to whether they would fit the main study.

By the transition from pilot to main study, the initial, exploratory approach was changed into what could be characterised as a more deductive approach, in that it went from general hypotheses to more specialised queries. I had to analytically narrow down a long range of questions, in line with the initial research question and the hypotheses which had appeared during the exploratory phase. McCracken (1988) elaborates:

> When research objectives are somewhat more general, it is sometimes useful to resort to a "tiered" pattern of interviews. In this case, the investigator interviews respondents in successive groups. After the first group is interviewed, data analysis is undertaken in order to narrow objectives and refine questions. The second group is then interviewed, and a further narrowing and refinement takes place.
> (McCracken 1988: 48)

This is an idealised description, but points to the intermingling of data collection with analysis originally devised by Glaser & Strauss (1968) as a process of 'constant comparison' in the research process. The clinical split between 'data collection' and 'analysis' is also an idealist construction, maybe even a forced afterthought, but the above 'tiered approach' still serves as an ideal for how the process of "sieving out" unnecessary questions might work. See Morley (2006), Boltanski & Thévenot (2006), and Latour (2005) for how fieldwork which might in practice have been confusing, stumbling and far from self-evident tends to subsequently be given an idealising appearance, as if it would have been structured from the beginning and/or developed fully according to plan. In more practical terms, each generation of questionnaires and selection of respondents involve significant improvements. The earlier studies revealed weaknesses, inconsistencies and preconceptions which were not passable in the final study. Further, it can serve as a step away from one's most immediate surroundings; a heuristic for 'manufacturing distance' (below).

At some occasions, the actual pilot study turned out to have validity and relevance, in that it helped me focus on those questions which were taken up by the respondents themselves, with little initiation from the interviewer: the emphasis on habit; the absence of deliberate politicisation (in favour of the monetary and practical reasons to file-sharing that the users seemed to much rather emphasise); and the differing interpretations of the term 'ideology' that appeared. The main study was consequently designed to be thematically narrower but demographically broader, comprising a larger group of potential respondents who were anonymous in every respect except the respective aliases and linguistic conventions they made use of. They were also less predictable in terms of knowledgeability and openness, and only a third of the respondents approached did present exchanges that were useful enough.[5] A schematic development can be sketched:

initial (MA) study design (acquainted respondents, college setting)
→ *pilot study* design (acquainted respondents, at geographical distance)
→ *main study* design (non-acquainted respondents, at geographical distance).

In each of these phases, the concept of 'expert interview' was central. Further, this tiered development also involved a gradual increase of the specificity in that the final study exclusively focused on Swedish file-sharers, in an online setting: It bridged geographical distance yet focused exclusively on a certain linguistic community.

To attain analytical depth, certain degrees of thematic, demographic and historical specificity are needed (Geertz 1993: 5). Then again, objectivity-making properties such as empirical adequacy, consistency, generality and precision cannot all be simultaneously maximised (Wylie 2004). When maximising empirical adequacy – especially when investigating emergent, not fully established media technologies of a 'rapidly transmuting kind' (346) like file-sharing – this entails a "trade-off" in empirical depth against empirical breadth. Some 'epistemic virtues' tend to be maximised for special purposes, with reference to specific projects or problems, Wylie explains. Like

[5] Of around 20 contacted individuals, only 7 resulted in actual email exchanges.

all scientific projects, this thesis is forced to balance generality against particularity, with the implicit risks of going too far either way. What is more important, since the focus is on the users' own attempts at generalisations, is how this balance has to be contextualised through a broader ontological framework in terms of what this 'rapidly transmuting' technology *is*, since not even this understanding can be taken for granted – hence the exploratory concerns of this thesis.

3.4.1. The specificity of discourse-based fieldwork on the Internet

Hine (2000) shows how the Internet can be seen both as a cultural *context* and a cultural *artefact*; both as *a place for social interaction* and as *constituted by separate texts*. In this respect, Internet technologies have a hybrid character, as mediators for communication and as texts in themselves. Further, Internet-mediated text has a dual character in that it is *performed* (like spoken language) yet *almost instantly materialised* (as a recorded and duplicated trace). Unfortunately, Hine's account glosses over the subtle distinctions made by other contemporary theorists regarding how technologies are constituted and reproduced in ways which are material and semiotic at the same time. Not only is the Internet portrayed as a somewhat monocultural sphere where one language rules supreme, and nationally or linguistically determined Internets are glossed over. Like many early Internet theorists in the late 1990s, she renders the Internet as a space, 'cyberspace,' where culture is formed and recreated (9). This view risks seeing the Internet as 'a place apart,' a notion which Miller & Slater (2000) have questioned, since they found it clashing with how the Internet is related to in daily life. Her split view implies a view of the Internet as an arena where culture is "acted out"; an arena which is given by technology or nature, onto which human subjects "inscribe" meaning. This split entails a reproduction of the ancient 'act of purification' that Latour (1993) criticises; a distinction which outlines an immutable split between *culture* on the one side and *nature* on the other. This must be

heeded throughout this thesis. One simply has to note how the materially defined, linguistically varied and functionally stratified sphere that is called 'the Internet' is not given to people as a form of Cartesian *carte blanche* from which we can derive any form of meaning, or inscribe any form of purpose – but a sphere whose material configuration is culturally contingent, and thus culturally significant in itself, *embodying an inscribed agency but also performing specific forms of agencies* in an interplay with its users and explorers.

Not only when seeing the Internet as a sphere, but also seeing it as a cultural artefact – as a product or as an embodiment of culture – one has to be careful not to recreate the ontological gap that Latour warns us about. Hine quickly emphasises that all uses of technologies as cultural artefacts are culturally conditioned, in that they entail 'interpretive flexibility': ideas about what constitutes, for example, the most sensible usage of a certain technology tend to be produced locally and within a certain context, in other words ethnologically (10). In the case of p2p it might arguably be even more so, as the populations generated could be said to determine and simultaneously be determined by the technical architecture in ways that are both novel and interesting.

What is arguably most specific with discursive fieldwork on the Internet is that the researcher would not have any illusions of comprehensively researching the *identity* of his/her respondents. The respondents' performances here only disclose a very limited part of their identities, and are extremely limited as they are both mediated, text-based and anonymised. Still, the identities of the respondents are nevertheless of limited interest, as my interest lies in the "macro-semantics" of argument and assumption, validity and norm, rather than in the "micro-semantics" of subtle cues to identity construction.

3.4.2. Sampling

The selection of respondents was deliberately small: five in the pilot study, seven in the main study. Even early on, it was clear that a great amount of useable discourse was produced by these respondents in combination with the pre-existing discourses in public circulation. There are examples of qualitative studies which have successfully made use of such relatively small selections: Wallman (1984) is but one example. This ethnography researched eight families, and was despite this quantitative limitation 'extremely productive' (MacPherson 1985: 636) in its conclusions. The main heuristic was to accurately represent 'the variety of experience, the complexity of response and interaction which is so frequently masked by crude categorizations of social types and geographical areas' (MacPherson 1985: 635—636). A case study, a limited extract in order to illustrate a more complex whole, primarily requires *truthfulness* and that the *depth and richness* of the generated discourse is sufficient enough. As with Latour's concept of 'oligopticon' (2005), larger generalities are explored through a 'myopic' approach to the associations made to these supposed (but not less real) constructions. Accounts are here judged only by their descriptive and associative strength – in fact, even a single in-depth biography could generate enough data in this respect.

In their task of revealing what is specific to the ways in which we relate to a domestic generality as opposed to a civic one, Boltanski & Thévenot (2006: 9—10) hold that the former is exclusively related to monographic information while the latter always operates in relation to collective entities. Consequently, the respondents are in one way representatives for a larger collective, but their claims cannot be seen as strictly statistically representative (and are not meant to anyway). Fittingly, the methodology of Boltanski & Thévenot (2006) is devised *not* to take for granted the categories and measures a statistician would start from, but to find out how individuals themselves formulate such categories and measures. The thesis thus serves as a case study which makes generalisable claims for truth, in that it admits the situated and politicised nature of the existing claims in the debate.

The groups of respondents were thus thought to represent Swedish users, however not in terms of representing *every* user but in order to find out what being *a* user is like, and how this user is constituted in regard to a greater generality. Bryman (1988) recommends 'theoretical sampling' as a means to target 'the essential properties of everyday life' (90); in other words not a blindly statistical selection but, rather, a strategic one, aiming for respondents likely to give exhaustive and insightful accounts.

Moreover, the specific choice of an online environment was supported by the fact that several of the respondents were approached through forums such as blog commentary functions and message boards (like the ones on the Piratbyrån website). This was a deliberate choice in the spirit of 'purposive sampling' (Silverman 2001: 250), aiming to increase the probability of relatively comprehensive accounts, since one can expect the individuals who frequent such fora to have certain degrees of interest and knowledge on the topic, and would be likely to be communicative and prone to produce qualitatively satisfactory accounts. This also turned out to be the case: the answers were sometimes surprisingly lengthy.

3.4.3. Email as a context and interview tool, and 'long interview'/'expert interview' as a concept

There are some specific conditions that need to be considered in terms of email-mediated interviews as a method. To begin with, email is a text-based form of communication, which automatically generates an artefact. This saves the researcher the work of transcribing, but lacks the nonverbal, emphatic cues which make an irreplaceable part of everyday language and to a large degree serve as identity markers for the speaker. As many interpreters of early, text-based, computer-mediated communication (Turkle 1995, Hine 2000, Lister et al. 2003) have noted, the use of certain formalised abbreviations, 'emoticons' and annotations have become the norm, especially with email and chat exchanges, but this can only partially make up for the lack of spoken and bodily cues. In my own fieldwork, this "low fidelity" in terms of such

subtle cues could still be accepted in that the communication of individual identity was of low concern for the project. My own fieldwork lies closer to what Flick (1998) labels the 'expert interview' and McCracken (1988) the 'long interview,' rather than conversation analysis, sociolinguistics, or "pure" anthropology: As already explained, these latter types of research are about "micro-semantics" and more subtle dimensions of (spoken) language, while my project is to do with the "macro-semantics" of associations, mental images and assumptions that Swedish file-sharers are found making. The 'long interview' is typified by close, long-running contact with individual respondents, yet constitutes a departure from the 'depth' interview of the psychological investigator in the sense that the long interview is 'concerned with cultural categories and shared meanings rather than [with] individual affective states' (McCracken 1988: 7). This focus on discursive issues rather than emotional or affective states also explains the choice of medium for the interviews – email instead of "face-to-face" – since it gives less credence to local behaviour and abovementioned para-linguistic signs.

Regarding the phrasing of questions in a 'long interview,' I assumed that also subtle text-based hints can be leading, so continuous attempts were made to keep the written correspondence as neutral and terse as possible, in the confidence that comprehensive and inspired reactions would arise from each respondent without much rhetorical provocation from my side. Further, it is important in a 'long interview' to maintain the possibility for respondents to follow up on questions – they were also constantly reminded of this in each email exchange.

Email as a context and interview tool also allows geographical distance to be overcome. The respondents could therefore be regarded as equal not in terms of geographical origin but in the capacity of being thematically, agentially and nationally unified as Swedish file-sharers. Moreover, just as in traditional mail exchanges, email decreases the risk of what is referred to as 'interviewer bias'; unintended hints in terms of body language or verbal intonations by the interviewer (Oppenheim 1966: 33). Also

rapport could be thought of in terms of distance. Here, McCracken stresses the importance of *keeping* distance. Since the topic under investigation is relatively well-known for me as a researcher, it is important to maintain an analytical distance from my own assumptions. 'It is necessary to create a critical awareness of matters with which we have a deep and blinding familiarity' (McCracken 1988: 23). By this reflexive practice, distance is thus 'manufactured' as a means to approach the "situated objectivity" outlined above. In other words, a strategy deliberately opposed to 'going native,' where one temporarily suspends areas of one's own expertise. 'Manufacturing distance' is thus dependent on prior experience – of a reflexive, critical and systematic character.

Email exchange between anonymous counterparts, as a context and interview tool, should allow for this form of relative distance in its capacity of being purely text-based. It could potentially help to create an atmosphere of certain formality and rigidity in that neither researcher nor respondent would expect their counterpart to have previous knowledge, which forces each participant to elaborate their arguments in clear writing. Furthermore, their mutual anonymity should be expected to facilitate a confessional atmosphere.

Email-mediated interviews also allow for a high degree of follow-up questions and answers; also in this respect the medium serves well for a 'long interview'. However, both McCracken (1988), Oppenheim (1966) and Foddy (1993) point out that the sequencing of the questions is vital, since earlier questions can distort the meaning and impact of the latter. Hence, the compilation of an initial questionnaire is of great importance, not least since tangents can be expected to sprout, which makes it essential to have a clear focus for the interview. The challenge is to use deliberate cues and follow-up questions (McCracken labels these 'prompts,' Oppenheim calls it 'probing') to gently and unobtrusively intervene in order to maintain some form of structure and integrity. Oppenheim argues that the risk for interviewer bias is probably at its highest

whenever probes are employed, and that they should therefore be considered and neutral (42), like for example: *'Could you say a little more about...?'* or *'Now, what about the...?'*

Due to the situated character of email, an instinctive strategy might be to avoid questions that measure factual knowledge (for example, *'What rights do you have to copy material, in legal terms?'*) due to the risk of respondents researching their answers before making them (using search engines like Google). But in the pilot study, many of the interviews indicated that this was in fact rarely the case, at least when questions were reformulated to make this cognitive dimension less explicit (for example, *'What legal rights do file-sharers in general think they have to copy material, do you think?'*). Actually, several pilot study responses (not necessarily on the topic exemplified) contained *de facto* errors and/or assumptions. This was also found by Perkins-Svensson (2006) in her statistical survey of file-sharers, where only 12 % of the respondents produced descriptions of the current legal situation that were factually correct and specific. One example was the statement that p2p nodes would have total anonymity, which is not entirely accurate (chapter 4). This indicated that the respondents were not confirming the latent veracity of their claims (through search engines or wikis), and should be taken as a calming sign of email answers often being as spontaneous as everyday talk.

Another concept which categorises my fieldwork is the 'expert interview' (Flick 1998: 91—92; Meuser & Nagel 1991); a form of semi-structured interview which aims to reveal less biographical data than generalisable data. The interviewee is here seen as having a relatively high degree of expertise within the subject area, and is integrated in the study not as a singular individual but as a representative for a larger class of similar experts. This means that the range of what makes potentially relevant information is narrowed down compared to other forms of interviewing. The interview guide (in this

case, the questionnaire) has an important role, especially in weeding out unproductive topics (Flick 1998: 92).

There are problems in seeing the respondent as an expert. Especially in the case of file-sharing, the border might be thin or blurry between biographical experience and subject-specific knowledge. It is a leisure-based activity, yet simultaneously a globalised and controversial phenomenon (a form of 'underground economy'); hard to overlook and to foresee, both demographically and geographically. Hence, file-sharing becomes an area of expertise tightly interwoven with the expert's own personality and interests. No-one can claim absolute insight into the subject; everyone has their own vantage point. Yet, a beginner obviously knows less than a connoisseur. Hence, the accounts of individual users – if coupled with some information on subjective estimations of their own knowledge and experience – were important for generating answers regarding what constitutes the generalities commonly held as vital for the phenomenon. The focus on generalities, in the sense of Boltanski & Thévenot, becomes a means to extract from the everyday, biographical familiarity categories of classes experienced as common to all file-sharers.

Further, Meuser & Nagel list cases when expert interviews have become hindered (Flick 1998: 92), for example when the respondent has shifted between his/her expert role and private individuality, or when the respondent "hijacks" the interview situation in order to lecture about his/her knowledge. In my interviews, this was relatively rare, and the few times when respondents began to "lecture" this constituted interesting data in itself. The text-based and sequential nature of email also made it relatively hard for the respondents to bypass the planned structure of our exchange, and the norm almost exclusively seemed to be that of a letter exchange as personal candidness rather than public blustering.

3.4.4. Sequence and ordering of questions

McCracken (1988: 24—25) shows how a questionnaire has several purposes: (1) To guarantee that the topic is covered in the same order for each respondent, in order to maximise reliability and the possibility to repeat the study. (2) To assist the researcher in 'manufacturing distance'. (3) To aid the researcher in concentrating on the respondent claims by making the overall work as routine-based as possible. Finally, (4) a questionnaire helps establishing 'channels for the direction and scope of discourse' (McCracken 1988: 24), in other words avoiding respondents or researchers going off-track and discourse "spiralling out of control". It is important, however, to maintain the openness that is made possible by qualitative interviewing. One way of doing so is to keep the questions as open and neutral as possible, and to have several caches of 'prompts' (34—37) so that the interview develops mainly by the researcher utilising and following up on respondents' own lines of thought rather than imposing categories "from above".

The questionnaire was split into smaller segments which were devised to follow one after another; altogether 4—8 emails per interview situation. By the abovementioned, 'tiered' design of the fieldwork, the fine-tuning of the questionnaire was improved significantly. For example the amount of questions was limited, as were the ways in which they were formulated (often to make them less charged); the sequence was changed; some questions were relegated to follow-up ones; and the validity of each question was assessed according to the reflexive question of 'why do I want to know this?' (Foddy 1993: 32).

In the final questionnaire design some questions were deliberately placed before others. One example is how an early section had a question regarding what consequences of digitisation the respondent would see as the primary ones. This question was then repeated at the end of the questionnaire, in the hope that it would then generate a clearer and more considerate answer in that the respondent would then be more open and have reached more awareness as the interview would have

continued. Ideally, this second answer would thus differ from the first one in potentially interesting ways. Silverman presents a heuristic which was useful for the questionnaire design:

> One's initial motive should be to give close attention to how participants locally produce contexts for their interaction. By beginning with this question of 'how', we can then fruitfully move on to 'why' questions about institutional and cultural constraints.
> (Silverman 2001: 297)

That is, not only avoiding simple explanations and moving on to a deeper understanding of how the phenomenon is locally produced, but also successively opening up for a larger analytical depth within the respondents themselves.

At the same time, some spontaneity was desired. A few concepts, such as the overarching 'copyfight,' were thus deliberately deferred to the later sections of the questionnaire. There were two reasons for this: (1) To see if these concepts were spontaneously prompted by the respondents (and in that case why, and how soon), and (2) to avoid leading the interview onto predetermined modes of thought. Especially so in the beginning of each interview, when it was important to let the respondent formulate the phenomenon in the ways he/she would have found most appropriate, as this information would be interesting in itself and would show whether the phenomenon is influenced by concepts like the 'copyfight' already before the researcher's intervention.

A central group of questions related to the actual nature of the technology and its possible cultural, economical, and political consequences; questions which lie relatively close to my research question to begin with. Also practical questions like *'how easy or hard is it to find content?'* were important since they tended to opened up for wider arguments. With questions like *'is the current system of file-sharing democratic?,'* or *'compare digital files to artefacts and broadcasting,'* the intention was to more critically assess the answers, to trace individual norms and truths in relation to

allegedly "external" norms and truths circulating in society. It seemed like more general, estimative questions – about file-sharing as a phenomenon, other users, and the world at large[6] – gave answers that were easier to query by me as researcher, compared to the experience- or attitude-based questions which were more directly linked to the personal standpoint of the respondent. Often these former, more general questions were effective for initiating a thought process around a given topic, and could be followed up by more personal questions.[7] This is a common strategy, since respondents might initially be unwilling to relate to their personal standpoint in controversial issues. It is easier to make them talk about 'other people,' as a way to "break the ice" and in order to use this concept of 'other people' as reference point in an imagined positioning of their own standpoint (for example *'do you agree with the strong criticism that organisation X makes of the entertainment industry?'*; *'would you also call yourself a "pirate"?'*). Conversely, loaded questions can be used to generate interest, to then lead the respondent on to more general, analytical modes of thought. In the actual everyday context for my own interviews, my approach consisted of a mix of these strategies, altogether aiming for maintaining an overarching "flow" rather than dedicatedly trying to maximise each and every potential answer. It was sometimes worth accepting a shorter answer if a request for further elaboration would have disturbed the overall sequence.

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[6] Like, for example, *'who is the typical file-sharer, according to you?', 'is there a romanticised view of file-sharing, would you say?'*

[7] Like, for example, *'would you consider yourself a typical file-sharer?'; 'would you say that yours is a romanticised view of file-sharing yourself?'*

3.5. Conclusion

Due to the central importance of nonhuman factors to this thesis, the methodological approach cannot be said to be an anthropocentric one. Neither can it be said to be a purely ethnographic one, since the object of interest is not the biographical information of the individual subjects. The object of interest is how the file-sharer discourses at hand (locally and in the public debate) invoke larger entities such as economic and technical functions, and how individual morality is shaped by and through this invocation. Hence, a case study approach was chosen, utilising a formalised version of qualitative interviewing (a mutually anonymous, questionnaire-based, email-mediated form of 'expert interview') in order to assess the modes of reasoning among a small group of respondents in relation to the larger classes of phenomena invoked in the public debate. In the following chapter, the outcomes of this approach will be assessed, leading up to a final conclusion.

In the same way as Fish (1989) differentiates between the *empirical making of truth claims* and the *epistemology involved in assessing these truth claims*, we must differentiate between these two operational levels of epistemology. Beginning with the focus on validity and veracity *of respondent claims*, which much of this chapter has elaborated upon, I must continue by concluding the fact that *my own assessment of these claims* (regardless of how much or little it relies on the inherent validity and veracity in the initial respondent claims) is primarily an act of translation. Consequently, my own assessment of the circulating file-sharer claims and rationalisations might be more or less accurate, more or less interesting; it is not an "ultimate truth". It will be an argument in its own right, however, based on scientific assessments of whether the claims of the users involved have validity and reliability among themselves and the referents they invoke.

Chapter 4: Historical and technical conditions

4.1. Introduction

> If there is one thing to be learned from twentieth-century pop history it is that technological inventions have unexpected consequences.
> (Frith 1992: 69)

The topic of this chapter is the materiality of p2p; how its topologies and prescriptive agencies have been constituted through history. Beginning by outlining the historiography of p2p with special regard to the determinism and teleology in some of the more technical accounts of its conception and development, p2p is then introduced as history, architecture and technical protocol. The chapter serves to explain tropes which appear to be "taken for granted" among Internet users and experts: the ubiquity and alleged inevitability of file-sharing on the Internet; the novel system designs having replaced older ones; the inherent emphasis on convenience and acquisition.

The notion of a dichotomised 'copyfight' will be expanded upon, by noting how allegedly "pure" technical accounts tend to rely on certain assumptions of how the networks are used (in terms of, for example, 'seeder'/'leecher' behaviour) and imply normative understandings of the nature of 'content' and how behaviour is best policed. A certain form of morality will be noted among the proponents of p2p and deregulation of content distribution. This "p2p morality" emphasises the positive outcomes of how p2p combines strong individualism with a collective normativity that emerges out of every node's equal reliance on the overall infrastructure. Hence, in the context of the 'copyfight,' this morality is popularly taken up to defend the current, unregulated p2p-based file-sharing against the claims made by the copyright industry, which tend to locate sole responsibility either with the end-users or with the network facilitators.

The main reason for the following, rather thorough technical and historical account is to contextualise the user as an embedded actor. Since the notion of technological agency as *distributed* and *discursively contested* is central to this thesis,

the analytical standpoint for me as a researcher is that the placing of agential responsibility is a *performative* and *reflexive* act on behalf of the various actors involved. In order to narrow down the potentially unmanageable complexity of agency, any statement addressing the justification for file-sharing would rely on a 'figuration' (Latour 2005) or 'ordering' (Law & Mol 2002) which is, in turn, based on a conception of the technical and historical properties of the phenomenon. What the relevant technical properties *would be*, what they *are like*, and *how they came into being* thus become directly pertinent not only to this justification but to the very self-image of the file-sharer. Especially so, when relating to conceptions that are evidently widespread and thus carry some normative weight, like for example the trope that p2p-based file-sharing is "unstoppable", "here to stay", "something we have to live with", "integral to the way the Internet works"; in other words, a figuration of p2p-based file-sharing as a historically accumulated condition rather than, as the copyright industry might frame it, a deviation. Note here that the self-imagery of 'the file-sharer' in this mode of publicly circulated conceptions comes to relate as much to the generalised figuration (as an archetype, or, in the language of ANT, 'actant') as to the private biographies of the subjects involved. My interest with this thesis lies more with the former than the latter.

Further, the chapter also delineates the phenomenon's actual limits of action. I intend to show the material factors at play in p2p-based file-sharing, and the material barriers involved. These structural restrictions (technical, legal, economical) are vital to any justificatory account and are repeatedly invoked in the various types of discourse saturating the phenomenon.

After establishing the diagrammatic model of p2p as part of a wider narrative of futurology in the current Internet field, a rather concrete account of p2p as material architecture will be presented, in order to establish the necessary background information. The following aspects will be taken up:

- The architecture of p2p, including the notion of the Internet as "modelled originally on p2p, then client-server, then once again p2p" and an overview of the metaphors which depict the file-sharing infrastructure as one of 'pyramids' and 'darknets'.
- The popularisation of file-sharing and how it is problematic to delineate the rapid historical change as if sequenced into alleged "phases" of system design.
- The principal character of digital data as either units of content or as shared pools of socially useful references (Giese 2004).
- Very few individual users tend to contribute (as uploaders, seeders, activists). Hence, the idealist argument that every p2p user is a co-creator on equal terms is partially dismissed and instead the question of agency is discussed in terms of who can be seen to be responsible for the possible harmful externalities of file-sharing; the *individual users* or the *facilitators of the p2p networks.*
- The question of how to regulate file-sharing. Although singular crackdowns have been made and can be made, there is a notion that the phenomenon as a whole is "unstoppable" and that p2p networks are semi-anonymous, non-overseeable, nebulous and fleeting. This is seen to foster a view of Internet behaviour which presumes *individual, discretionary morality* rather than policing from outside. The notion of regulatory lenience and voluntary restraint/self-control is thus explained by a historical and technical overview. In practice, this argument would emphasise the importance of norms and habits over compulsory laws and rules.

4.2. Writing technological history: some initial considerations

Lally (2002) and Murdock et al. (1992) argue that the use of personal computers is saturated by discourses naturalising the inevitability of technological progress and the expectation that new technologies will increasingly permeate everyday life. A utilitarian imperative follows from this: keeping up with this development, acquiring computers

and getting online, benefits both individuals and society. Also my respondents echoed such notions of progress and teleology, and how one can avoid notions of guilt and responsibility by noticing how one's actions are collectively justified.

A common historiography of the Internet makes an analytical distinction between the end-users and the original builders of the infrastructures. The users are seen as "late-comers" to a structure already established by experts (such as administrators and programmers). This historiography assigns the use of p2p applications as a result of technical developments which are seen as external to the everyday user. However, 'Web 2.0' presents a competing historiography, where key elements of the constructive agency is assigned to everyday users. Hypothetically, the enemies of unauthorized file-sharing benefit from viewing the end-users thus; analytically separating co-productive behaviours from merely consumptive ones – in short, to discourage uploading and encourage downloading. However, it holds little argumentative weight to assign all responsibility to these end-users, as they exert little, if any control over the central infrastructure beyond their own workstations and/or domestic broadband connections. The range of action and the degree of contribution among the end-users is often limited. It will be shown that these dimensions are central to the debate on potential regulation of p2p-based file-sharing.

The further an individual file-sharer would place him- or herself on this imaginary scale of agency and, ultimately, responsibility for the co-creation and upkeep of these infrastructures, the more exposed he or she would be to the moral judgement of others. It is important to understand the embedded nature of the file-sharer as a posthuman subject; a subject who is only made possible thanks to his/her overall *connectedness* to the network, not only in material terms (broadband connection, applications used) but in a wider, agential sense. In philosophical terms, the subject can only act, and be acted upon, by means of its connectedness to other entities – this is congruent with the posthumanist theory informing this thesis. To most Internet users,

the heterogeneous ways in which the computer is used are near-seamlessly integrated into everyday life, with the boundaries of "being online" and "being offline" becoming permeable, as noted by Miller & Slater (2000). Technological development has led to a situation where certain modes of behaviour and habit are allowed and, in the case of Sweden, so widespread and taken-for-granted that the users' choices are justified, so as to appear rational, obvious or even "natural". This is a mode of justification which relies on a conception of the technology that is structural, verified by logical argument regarding the technical properties at hand, and historically founded.

Nevertheless, all textual descriptions are, to some extent, contestable. "The truth" about the history and technical properties of file-sharing can be invoked rather differently, depending on who would formulate it in the struggle over possible future regulations of the technology. To begin with, one can observe publicly mediated accounts (news reports, blogs, wikis). Second, many such public accounts are often suffused by a "specialist" mode of address (expert analyses, 'how-to' guides, documentary accounts outlining a historiography of file-sharing) Third, many of these specialists are file-sharers themselves, and many such "specialist" accounts produced should be considered as interventions into the dichotomised debate. There are no "clean breaks" between these different kinds of discourse. This does not necessarily compromise the legitimacy or validity of these existing, public accounts, but it raises the concern for a critical reading, and an awareness of any potential agenda behind the choice to publish a given account. What this chapter will hopefully show, however, is that there are numerous generalities which cannot easily be overlooked or misinterpreted, and which are commonly agreed upon by most of the actors involved: these generalities thus form a wider, publicly established imagery of p2p-based file-sharing which the end-user discourse will be seen to invoke.

Structural shifts and changes in the very ordering of the Internet should not be historicised as decisive, clear 'shifts'. Focusing only on the latest, cutting-edge

developments would be to overemphasize radical shifts over slower mutations and upgrades and to simplify history into 'a march of events from one epoch to the next' (Keen 2006), a historiography which Larsmo (2007) labels 'dinosaur theory'. Development of the Internet is facilitated by the gradual adoption of new protocols (software applications) which is augmented by material upgrades in processing speeds, connection types and more infrastructural/demographic factors such as country-wide establishment of broadband. The practice of circulating and hoarding data (in ways that were unforeseen or at least alternative at the advent of p2p networking) is now seen as commonplace among millions of educated and technologically competent Internet users. Serious concerns have been raised that a large (and, in part, loud) minority of file-sharers occupy a majority of the total Internet bandwidth available. This has prompted policymakers to argue for an uprooting of the currently open, communal nature of the Internet infrastructure and replace it with sanctioned, proprietary networks. These concerns have been addressed in the (mainly U.S. American-dominated) debate on 'network neutrality' (Wu 2003), but underpin the debate in Europe as well, especially with regard to the introduction of the *Telecoms Reform Package* to the European Parliament (EUROPA 2007).

Although specific file-sharing applications are not default technologies for the average Internet user, p2p-based file-sharing has in many ways become part of mainstream Internet usage, and its discourses share some significant traits with the established historiography, teleology and futurology of the Internet. Hence, this chapter begins by establishing that the discourses surrounding p2p-based file-sharing to some extent confirm much of what has already been established – academically and non-academically – on Internet phenomena, while also breaking with many of the general preconceptions and expectations about the Internet.

The historiography and futurology of the past has shaped and continues to shape the present. Certain considerations have been embedded in the Internet infrastructure,

like the maximisation of decentralisation and resilience in the face of an attack on the network. Such considerations are sometimes likened to teleological energies, explaining why p2p as a totality is understood to simply not abate, or go away. A unified futurology is shared by file-sharing activists (such as Piratbyrån), cybercapitalists (Google, Microsoft, Skype) and 'content industry' spokesmen (MySpace, record companies) alike. This futurology is directly influenced by ideologists of the 'Californian ideology' (names like Andy Oram, Clay Shirky, Howard Rheingold, Kevin Kelly, and Chris Anderson are reappearing) but has also been reverberated in much more established, traditional political circles. Robins & Webster (1999) describe how the neoliberal politics of 'the third way' were strongly caught in this drift throughout the late 1990s. They also note some precursors to the utopian claims later made by Bauwens (2002), and some of the beliefs expressed by Lévy (1997) and Negroponte (1995):

- A vast, continued expansion of the digital realm.
- 'Virtual communities' as implicitly contributing to a social cohesion based essentially on consumer choice in a *laissez-faire* global economy.
- An alleged technological logic of the digital era (connectivity, instantaneity, time-space compression), often invoked to have causal effects on the social realm. Technical protocols like p2p are thus expected to foster dynamic new social relations and a genuine sharing of culture.

  (Robins & Webster 1999: 221—237)

Unrestricted p2p-based file-sharing, as epitomized by Napster, however acted as a surprise in this respect: The ethos of 'sharing' as a communion of spirits and minds was replaced by a realization of the worldly implications of an unfettered, radically disseminated digital sharing. It became clear that such networks led industrial interests to enact legal persecution of citizens. Other problematic issues, such as censorship on a national level (as in China and Iran) and on a local level (ISP traffic restrictions), monitoring of communications (as in the laws introduced in the name of fighting ter-

rorism) and battles over policy and structures (as in the FLOSS and 'network neutrality' debates) have surfaced. The focus has shifted to the potential problems of a commonly accessible Internet, ruled by open standards and freely available protocols.

Such concerns regarding socio-cultural implications arise with every new media technology. What is arguably new with digitization and the Internet is its embeddedness and ubiquity. It presents a complex intermingling of agencies and social relations, not only human and localized ones, but machinic and distributed ones. A focus on multimodal agencies and heterogeneous associations becomes instrumental, especially the recognition of factors extraneous to individual intent as inherently structural; embedded in technology, not made of material factors alone, but rather (aggregated) human uses and practices 'made durable' (Latour 1991). Certain understandings of the infrastructural "logics" of new, digital technology – like end-users becoming empowered and collectives enabled by connectivity, instantaneity, and time-space compression – have come to justify an agenda which advocates a "hands-off" approach towards the Internet.

A wider sea-change in the public discourse seems to have occurred in recent years. Not only on the blogs, message boards and online comments that are partial to file-sharing, but increasingly also in public accounts such as newspaper articles, columns, and features, a more pragmatic and lateral approach to p2p-based file-sharing can be noted. The entertainment industry appears to still thrive, despite cries over file-sharing, and it has been noted that heavy file-sharers tend to be heavy consumers of culture as well. In 2007, *The Independent* published a booklet, sponsored by Tesco, which gave a pedagogical account of 'the digital music revolution,' including literal instructions on how to rip music, edit metadata, and a guide to file-sharing and 'unauthorised downloading' (Independent 2007). Such sponsored guides show how widespread the phenomenon has become. Another example was the announcement by EMI and iTunes to sell DRM-free versions of their titles (Apple 2007). Initiatives to

make entire catalogues of material constantly available for streaming, by way of a subscription- or ad-based business model has begun to appear as well.[8]

All is not idealism, however. Some of these expectations have been problematised by real-world events. In 2008, U2 manager Paul McGuinness publicly urged technology companies like Apple to rid its 'entrepreneurial, hippy' value system from its 'inherent disregard for the true value of music' (see Gibson 2008c). That is, he urged them to stop relying on indirect revenues from piracy which happens at the expense of the traditional recording industry. This exemplifies the rift not only between the telecoms and technology industries and the 'content creation' industry, but also within the different sectors of the entertainment industry. McGuinness seems to hold that commercial downloading services coupled with legal repression against unauthorized sharing would ameliorate the problem, yet representatives of both the telecoms and technology industries and of smaller record companies advocate a more lenient approach, avoiding the monitoring of individual users or the rigid impediments to copying and further dissemination. Apple's attempts at distancing themselves from DRM is a case in point.

Consequently, unregulated file-sharing is seen as less of a problem for the infrastructural providers than for the traditional institutionalised actors in the mass-market media, whose distribution monopoly is threatened. However, the clogging of bandwidth due to soaring p2p traffic and the resulting debate on 'net neutrality' does raise some concerns also for ISPs and global Internet regulatory bodies.

Although it is hard to prove causal links between unregulated file-sharing and a decline in CD sales (Pollock 2006, Andersson 2009) while DVD sales have seen a constant year-on-year increase in Sweden for the last decade (Vikingsson 2006; Runquist 2009), the mass-scale adoption of p2p sharing coincides with a fundamental overhaul of the distribution of cultural products. This chapter constitutes a form of

[8] Like, for example, Qtrax (http://music.qtrax.com/) or Spotify (http://www.spotify.com/).

assessment of the validity of the file-sharers own accounts, as idealistic dimensions like the ones typical for the 'Californian,' laissez-faire ideology shone through in both respondent accounts and descriptive texts. The ostensibly idealistic futurology of such accounts should be met with some intervention by invoking actors and mediators which suggest otherwise. A simple example would be the notion of how convenient, fast and efficient uploading is – which could be countered by invoking the nature of ADSL connections, which radically limit the upload capacity by direct technical means.

Before the advent of commercial video-on-demand services, p2p-based file-sharing was the only plausible reason for a high-capacity domestic Internet connection (especially one with high upstream as well as downstream capacity). P2p protocols, especially BitTorrent, have for many years occupied most of the Internet's overall bandwidth – and have thus often been blamed for impeding the capacity for other applications. Only recently, online video-on-demand services like YouTube and Google Video have caused Web traffic to consume more network bandwidth than p2p-based file-sharing does (Zeropaid 2007). Recent data (iPoque 2007) assigns the absolute majority of data exchange on the Internet to p2p-based applications. The current debate on 'network neutrality' relates to the question of what paradigm should have primacy: a continued open-protocol, non-tiered Internet infrastructure, where all operators share the successively scarcer bandwidth, or an Internet infrastructure allows telecoms and content industries to facilitate dedicated sub-networks for high-bandwidth, instantaneous connections (most likely highly commercial, on-demand content like 'streamed' video and video conferencing). What is at stake here is the fundamental structure of the future Internet. The conflict ultimately goes back to the question of whether the Internet should be based on a diagram of *client-to-server* (alternatively, producer-to-customer) or on a flat topology of *user-between-user*. Those opposing unregulated file-sharing mean that it puts disproportionate strain on the existing, open Internet infrastructure, and that it needs to be curbed. 'Network

neutrality' refers to the ideal of maintaining this openness and *not* compartmentalise the Net into proprietary sub-systems. Conversely, it has been argued that BitTorrent-type distribution makes optimal use of bandwidth which would otherwise remain untapped. This a key argument among those who defend p2p-based file-sharing despite its current load on the world's data cables.

The main diagrammatic structure of p2p can be approximated by utilizing this very distinction. P2p here becomes the archetypal communicative paradigm of *many-to-many*, or *periphery-to-periphery*, in contrast to the *one-to-many*, or *centre-to-periphery* paradigm of broadcasting. Of these two diagrams, the former would arguably have the longest history. The genealogy of horizontal exchange is ancient, stretching from oral word-of-mouth communications and modes of ritualistic gift exchange to the present day. Despite its ancient lineage, this horizontal reciprocity is now commonly said to be typical for 'new media'. Ironically, contemporary p2p-based file-sharing radically remediates 'old media' (broadcasting) commodities into a 'new media' system of reciprocal dissemination.

Digitization initially came to comprise only those informational, textual forms of communication that were suited for binary encoding. By forcefully and stealthily "recapturing" audiovisual content into a fully digitised system of exchange, p2p-based file-sharing thereby interrupted the established, "text-only" concept of digital networking as it was envisaged by futurologists and nostalgic agents alike. In this sense, contemporary p2p-based file-sharing involves significant differences not only compared to earlier modes of peer-to-peer exchange but to earlier conceptions of digital networking as well.

4.3. Peer-to-peer as architecture

The rubric 'peer-to-peer' is essentially an umbrella term, referring to several tangible technological innovations within network computing as well as to the underlying principle, the "system logic," unifying these. Andy Oram (2001) maintains that the idea of p2p entered the public realm in the year 2000.

> At that point in history, it looked like the Internet had fallen into predictable patterns. Retail outlets had turned the Web into the newest mail order channel, while entertainment firms used it to rally fans of pop culture. Portals and search engines presented a small slice of Internet offerings in the desperate struggle to win eyes for banner ads. The average user, stuck behind a firewall at work or burdened with usage restrictions on a home connection, settled down to sending email and passive viewing.
> (Oram 2001: vii—viii)

Oram continues by noting that the computer field then became 'awakened by a number of shocks' (ix). A number of technologies, not fundamentally new in themselves, he asserts, were discovered by the users and came to have wide social impact – most notably Napster, the (in)famous, hugely popular music file-sharing system which had to shut down in 2001 after losing some highly publicised legal battles;[9] SETI@home, a project which distributes real-time computation across millions of online personal computers through making use of idle time; and the completely decentralised (still existing) Freenet and Gnutella file exchange systems. All of these systems had in common that they returned dissemination of content, choice and control to the ordinary users at the 'tiny endpoints on the Internet' (Oram 2001: ix). The client-server model of the past came to appear as surpassed. Instead, according to Oram, the significant communication takes place between cooperating peers. On a p2p file-sharing network, any computer acts as a client when searching and downloading files from another computer, and acts as a server when it provides files to other computers on the network (Wang 2004: 17).

[9] Napster was subsequently re-launched in 2003 as a commercial, regulated, "pay-per-song" service.

The alleged newness of p2p as system principle is, according to several experts, rather misleading. Social networks, telephones and mail can be said to be p2p, and so are the principal underlying designs of the Internet backbone: the original implementation of Usenet (Miller 2001: 24; Sundsted 2001), as well as IP routing (the Internet equivalent of a 'postal code' structure; more on this below) are based on a p2p logic. Vaidhyanathan (2001: 180) notes how the original Arpanet was p2p. Oram points out that until the nineties, the endpoints on the Internet operated as peers since every node functioned as both server and client. 'Aside from dial-up users, the second-class status of today's PC browser didn't exist' (Oram 2001: ix). Shirky (2001) advocates a non-literal approach to defining what p2p is, and notes that servers talking to one another are p2p, as well as online games interconnecting end-users. Meanwhile, he provocatively states, Napster – which 'jump-started' the debate – might *not* qualify as p2p due to its reliance on a central server.

If taking this structuring of p2p exchange literally, earlier, non-digital networks could as well be insert into the diagram: Bolin (2000) and Dinsmore-Tuli (2000) have for example written about video film swappers; there is a whole body of work on reciprocal gift cultures; while Gray et al. have written extensively about fan cultures and their highly textual modes of exchange (Gray et al. 2007). The per-song exchange of p2p-based file-sharing is similarly often compared to the "cassette culture" which is seen to historically precede it (Jones 1990; Moore 2004), a practice duly condemned by the music industry at the time with slogans like 'Home Taping is Killing Music'. This slogan was later appropriated and mocked by pro-file-sharers, through parodist spoofs like 'Home Sewing is Killing Fashion' (see fig. 1). Hackers commonly use the term 'sneakernet' for any transfer of electronic information by physically carrying removable media (the 'sneaker' referring to the shoes of the carrier). However, a central systemic difference between these earlier, indeed ancient modes of exchange and the present p2p networks is the latter's radicalised scale of distribution, its instantaneity,

irreverence to geographic borders, and semi-anonymity. Digital p2p networks facilitate not only older forms of sharing that are distinctly *friend-to-friend*, but more significantly, complete *stranger-to-stranger* exchange.

In the context of the Internet, Shirky (2001) maintains the above argument that p2p basically is a class of applications that takes advantage of resources at the 'edges' of the network, with significant or total autonomy from central servers. These applications 'leverage previously unused resources, by tolerating and even working with variable connectivity' (22). The Internet was originally devised as consisting of machines that were assumed to be always on, always connected, and with a permanent Internet Protocol (IP) address. The shared mainstream view sees the Internet as an assembly of millions of local networks, joined together by means of an open protocol, systemically "blind" to what gets communicated, enabling messages to be re-routed independently of missing nodes. However, with the invention of the Mosaic web browser, Shirky argues, the client-server model began to spread instead. Personal computers were not always connected and therefore did not have fixed IP addresses – they were only assigned a temporary IP address when dialling up their Internet Service Provider (ISP). This prevented PC users from hosting any data or net-facing applications locally, and instead servers were designated as powerful machines always connected and with a fixed IP address, while PCs were used only as passive clients for occasional web browsing.

In 1996, with the onset of ICQ (the first PC-based chat system), machine-specific IP addresses became even less relevant, since the ICQ protocol made the individual users addressable, regardless of what machine they were using.

> This is analogous to the change in telephony brought about by mobile phones. In the same way that a phone number is no longer tied to a particular physical location but is dynamically mapped to the location of the phone's owner, an AIM [AOL Instant Messenger] address is mapped to you, not to a machine, no matter where you are.
> (Shirky 2001: 31)

This non-boundedness, or relativity, of network addressing was made even more obvious with the rise of Napster and other file-sharing networks 'overriding' the problem of non-permanent IP addresses in order to let the end nodes of the Internet communicate directly with each other. As hardware and software improved, treating PCs only as clients became less and less tenable. Shirky concludes that this trend has been most visibly exacerbated p2p technology.

Oram concurs and describes p2p in terms that are doubtlessly teleological, as 'the continuation of a theme that has always characterized Internet evolution: loosening the virtual from the physical' (Oram 2001: x). While this appears to contradict what Hayles (1999) concludes about virtuality – that virtual data is always carrier-bound – one can nevertheless note that *in terms of practical functionality*, increased machinic performance allows for functions (like the ability to act as a server) to be assigned to locations where they were not initially intended. Regardless of the implied "direction" of technological development in such a statement, the recognition that permanent IP addressing and rigid client-server structuration has become radically transformed by p2p is important. To conclude, a technical definition of p2p could look as something like this:

- End nodes sharing resources via direct exchange and with significant degrees of discrete autonomy and hierarchical equivalence.
- Information distributed among member nodes instead of concentrated at a single server; nodes in the network participate in tasks that would otherwise be handled by central servers.
- 'Pure' peer-to-peer systems are distributed systems without any centralised control, where the software running at each node is equivalent in functionality.

There are, broadly speaking, three main areas of network computing where p2p system design has been implemented: (1) exchange of information/digitized content (file-sharing), (2) distributed computing (SETI@home being the most quoted example) and

(3) communication/collaboration (ICQ, Instant Messenger, Skype). Here, the systemic advantage of p2p is its inherent scalability and its vastly increased accessibility of more information due to the low barrier of entry for additional end nodes (Milojicic et al. 2002). This, together with the prospect of continued temporal instantaneity and vanquishing of spatial remoteness, leads many authors to suggest p2p as a leading technological paradigm for the future. Especially so, in an Internet infrastructure of increasingly mobile, handheld devices, characterized by *ad hoc* formations of social groupings and affiliations (O'Reilly 2001: 55). Initiatives like the BBC's joint consortium *P2P Next* [10] suggest p2p-type platforms as a genuine solution for delivery of live audiovisual content; such a system should however be expected to incorporate also high degrees of centralisation and regulation. The areas of implementation above should not be regarded as effectively clear-cut or separated in any way; for example Napster has been described as essentially a 'brokered peer-to-peer system', relying on a central addressing authority and bearing fundamental resemblances to communicative/collaborative p2p. Disadvantages of p2p compared to more centralised/brokered systems would be the lack of searchability and integrity of the overall quality of the network. P2p systems seem to contain an 'inherent fuzziness', Oram (2000) argues. The certitude of information is low: a host might be there one minute and gone the next. Moreover, with decentralised networks, the network as a whole is non-overseeable. It involves a 'horizon' beyond which you cannot overlook the rest of the network.

The enthusiasm for p2p has led to many incautious statements about the superiority of the technology, Shirky (2001) maintains, when 'in fact, peer-to-peer is distinctly bad for many classes of networked applications. Most search engines work best when they can search a central database rather than launch a meta-search of peers. Electronic marketplaces need to aggregate supply and demand in a single place at a

[10] See http://www.p2p-next.org/.

single time in order to arrive at a single, transparent price' (28). P2p is probably not appropriate when it is important for everyone to know all the current data at the same time (Oram 2000). Systems that require real-time, rapid search through large sets of unique data benefit from centralisation in one way or another. This recognition has also been implemented in various ways both in ICQ and Instant Messaging, as well as in file-sharing systems such as Napster (central server), FastTrack (utilising 'super nodes' that cache information about other nodes) and, more importantly, BitTorrent (which relies on meta-systems of trackers and webpage indexes containing links to these trackers).

The client/server model thus remains extremely useful, especially when one site is recognised as the authoritative one and there is a need for control over the information. It is a simple, durable model; administrative problems generally only occur when the amount of traffic exceeds the server's capacity. P2p is a general term for more complex designs – not one, but many, differing ones – and is especially useful when the content that users want to acquire is dispersed, at many endpoints; where the contributions of many is more important than the authority of one. In short, Oram (2001) concludes, p2p and client/server will coexist, and many systems will be characterised as a mix of both models. Even for some of the most decentralised of systems, significant alterations have been made to them, where centralising elements are added in order to increase general efficiency, speed or ease of use (the now common introduction of 'super nodes' or 'hubs' into otherwise entirely decentralised/non-brokered networks is a case in point).

4.4. File-sharing nation: a phenomenon "gaining ground"

What follows here is a brief overview of the different p2p protocols and applications gaining popularity throughout the first years of the new millennium. See fig. 2 for an overview of various applications and networks.

4.4.1. Gnutella

Alongside the escalating demise of Napster, one of its more interesting alternatives quickly gained popularity: the Gnutella network, an open-source, strongly decentralised protocol. The initial network application was developed in early 2000 by America Online (AOL) subsidiary Nullsoft, but was almost immediately deemed an 'unauthorized freelance project' by AOL, forcing the developers to take their hands off it (AOL was at the time in progress of merging with Time-Warner, one of the most influential signatories to the RIAA legal action against Napster). By then, the source code of the program had leaked and spread within the hacker community and within a few days, third-party alterations of the original protocol started appearing on the Internet. By publicly releasing the source code to Gnutella, the Nullsoft programmers ensured that the Gnutella network would continue to thrive and develop without need of further intervention and support from the original programmers (Kan 2001; Miller 2001: 130—131; Röttgers 2003; Wang 2004).

The application itself is small, the interface minimalist, the underlying structure is hidden from view, and there is no need to type in complex addresses and suchlike. Unlike Napster it is completely decentralised, and allows for other file types than just mp3 files to be shared; it was initially designed for sharing recipes, but soon people came to realise it worked for any type of digital content, including music files. The user agency thus actually came to influence the systemic operability of the network. Its decentralised nature makes it extremely durable (it is still running), since independent shutdowns of computers can never exterminate the entire network, and no single point of responsibility exists for operative administration and regulation of content. However, the Gnutella system design has inherent problems with searchability and speed. Thanks to its open source design, many improved versions of the software client have been released, some of them adding centralising elements to the original decentralised design. Nowadays, its popularity has however subsided in favour of other, newer networks and it is not very widely used, especially for larger files.

4.4.2. FastTrack

In March 2001, when Napster was ordered to filter out all content from the major music labels that were processing lawsuits against the company, many users came to turn to the then new-fangled FastTrack network (Miller 2001: 156—158; Röttgers 2003), originally designed by the Amsterdam-based programmers Niklas Zennström and Janus Friis (who later became known as the originators of the widely acclaimed IP telephony service Skype). With FastTrack, file-sharing was not only about music anymore: programs, e-books and even films were soon accessible on the network. Its system design had an increased search efficiency compared to completely decentralised systems like Gnutella, by utilising so-called 'super nodes'. Any computer being fast and well-connected enough acts to function as a super node, and other computers in its physical vicinity (in network terms) will automatically provide it with a list of the files they are sharing. The search is distributed via the super nodes, but the actual downloads take place directly between the computer on which the file is shared and the computer that requested the file, not via the super node (Miller 2001: 157; KaZaA 2005). Moreover, FastTrack introduced some 'intelligent download' functions: if several downloading sources are available, the application automatically finds the fastest one and, more importantly, allows for download from multiple peers simultaneously – something that made a clear improvement to downloading speeds compared to earlier networks. With FastTrack, even bigger files like films and computer games became tenable to download, especially for users with high-speed connections.

Originally, there were two competing software clients for FastTrack: the KaZaA Media Desktop and Morpheus. As they become widely adopted and hence more heterogeneous and harder to oversee/control in terms of content, they illustrate the tendency in p2p historiography to lament the demise in "purity" or integrity of networks. FastTrack's overall pool of content was considered to be increasingly polluted. Some clients installed so-called ad-ware or spy-ware that infiltrates the user's

computer and swarms the user interface with advertisements. Lacking such malicious features, and allowing for multi-source downloading while having a large user base led many people to see Morpheus as superior to Napster. However, the competing KaZaA client quickly rose to prominence. A private company, Sharman Networks, bought the rights to the FastTrack protocol and the KaZaA client, and duly forced the Morpheus client off the network. KaZaA thus soon became the dominant FastTrack client (Mennecke 2004).

By May 2003, the KaZaA software had been downloaded more than 230 million times (Teather 2003). This could be compared to the total estimated number of users at the height of Napster's popularity in 2000: approximately 80 million (Gibson 2003). However, there are numerous implicit problems in surveying file-sharing quantitatively. The transitory behaviour of the file-sharing user-base in regard to the authorities' attempts at enforcements were labelled a 'cockroach phenomenon' (Hosein et al. 2003), since after the filing of lawsuits and the subsequent shutting down of the Napster and Scour applications 'a new generation of p2p services came to the fore. Many of these had already been around for some time; however, it was the enforced suspension of Napster that made users migrate to them' (90). This alleged 'Napster diaspora' soon became as large as the original 'Napster community'. The entertainment industry reports on the alleged 'demise' of file-sharing as a totality that resulted from the downfall of Napster were in fact only recognising the downfall of one singular network amongst many others. Data on file-sharing has been misinterpreted in this way several times. For example, BBC (2005) alerted of a similar, alleged 'migration' from BitTorrent to eDonkey in August 2005, something which in retrospect appears as a flawed observation, given BitTorrent's continued dominance of bandwidth and user adoption. In terms of demographics of p2p, statistics can prove to be misleading.

As its popularity soared, however, KaZaA turned out to be riddled with problems. Nowadays, the network's content is characterised by significant levels of pollution (see

below) and many of the software clients to access it are proprietary and designed to profit from user-unfriendly ad-ware and spy-ware. Due to its popularity, it nevertheless provides fairly good chances of finding at least more "mainstream" types of content (such as chart music and Hollywood movies).

4.4.3. BitTorrent

In terms of sheer amounts of data, today's Internet traffic is dominated by the transfer of very large files like videogames, software packages and full-length films, often "ripped" from DVDs. The main applications for transferring these types of files are the eDonkey and BitTorrent software clients. According to British data analyst CacheLogic, BitTorrent was by 2004 the definitive leader of the file-sharing networks in terms of sheer data volumes transmitted via the protocol (Parker 2004). The mass media at the time tended to focus on already-established applications and networks such as KaZaA or Gnutella, which nevertheless soon were surpassed by BitTorrent in terms of data traffic. By 2007, BitTorrent and eDonkey were the most popular p2p networks by a wide margin, together accounting for between 70 % and 97 % of all p2p traffic (iPoque 2007). This shift mainly took place between 2003 and 2006, prompting a (primarily U.S.-centred) 'net neutrality' debate in 2006 and 2007, regarding what structural choices to make when Internet traffic is soaring and the infrastructural capacity – according to some – risks collapsing. Increasing broadband connectivity appears to predispose more on-demand, commercial audiovisual traffic. Reports in early 2007 indicated that emerging video-on-demand services like YouTube and Joost were surpassing BitTorrent in terms of occupying bandwidth (Zeropaid 2007). Similarly, between 2003 and 2004, BitTorrent evolved into one of the most popular networks, whereas FastTrack traffic dropped significantly (Karagiannis et al. 2004). Differing protocols could thus be seen as partially overlapping 'currents', successively gaining prominence over each other – not only in discursive terms (hyperbole), but in *de facto*

absorption of bandwidth – but could just as well be seen to compete with each other, all at once, in a 'media ecology'.

BitTorrent, developed by Bram Cohen (2003), is generally seen as a more efficient and significantly cheaper method of utilising bandwidth (Cringely 2007), compared to traditional transfer models involving centralised, huge distribution servers. The reason for p2p accruing such low costs is that p2p benefits from available bandwidth as a hidden externality borne by – depending on how one interprets it – the ISPs or their customers. This, since the end-users (especially in the ADSL model) pay for more bandwidth than the average user actually makes use of (Cringely 2007). In regard to the above argument of Internet infrastructures becoming increasingly overloaded, BitTorrent is often criticised as the prime protocol occupying ISP bandwidth without providing any specific ISP compensation. However, BitTorrent could conversely be argued to actually make the network more efficient. It shares the files across multiple peers, reducing the demand on any one link; it is designed to run in the background when machines are otherwise unused, and thus smoothes usage throughout the day and therefore alleviates "peak-time" congestion. It is, however, not at all suited for real-time video distribution (streaming) due to its "tit-for-tat" data transfer, and was until 2007 only very fragmentarily used for any commercial purposes. This serves to explain BitTorrent's current status as a somewhat "problematic" protocol, primarily among 'content providers' who tend to emphasise its bandwidth impact on the competing ensemble of currently available, profitable Internet services.

Network analyst Chris Colman observes that 'in the beginning, there was only Napster. Today's file-sharing environment is much more fragmented, with a varying proportional mix of current and emerging p2p applications dominating in each region' (Wearden 2003). Correspondingly, applications that are based on the FastTrack network (such as KaZaA and Grokster) have been more popular in the U.S., whereas eDonkey (accessed via the eMule software client) has been the most popular network in

the UK, Germany and Israel. Moreover, the popularity of Gnutella has sharply declined during recent years, leading the analyst to conclude that applications and protocols can surface and also disappear very rapidly in a shifting technical, cultural and legal environment (Wearden 2003).

BitTorrent and eDonkey operate by breaking up the individual files into thousandths of pieces, allowing them to be distributed independently. As soon as parts of a file have been downloaded by a user, the very same parts become instantaneously available to all other users as well. The entire file does not need to be downloaded in order to make it available for sharing, and the download takes place in a "tit-for-tat" manner, directly compatible with the original TCP/IP protocol of the Internet backbone and preventing parasitic behaviour and bandwidth bottlenecks. The more popular a file is, the quicker it will be to download. Games, movies or episodes of television series that previously would have taken hours to transfer are made significantly easier to share (Cohen 2003; Wearden 2003; Pouwelse 2004). BitTorrent shares some essential fundamentals with eDonkey while harnessing even more efficient use of bandwidth by disaggregating content even more freely than the latter: not only are the files split into smaller chunks, and made accessible in a dispersed way where users are no longer forced to download it from only one source at a time, the BitTorrent architecture also disaggregates itself from the client-server model even further than networks like Fast-Track, eDonkey or Direct Connect. The latter two require the users to actively connect to particular servers, in order to facilitate a search registry and administration of file transfer. BitTorrent users do not have to connect to any such servers. More importantly, its user interface operates much more publicly, as a sphere of file search and exchange parallel with the architecture of the Web. If you have a BitTorrent client on your computer, and get hold of an address (similar to a URL) pointing to the file you are after, you can commence downloading instantaneously. The online, Web-based indexes which all play a central role in the overall BitTorrent infrastructure (like TPB,

IsoHunt, and H33t) are essentially message boards allowing users to anonymously post such links.

Files are made public with the BitTorrent protocol through a process where moderators, non-moderated submitters or, more rarely, normal users make available an initial first copy of a file to the network (this process is normally referred to as 'seeding' the file). In sync with this, a static log file with the extension *.torrent* is published on an ordinary web server. This file contains information about the file, its length, name, identity, and the URL of a 'tracker'. Trackers are software agents that enable downloaders to find each other (Cohen 2003). As the torrent file is deposited on the Web, conventionally in large, searchable directories such as TPB,[11] it is easily available and reachable with traditional search engines like Google. This visibility and potential traceability of the individual seeders prompted Cohen to initially predict that BitTorrent would *not* be optimised for wide-spread illegal distribution (Hellweg 2004). These predictions were wrong: BitTorrent is now regarded as the prime application for legal and illegal transfer of large video, audio or software files. TPB, the world's largest archive of BitTorrent links to date (of which the absolute majority refer to content which is copyrighted) has showed to be resilient in the current climate of lawsuits and industry threats, possibly due to its location in Sweden, out of reach of American jurisdiction. By 2008, the site had reached over 25 million unique peers and over 3 million registered users.

Alongside BitTorrent, web-based 'one-click file hosting' services (like, for example, Rapidshare) represent what seems to be a current trend within file-sharing. Both technologies rely on the publication of authored, Web-mediated lists of files, and thus resemble systems of consumption based on instantiated, public recommendations, rather than on systems that operate solely through self-instigated searches within an

[11] See http://www.piratebay.org/. Other similar torrent trackers/indexes are IsoHunt (http://www.isohunt.com/), H33t (http://www.h33t.com/), Mininova (http://www.mininova.org/), or the now-defunct Suprnova (http://www.suprnova.org/) and LokiTorrent (http://www.lokitorrent.com/).

indefinite, non-overseeable space (as with Gnutella). Superficially, it seems like these newer models would offer a smaller variety of files, since they all have to be seeded, allocated a publicly available link/tracker and announced via the Web-based forum. But in reality, the mobility, accessibility and ease with Web-published file directories seems to have contributed to a plethora of content searchable and available via an ordinary Web browser.

However, the administration of the BitTorrent network requires more continuous input of human effort than earlier p2p file-sharing systems: in order to keep levels of polluted content down, new content is first manually inspected by moderators, who weed out fake, low-quality, or incorrectly named files. A user who injects content is referred to as a moderated submitter. Users who frequently contribute approved content are promoted to the rank of non-moderated submitters, and are thus allowed to directly add content (Pouwelse 2004). This 'division of labour' in order to maintain system performance and input of fresh content would nevertheless be expected to be entirely hidden for the average end-user of the software, especially in the BitTorrent case. Hosein et al. (2003) argue that the continued successful development of p2p networks will require the accommodation of more self-regulatory mechanisms – these manual processes of "weeding out" content could be seen as such. 'The technology that is the architect of freedom to share files becomes a technology that enforces self-regulation' (91).

This issue of *voluntary regulation over external* will resurface in the following historiography of file-sharing, since it becomes something of a standard argument in many of the observations on the actual technical infrastructure. Although such observations might seem to serve the libertarian, pro-file-sharing argument, it needs to be noted that voluntary regulation does not necessarily equal 'no regulation at all'. Rather, it constitutes a dismissal of the notion of external (or top-down) regulation being at all workable or desirable. The argument can thus be seen as underlying some

of the moves towards regulatory lenience that will be explored below. With such a move towards self-regulation, the notion of an individual morale relating to plausible and equitable collective metaphors like 'the greater good for society' once again becomes pertinent. The voluntary action of the actors involved becomes directly guided by the norms and metaphors by which they relate to the supposed external effects of their actions. With p2p-based file-sharing these effects are thought to be mainly economic: *Are certain forms of file-sharing harmful to cultural production?* If so, are particular *uses* or *formations of users* more harmful than others? Further, the 'greater good for society' metaphor can be split into two sub-questions, depending of whether one takes a more left- or right-wing stance: *Is file-sharing 'good for business,' and in that case what businesses?* Equally: *Is file-sharing 'good for citizens,' and in that case, what citizens? Only the heavy, savvy file-sharers themselves, or any cultural consumer or producer?*

Hence, it is important to note some of the existing metaphors within the file-sharing field, in order to discuss the invocation of such metaphors in the user discourse and public debate. I will begin by noting the alleged stratification among file-sharers themselves (the "leaders of the scene" at the top and the vast public at the bottom) and the semi-invisibility of file-sharing, where a shift might be seen towards further invisibility and anonymity (if the legal retribution continues). The latter phenomenon might in fact serve as an argument in favour of the alleged impossibility of external regulation; if legal repression mounts, it is often argued that p2p will simply move "underground" by way of encryption and dispersion.

4.5. Prevalent metaphors: 'pyramids' and 'darknets'

The illegal, copyright-infringing dispersal of digital content is often presented as being tiered into a pyramid structure. Rajagopal & Bojin's (2004) observation of a three-tier hierarchy within the more 'traditional' warez/cracker community has however been criticised by for example Fleischer (2006b; 2006c). He argues that broadband transfer

speeds, combined with the significant reliance on end-users seen in p2p, makes the notion of a 'pyramid-shaped' distribution of pirated content somewhat outdated. However, judging from a few of the comments to this statement, the 'pyramid' notion still applies to large parts of the pirated content – especially to "mainstream" material like Hollywood films and video games – with the essential difference being that content would circulate much quicker today, moving very quickly from private FTPs out onto p2p networks. Rajagopal & Bojin outline three general technical-social levels within the cyber-piracy system of any digital cultural goods: (1) the upper echelon, 'the scene,' where exclusive so-called *release groups* are the initial architects of the cracked pirate release (often before the actual film, album or videogame has hit the shelves of retail outlets) and FTP sites act as warehouses for the increased proliferation of this material; (2) the intermediary newsgroups and IRC channels onto which the pirated material subsequently normally gets posted; and ultimately (3) the file-sharing networks or so-called 'warez sites,' where the large majority of consumers of pirated material congregate in order to acquire the desired goods. This three-step process is said to typify the now commonly used verb 'seeding'. When it comes to acquisition of material, these different spheres serve different purposes and are subsequently accessed according to these purposes, the authors argue. A key element in these decisions has to do with the temporal 'life-cycle' of the product, where newer, imminent releases are made available by the upper echelons, while the older and long-available material circulates among the lower ones (Rajagopal & Bojin 2004). There is a specific meritocracy associated with the 'couriers' in the upper echelons:

> This is a "scene" – like a competition but within a limited circle. We might be, say, a couple of hundred people doing this altogether. Some are technicians from other ISPs, some are private persons. On the server there's been a hundred active users, tops. It's only between them the material has been spread. Nowhere else. We haven't had any commercial gain from this because this is a private thing we've run. It's hard to describe it but it isn't really the movies or the stuff in itself that is interesting. The competition consists of shifting around as large amounts of data

> in-between us, in as little time as possible. [...] By doing this, you get "points" showing how good you are.
> (anonymous, in Karlung 2005: 6, my translation)

The above excerpt comes from an internal report at a Swedish ISP where one of the employees was accused of using company equipment for illegal file-sharing in March 2005. His sentiment is echoed by Blomqvist et al. (2005b): 'to be active on p2p networks is sometimes said to be like a member of a special community'. Pålsson (2008) has studied this 'scene' in terms of cultural and subcultural capital (Thornton 1996). However, as Blomqvist et al. found, this is not a major driving force for most file-sharers, only for a rather small group of devoted, frequent "data hoarders," commonly referred to (particularly in the Swedish online vernacular) as 'the scene'. Whether any clearly defined such 'scene' can be discerned has recently been questioned in the Swedish file-sharing debate (see Fleischer 2006b; 2006c).

Rajagopal & Bojin maintain that the top echelons mimic capitalist processes of appropriation and competition, something which is largely paradoxical as they argue that the 'cyber-pirates' despise proprietary ownership of technology and capitalist commercialisation of the Internet. The authors, I would argue, here echo the presupposed idea of political, anti-capitalist, or anti-establishment motivation among file-sharers that I have characterised as an 'activist bias,' whereas their image of an alleged 'top tier' is mirrored by the notion of "data hoarders" in my respondent discourse. When the authors try to insert more recent file-sharing innovations like BitTorrent into their account, their outline of presupposed separate tiers becomes even more problematic. With BitTorrent, the management of links, active torrents and trackers is much more decentralised, and the insertion of new data does often originate also among 'third tier' users. Fleischer and others thus criticise the overly clear-cut echelons sketched out by Rajagopal & Bojin, especially since it risks entailing a form of determinism where actual identities of file-sharers would be *a priori* defined along such categorisations. To counter this risk, I would like to note that although these

particular spheres of online activity are quite clearly separable, the distinctions of whether and how particular user *identities* differ are usually not that separable: one single user could be an actor both in the higher tier and in the lower ones simultaneously, and self-reflexively refer to the contradictory, complex differences in skills, knowledge and access that follow. This is also how everyday file-sharing seems to work; 'all people exist on all levels,' all the time (Jeppelin, 2009). Rather than the actual position of a given user, it is the *projected image* of who she/he is (the 'actant' in ANT terminology) that can be correlated with such categorisations. What the perceived 'top echelon' does is primarily to redistribute material *faster* than anyone else; the 'pyramid' is borne out of an unequal distribution of speed rather than out of situated identity (Stiernstedt 2009).

As will be shown below, the reasoning behind many of the legal clampdowns seems to have been that these higher echelons contain the more serious perpetrators, who should be targeted more systematically in order to diminish piracy (especially so, the actual proprietors of file-sharing networks, FTP databases or warez sites). However, blows have been made also to more traditional (lower echelon) end-users, possibly in order to instil some fear among the public; spreading the common suspicion that "anyone could get caught," which was echoed also by some of my respondents.

In response to such measures, many Internet pundits seem to advocate a return to more clandestine file-sharing infrastructures. In Sweden, several anonymising proxy services[12] have been launched (publicly endorsed by the Pirate Party after the widespread debate on file-sharing and Internet privacy following the clampdown on TPB in May 2006 and the implementation of IPRED in 2009), where an encrypted, anonymised Internet connection is offered for a monthly fee. I would argue that this tendency to argue for returning "underground" is in large parts a rhetorical manoeuvre by interested actors (such as the Pirate Party and associates) to project fears of an even

[12] See Relakks (https://www.relakks.com/), Integrity (http://integrity.st/index.php), Flashback (https://www.flashback.name/), and the Pirate Bay's own Ipredator (http://www.ipredator.se/).

less overseeable sharing, impervious to regulation. Moreover, this projection suits the teleological account, rooted in libertarianism and the abovementioned futurology, where the scenario of 'blacknets' or 'darknets' [13] is enacted. The encryption and anonymisation is predicted to ubiquitously operate in the background, largely invisible to the user (much like DRM becomes built into operative systems), simply because the technical means are available for this. This scenario has in fact been referred to in many of the technical discourses (on blogs and forums) as a more or less "given" next step, at least if the current legal crackdowns continue. However, the continuing popularity of systemically open systems such as BitTorrent, the reluctance of ISPs to disclose user information, and the statistically miniscule risk for users actually being caught imply that a more "open" use still remains being the norm in the file-sharing world at large. Moreover, openness tends to beget popular adoption and, thus, a widened diversity of content.

4.6. Rapid historical change, delineated into alleged "phases" of system design

At this point in my historiography of file-sharing it becomes possible to schematically observe the different "phases" that the technology has undergone, according to its established narrative. Note, however, that (1) the delineations of such alleged chronological currents here only apply to the recognised invention and establishment of applications *per se* – that is, they should not be thought to correlate also to the specific, historically changing and universally heterogeneous *user* characteristics (however, some respondents were clearly keen to make nostalgic comparisons between file-sharing protocols present and past).

(2) Any idea of "generational shifts" of technology needs to be complimented by an understanding of Nelson & Winter's 'path dependency' theory (1982) and Bolter & Grusin's concept of 'remediation' (1999) in order to gain greater plausibility and to

[13] See http://www.wordspy.com/words/darknet.asp. 'Blacknets' is an alternative, earlier term – coined by May (1998). See also Ludlow (2001).

counteract teleological renditions of technological change. The concept of remediation emphasises the fact that new technologies always build on, or extend, older technologies, and that new technologies not only "contain" elements of older technologies; the properties of the very same, older technologies also change, in the relation to their subsequent successors. Email, for example, contains elements of conventional mail, but conventional mail also took on new meanings once email gained wide-spread adoption. Similarly, every new application after Napster carries with it an inherent kinship to this initial application, while the Napster concept itself acquires new layers of meaning as new applications have followed it. The concept of path dependency states that there is in complex systems a sensitive dependence on initial conditions, even determination and/or 'lock-in' by events or junctures that might have initially appeared insignificant. As argued by Lanier (2006; 2010), digital systems entail a high degree of resilience and rigidity as proprietary, technically facilitated arenas come to gain monopoly by harnessing the labour of the people crowding its periphery. According to Lanier, software can be characterised as 'brittle' and this leads to the phenomenon of 'lock-in,' meaning that software is harder to change once it has been enhanced by subsequent developments. Lessig (1999) argues that in the online realm architecture will play the most important part, mainly because architecture – that is, code – is self-executive when it comes to constraining human behaviour. This is concurrent with Galloway's notion of protocol (2004).

(3) Given the concept of remediation, these alleged phases/generations of networks should not be interpreted as subsequently following one-upon-another, like cars in a one-lane queue. Rather, they pass alongside each other, one merging into the other, with certain older applications remaining present as other, newer ones, pass by and gain presence – the metaphor is, to be more precise, one of "currents" emerging one alongside, rather than clear "phases".

Oram (2001) traces the alleged 'first generation' of p2p networks, outlining the foundations and very definitions of p2p, arguably epitomised by Napster. The main file-sharing examples given in this early literature are almost exclusively Napster and Gnutella, the latter one of these appearing to have survived, 'passing under the radar' and remaining widely used also when later generations of file-sharing applications have surfaced and gained ascendancy. With its origins somewhat falling in-between the first and second generations, Gnutella has particular first-generation properties in that the network design in itself was of a fundamentally new character when it was launched, yet proved to be fairly crude compared to more currently popular networks. However, the application's popularity coalesced with the second generation of networks, emerging in the shadows of Napster. This second phase of file-sharing is principally defined by the FastTrack network. What defined the newer networks was a better efficiency in the balancing between centralising and decentralising elements, and the ability to download from different peers simultaneously. In terms of popularity, it was FastTrack and Direct Connect (alongside the short-lived Audiogalaxy application) that promptly gained presence after the demise of Napster, Miller notes (2001: 96), who in the midst of this frenzied phase provides a hands-on users' guide. His list of Web links, the majority of them no longer active, marks his account as a short-lived document of its time.

This thesis was written in the midst of a surge of networks and applications that could be labelled 'third generation'. The defining architectures here are BitTorrent and eDonkey, blurring the distinction between up- and downloaders, and specifically adapted for high-bandwidth connections and gigabyte-size video and software files. The specific mesh topology of BitTorrent makes for a radical decentralisation, where the topology of the network is constantly shifting, thus making the actual data flow non-overseeable in its entirety. The regulated elements in this architecture are the trackers, links and indexes, tracking what instances of content (films, books, and games) are able

to be exchanged. Yet, the fragmented way in which the content is "swarmed" means that one user cannot be accused of sharing a copyrighted file in its entirety (unless he/she is the only node sharing this file). Wang (2004) here makes for a lucid, clear instruction manual, nevertheless also marked by its time (like the two abovementioned works).

In one future scenario, the legal stance towards file-sharing would be loosened (at least in practice) and more transparent, publicly visible and traceable sharing would thus become the norm. The notion of proprietary, 'gated' networks (Miller 2001: 101–102) falls within this remit: architectures that are manageable in the sense that they enable regulation, monitoring, profitability, exclusivity and security. However, when previously unregulated networks have been appropriated thus (like for example when Napster was transformed into a legal service) their populations have tended to migrate to other, more nebulous services. Alternatively, proprietary services could be devised, that allow a more heterogeneous glut of content and would enable vast p2p networks – but *not anonymised*, thus "keeping track" of the users. [14] However, the current politics promoted by the entertainment industry appear to prompt more gloomy scenarios among technologists and futurologists. One such scenario – similar both to the idea of 'gated' networks and to 'darknets' – would be so-called 'trust-based networks,' where ties are made in-between human friends instead of machinic nodes; in other words, a return to the logic of 'friend-to-friend' rather than 'stranger-to-stranger'. Here, trust is the most valued parameter, adding an additional barrier of access to the previous ones, where exclusivity, personal recommendations and invitations deter unwanted activities and/or polluted content. Trust gets relayed so that a 'friend of a friend' can be granted access (Massa 2003), thereby transforming social ties into transferable and exchangeable entities; arguably commodities in themselves (similar to the semi-anonymity of current social networking sites like MySpace and Facebook). In fact, such

[14] One example is Google Desktop (http://desktop.google.com/about.html) which makes the user's entire computer searchable, including text, mp3s, images, audio, and video files.

invitation-only communities already exist in the torrent world: private trackers like SweBits, ZineBytes, and Karagarga[15] only allow members to invite others once they have acquired a sufficient upload/download ratio.

Increased privacy and security can be achieved in many ways: by exclusivity, encryption, dispersal and decreased traceability. According to some, this embodies the 'greatest fear' for regulators and law enforcers. Shirky compares the increased urgency of encryption among today's file-sharers to the necessity of hiding transactions in the US during the prohibition (Shirky 2003; see also Ludlow 2001). Several real, encrypted p2p 'darknets' already exist, where users are untraceable and entirely anonymous, and where content remains in the public domain for as long as it is in some quantifiable demand.[16] Paradoxically, for this latter purpose, establishing 'darknets' would also be part of the pro-file-sharing agenda: the Swedish Pirate Party actually began promoting an existing commercial 'darknet' service in August 2006 in response to entertainment industry aggression (Piratpartiet 2006). According to recent traffic analysis, around 20 % of the global p2p traffic is already encrypted (iPoque 2007).

Several global file-sharing services have superseded each other, each contributing to the efficacy and non-overseeability of file-sharing, and each one often being used in tandem with other protocols. It is common, for example, for one user to use certain protocols for specific types of content, and simultaneously other protocols for other types of content. Even more "open" protocols like BitTorrent are notoriously problematic to monitor, due to the ever-changing states and radically distributed nature of the active system. The succession of protocols has happened in overlapping, seemingly non-predictable ways – contrary to the apparent teleological tendency of the phenomenon's current historiography. Several networks are generally popular at one

[15] See http://swebits.org/; http://zinebytes.org/; http://karagarga.net/

[16] Publius (see http://www.cs.nyu.edu/~waldman/publius/publius.html). In purpose and ideology, Publius has two more contemporary counterparts in WikiLeaks; http://wikileaks.org/ and Freenet (http://www.freenetproject.org/). See also Waste (http://waste.sourceforge.net/), Mute (http://mute-net.sourceforge.net/), TOR (see http://tor.eff.org/index.html, and Pastry (http://research.microsoft.com/~antr/Pastry/).

and the same time, often for different reasons: File-sharers might use one network for a particular type of content and another one for different ends altogether. It is not possible to add together figures of popularity of two networks and say that there would be *n* amount of file-sharers altogether, since a person might count as one user on the SoulSeek network while being one on eDonkey, and yet another one on BitTorrent. The use of file-sharing applications can be expected to be extremely intermittent, since the software clients generally are left to run in the background of other applications and in idle periods when the computer itself is left unused but still online. Moreover, a connected computer does not necessarily equal one human user; groups of colleagues, friends or family members might for example share the same computer and connection. Constant software upgrades might force users to download and re-install the same software client several times over. Hence, figures like the 230 million downloads of the *KaZaA Media Desktop* should be questioned, in terms of representing actual users.

4.7. The problem of p2p demographics: trying to estimate its scale and resilience

When related to the Internet in general and file-sharing in particular, statistics become highly problematic. Even user surveys are fickle, because the controversial nature of file-sharing might lead some respondents to distort their testimonies. 'It is notoriously difficult to get accurate information about illicit or illegal behaviour or behaviour that's perceived as having a stigma,' Eric Garland, (CEO of BigChampagne, a firm that measures trading activity on peer-to-peer services) has noted (Manjoo 2004).

> While the industry cites several third-party studies that suggest a plunge in trading activity as a result of its lawsuits, its opponents dispute those studies and point to other numbers that indicate an increase in song swapping since the lawsuits began. And while the industry points to iTunes sales statistics as a sign that music fans are willing to pay for songs online, critics of the record labels pooh-pooh the iTunes numbers, noting that they represent but a fraction of the total music business. Every party in the battle seems to have a different idea about who's winning and who's losing.
> (Manjoo 2004)

One thing that is overlooked (if not deliberately ignored) in some of the statistics used in the debate is that many people tend to shift from one network to another when the former network for various reasons gets unattractive. There are indications that the use of the KaZaA client slumped significantly during 2003, coinciding with the newly instigated recording industry strategy at the time, to hunt down and legally force file-sharers to pay damage to the copyright owners. Still, few of the articles noting the drop in popularity of this particular network related it to the simultaneous rise of eDonkey and the escalating problems with the KaZaA client. This illustrates the need for qualitative data. By asking the users themselves why they would in fact switch networks, better conclusions should be possible.

The overall evidence indicates that file-sharing is only marginally, or locally, affected by the threatening activities of the entertainment industry. While quantifying file-sharing is in itself tricky, several reports on overall Internet traffic and total numbers of users registered with different networks show that the activity remains a substantial part of Internet usage, continuing on a moderately stable level. The Swedish clampdowns began by random domiciliary visits to a few file-sharers' homes, continued with police-aided stings against the Bahnhof ISP and TPB, and climaxed with the Pirate Bay trial and the implementation of the IPRED law in 2009. With the seizure of servers at Bahnhof, a brief decrease in Internet traffic was observed but soon the graphs of traffic statistics were back on the same levels as earlier. The publicity resulting from the raid only prompted a very brief interruption in end-user behaviour, which soon went back to normal (Karlung 2005: 9). This pattern was replicated in the Pirate Bay sting in 2006 and, more universally, by the IPRED implementation on April 1st 2009.[17]

There are several slogans among Internet pundits that invoke this resilience of p2p traffic: 'The Net interprets censorship as damage and routes around it' (Gilmore, in

[17] Netnod (central administrator of Swedish Internet data nodes) noted a drop in traffic routed via Sweden on that date, but the traffic volumes in April—June 2009 were nevertheless higher than those in April—June 2008. Moreover, significant Swedish traffic might since then have become routed via foreign nodes instead. See http://stats.autonomica.se/mrtg/sums/All.html.

Elmer-Dewitt 1993). 'The only way to control your content is to be the best provider of it' (Solheim 2008). Recent measurements of Internet traffic also show that p2p file transfer continues to dominate: It 'significantly outweighs web traffic' (Parker 2004), it continues to grow, and it accounts for the absolute majority of global Internet traffic. In fact, the share of p2p file traffic is likely to be underestimated when using conventional measurement methods, since much of the traffic is 'masked' as ordinary web protocol transfer etc (Karagiannis et al. 2004). Slumps in p2p traffic are more likely to result from technical failures within the hosting-systems than from external reasons such as legal crackdowns (Pouwelse 2004), and p2p activity in general has not diminished, regardless of lawsuits and scare propaganda. 'On the contrary, p2p traffic represents a significant amount of Internet traffic and is likely to continue to grow in the future, RIAA behavior notwithstanding' (Karagiannis et al. 2004: 1). The main file-sharers – approximately 10 % of the Internet users – are thought to use around 75 % of the overall bandwidth (Schofeld 2008a). According to iPoque (2007) between 49 and 83 % of all Internet traffic is p2p-based (with nighttime peaks of over 95 %).

At the same time, p2p applications can be said to harness bandwidth that would otherwise remain untapped. One simple technical property becomes important when noting the trope of the alleged "naturalness" of p2p to the Internet: The Transmission Control Protocol (TCP) which facilitates virtually all Internet communication is asynchronous and favours reliability and order of data rather than synchronous communication. Streaming services such as voice-over-IP and video-on-demand are thus impeded (and better served by the alternative protocol UDP) while p2p harnesses this inherent feature of TCP. With the current TCP protocol, the share of bandwidth is equal for each session; a user could thus surf the web in one open session, play an online game through another one, and file-share through numerous such sessions, effectively "hogging" bandwidth from more modest users. The current protocol has principally remained the same since 1987. Ou (2008) notes how researchers like Bob

Briscoe (Chief researcher at the BT Network Research Centre) have proposals for a new protocol dealing with this type of TCP congestion. One key problem, however, is to get users to (1) voluntarily adopt the new protocol, and (2) not abuse the potential flaws in the new system:

> At first glance, one might wonder what might prompt a p2p user to unilaterally and voluntarily disarm his or her multi-stream and persistence "cheat" advantage by installing a newer TCP implementation. Briscoe explains that with the right incentives, users will want to use a fair TCP system. It's not clear [...] what kind of specific incentives and enforcement.
> (Ou 2008)

Due to the latitude for user freedom, such proposals tend to suggest *voluntary policing*. Once again, the observation that the infrastructure would allow for high degrees of individual abuse suggests that individual restraint is hard to enforce yet should be promoted.

4.8. Public attitudes to p2p-based file-sharing

Arguably more important than the sheer numerical popularity of file-sharing are the positive attitudes to file-sharing that have become increasingly notable in public opinion. Janko Röttgers (2003) was one of the first to argue for this: despite legal and public relations battles, he noted that file-sharing is no longer seen as controversial; it is part of everyday life for millions of computer users. Not surprisingly, the record industry initially made a different interpretation of the situation:

> "What the lawsuits have done is facilitate a national discussion," says Mitch Glazier, an RIAA lobbyist. "They have raised awareness and especially made parents talk to their kids about what they're doing online. Parents had no idea what Kazaa was, they had no idea whether their kids could or couldn't access it." The legal strategy, Glazier says, has "forced people to discuss what's appropriate."
> (Manjoo 2004)

In the same optimistic vein, a typical trope from IFPI is that 'thanks to a range of public information campaigns, internet advertising, artist campaigns, instant messaging and the lawsuits, seven out of ten people in Europe know that file-sharing without the

copyright holder's permission is illegal' (IFPI 2005a). But the wide-spread sharing persists. The question whether these millions of users would actually perceive themselves as criminals, by doing something that is largely seen as an elementary part of everyday Internet use.

At the time of my fieldwork, 59 % of Swedish Internet users aged 16—30 held that there were no good legal alternatives to file-sharing, according to media statistics consultant MMS (Brandel 2007). The MMS project manager noted that apart from the technical failures of the legal sites (involving complicated DRM systems and lacking functionality on Mac, for example) they entirely lack the social dimension of the unauthorized file-sharing sites. TPB allows users to chat and to comment and rate files, something which has become an integral part of file-sharing culture. Ironically, Swedish IT pundit Oscar Swartz (2008) described the site as appreciably more "rock 'n' roll" than the music industry which is fighting them.

Between 2005 and 2008 a general acknowledgement began to emerge (at least in the more liberal press) that the entertainment industry was thought to have weathered the economic crisis purportedly instigated by unauthorized file-sharing, and that certain sectors of this industry were in fact doing well (Gibson 2005; 2008b; Keegan 2008; Wallis 2008). More importantly, a realisation about how commonplace the pastime of unregulated file-sharing is (especially among younger people) seems to have led many cultural commentators to have accepted unauthorized file-sharing as a part of the contemporary cultural landscape. In 2008, a British study showed that 95 % of the 1,158 people surveyed (aged 14 or over) had engaged in some form of copying. Around 90 % of the surveyed youths owned personal mp3 players, and 63 % downloaded music 'using unlicensed peer-to-peer file-sharing networks' (BMR 2008). 42 % of the respondents (and two-thirds of those who admitted downloading) had 'uploaded' as well. Younger respondents were more prone to upload. The reasons for uploading were mainly to give return, recommend, and make available music; 'a sense of fairness and

the principle of reciprocity' (BMR 2008). The reasons for *not* uploading were affiliated with practical issues (viruses, security risks, and 'pop-up' ads). Only half as many respondents noted the 'risk of getting caught' than those listing such technical/operational risks. Out of the songs in their collections, 48 % had *not* been paid for. This share was significantly higher in the younger age groups. Also Swedish surveys indicate that the file-sharers, despite knowing the law, seem largely unfazed by the legality of the phenomenon. Three Swedish sociologists of law (Hydén et al. 2009) argue that 75 % of the 15—25 year-olds they had surveyed[18] did not see the fact that their file-sharing was illegal as a reason to avoid doing it.

British consumer research agency The Leading Question (2005) found that those who admittedly downloaded or shared unlicensed music on a regular basis also spent significantly more money on legal services. The average spending on legal downloads among these was £5.52 a month, compared to the average monthly expenditure on digital music among those who were not illegally file-sharing, which was only £1.27 (Leading Question 2005; Gibson 2005). Paul Brindley, the agency's director, commented: 'There's a myth that all illegal downloaders are mercenaries hell-bent on breaking the law in pursuit of free music. In reality they are often hardcore fans who are extremely enthusiastic about adopting paid-for services as long as they are suitably compelling' (Gibson 2005). During this period it became more common even among representatives of the music industry to acknowledge this. Glen Merrill, formerly Google's chief information officer, later digital strategist for EMI, said: 'There is academic research that shows file sharing is a good thing for artists and not necessarily bad. [...] We should do a bunch of experiments to find out what the business model is' (Gibson 2008b). Similarly, the ubiquity of unregulated copying led Disney co-chair Anne Sweeney to state that piracy 'is just a business model' to be competed with (Wistreich 2006), signalling a different attitude towards unregulated file-sharing where

[18] N = approx. 1,100 people.

Disney regards itself as the mainstay for putting out content in the first place, lending them primacy in the life-cycle of products.

4.9. Generational aspects

Many of these reflections on public attitudes to file-sharing seem to imply that a generational shift has taken place in terms of copyright morality (Larsmo 2005; Pogue 2007). Söderberg (2008: 208) notes how Swedish centre-right politicians who defend 'intellectual property' argue that a whole generation has become fostered to disregard the principle of property rights and how this is problematic for a rights-based liberal market economy. The argument that this normative acceptance for certain forms of property is undermined is hardly diminished by the new business models that prosper from the file-sharing services, nor by the potential profits that the entertainment industry makes thanks to illegal distribution channels, Söderberg holds. Moreover, when a Swedish 31-year old was sentenced in May 2008 for making available music and films, he recounted his experiences on a personal blog, and soon sympathisers voluntarily donated money to him in order to cover fines and legal expenses. Söderberg (2008: 35) notes how this reflects a public attitude to perpetrators that differs significantly from other types of crimes.

Yar (2008: 609) mentions 'the apparent inverse relationship between age and propensity to commit copyright offences [...] Historically, youth have been the subject of successive waves of social anxiety or moral panics, which focus upon the threat that young people supposedly represent to morality, body and property'. Cultural studies have a long history of accounting for this generational dilemma (Cohen 1972; Pearson 1983; Wimsatt 1994; Springhall 1998). As with my own approach, Yar turns to Boltanski & Thevenot's concept of discursive resources and strategies that actors mobilize to justify their normative claims:

> Rhetorical performances can be seen as attempts to establish effectively the legitimacy of a given point of view, set of claims or assertions of rights, entitlements and responsibilities. [...] However, given the inherent plurality of such repertoires, there are always alternative justifications available which favour alternative norms and claims.
> (Yar 2008: 610)

Mythological tropes are thus invoked both on the side of the pro-copyright agenda and by the proponents of unregulated file-sharing. Söderberg (2008: 54) notes the operational function of law-as-pedagogy: Although the legal crackdowns never manage to stop more than a fraction of all sharing, it serves to engender new societal norms. Both the legal rhetoric and the real instantiations of the law primarily serve to engender an alternative normative orientation, different from that of free and unrestricted sharing.

4.10. Opposing moral/legal tropes

By looking at various examples of 'educational' (more correctly, propagandist) material targeted to children and youths by the pro-copyright lobby, Yar (2008) identifies some mythological tropes:

4.10.1. Trope 1: the myth of property as a natural right (a Lockean right to property, as a result of 'honest labour'). The counter-trope among the proponents of unrestricted file-sharing would in my interpretation be the standpoint (which Yar assigns to be more non-Western in its character) that *cultural heritage is held in the commons*; it is carried collectively and holds value communally (a position advocated by Lawrence Lessig, James Boyle et al). This ties directly to James Carey's characterisation of a 'ritual' purpose of communication as different from a 'transmissive' one (Giese 2004). One could take this counter-trope even further, as an assertion of *sharing as a natural right*; which would be to formulate the commons-as-carrier trope in overdetermined form. This form of argumentation did occur among my respondents.

4.10.2. Trope 2: the myth of equivalence between tangibles and intangibles (the assertion that allows copyright infringement to be equalled with 'theft'). The counter-trope here would be *the disparity between tangibles and intangibles*, where digital files are seen much more as utilities or 'common goods' than discrete, tangible objects ('common' as in nonrival and non-excludable, subject neither to scarcity nor depletion). One of my arguments is that we need to be wary of this dimension also when criticising the pro-file-sharing side, due to the conflicting modes of valuation (as works of art or as "flow"/"ether" of information).

A paradoxical consequence of trope 2, Giese points out, is that maintaining the equivalence between tangibles and intangibles would directly clash with the established legal doctrine of 'first sale'. This doctrine declares the right for the consumer to freely dispose of cultural artefacts once they are purchased. This distinction is exploded by digitization, and cannot be solved without either disallowing free disposal (effectively creating an extremely proprietary, locked-in public realm) or by giving up the idea of a transmissionary/proprietary mode of management for digital files, akin to that of tangibles. 'The doctrine of first sale becomes an intolerable threat to media industrialists whose economic base is the sale of mass-(re)produced cultural artefacts' (Giese 2004: 357). This notion of 'first sale' was also invoked by my respondents who invoked the right to freely dispose of songs, films etc that one had purchased.

4.10.3. Trope 3: the myth of individual creativity (the idea of a singular author, creating seemingly *ex nihilo*). The counter-trope here would be '*the death of the author*'; the recognition that the production of cultural goods is not a matter of individual creativity, effort and excellence and that there is no moral obligation to 'recognize' and 'reward' the individuals concerned; that the creation of culture rather lies in the aggregated amalgam of cultural impulses essentially *between* entities. This notion of cultural creation resonates with the posthumanist conception of generative agency as being

distributed and non-specific and can be seen as a continuation of the poststructuralist reception of Barthes (1977) and Foucault (1984) where 'all iterations of knowledge partake of a web of intertextual meanings, drawing upon meanings always already present in the cultural system' (Yar 2008: 614). It resonates also with contemporary studies of dissemination of knowledge and innovation in STS and engineering (Orlikowski 2000); areas which inform also the hacker ethos and the technocratic management of the Internet at an administrative/engineering level.

4.10.4. Trope 4: the myths of harm (the notion that actual sales and revenues are damaged, and by extension, that there will be less financial incentives for struggling artists and producers).

Regarding the link between file-sharing and falling CD sales, there are various studies having different conclusions. For reasons of brevity a comprehensive analysis of these findings is not included here, but is provided by Pollock (2006) and Andersson (2009). A general conclusion is that CD sales started dropping simultaneously as unregulated file-sharing began to rise (initially with Napster in 2000). However, a direct causal link is hard to establish, since there are so many other factors that could serve as an explanation to this drop: Changing consumption patterns (with the ascendance of video games, DVDs, hardware etc as new expenditures); shrinking profitability from CDs; a decline in the number of new titles; a cyclical slump after the boom of the 1990s; decreased diversity of radio playlists; and so on.

The counter-tropes to trope 4 would thus be (A; noted by me), *the impossibility of assessing harm, or of linking file-sharing causally with falling sales.* (B; noted by Yar), *the disjuncture between retaining authorial rights and retaining profit from these rights* (many licenses are not held by the actual authors in question). (C; noted by Yar), *the reservation about whether culture is created due to economic incentives.*

This listing of opposing tropes might serve as an analytical tool to relate circulating discourses to actual evidence. Various invocations that serve to support one's trope are often made, and it is important to critically assess any such claims or invocations, regardless of who makes them. These tropes also give context to the individual file-sharers' claims. It becomes easier to excuse one's behaviour if one does not even acknowledge or give credence to any possible negative effects: "There is no author who can claim legitimate control over this artwork to begin with!"; "Files are not to be seen as artworks, they are common pools of data!"; "No-one can be proven to be harmed economically by the sharing!"

I would add one more trope to this list. **Trope 5: The myth that file-sharing can be regulated from above.** Its counter-trope – that *the phenomenon is impossible to fully regulate* –is arguably even more widespread and tends to preclude the likely entertainment-industry argument altogether. In pragmatist epistemology (such as that devised by Rorty, above), these tropes operate by gaining normative weight in epistemological communities: the more actors subscribing to a certain notion (however not without invoking certain empirical supports), the more credibility it appears to have.

Regarding who would hold any form of "responsibility" of negative externalities – as a confrontational discourse would argue for – is in actual fact hard to prove, as will be shown in the following. While the actual responsibility appears to be distributed, fragmented along a range of interlocking technical and cultural tendencies, there is a need in a confrontational discourse to assign responsibility with either individual users or the facilitators of networks and platforms. Although there is a notion of economic damage within the entertainment industry and also among legislators and government actors, it is appropriate to investigate the actual nature of such economic damage. It turns out that a direct causal link to unauthorized file-sharing is hard to establish. Further, the presupposed individual responsibility becomes hard to automatically

assign to any one user, as if these were all operationally equivalent merely by being active peers on the network. In fact, there are significant differences in degree and type of activity between different peers: For example, only very few users actively upload at any given moment. As with the notion of whether a user identifies with 'upper' or 'lower' echelon behaviour in the alleged tiered hierarchy of file-sharing, this need not mean that there would be different *a priori* classes of users. An individual can for example be an uploader/'seeder' 5 % of his/her time on a certain network, or might be a regular uploader on one network while merely being a 'leecher' on another one. Many of the tactics utilised in the crackdown on file-sharing seem to be intended to penalise exactly the forms of activities that are associated with active contribution, or 'seeding,' as this is the mode of agency likely to instigate most damage.

4.11. Actual user contribution is rare, and *a priori* definitions of user types are hard to make

> Perhaps the gift economy is a little less public-spirited than its promoters suppose? A lot more receiving/taking than giving is evident.
> (May 2002: 102)

I have established that the large majority of file-sharers appear to fall in and out of different roles (or 'actants'), such as 'seeders' and 'leechers,' on a more spontaneous basis. In fact, many investigations of the nature of file-sharing networks show that few users contribute with new, unique content to the networks, while many more download without actually contributing to any considerable extent. On p2p networks, 'each has the opportunity – though not the requirement – of being a producer as well as a consumer' (or rather, a 'receiver' as well as a 'contributor'; Oram 2000). Nevertheless, he asserts, those who 'produce' may be relatively few; he quotes a study which found that only 2 % of Gnutella users actually contribute, while even on Usenet only about 7 % post material. More findings indicate the same tendency: Saroiu et al. (2002) debunk the myth that all peers behave equally, in terms of both contributing and consuming resources. Approximately 26 % of Gnutella users shared no data; these users were

clearly downloading data but not sharing. Similarly, in their observation of Napster, an average of 60—80 % of the users shared 80—100 % of the files, implying that 20—40 % of users were sharing few or no files. Furthermore, their study shows that both Gnutella and Napster entailed a significant amount of heterogeneity; bandwidth, latency, availability, and the degree of sharing varied significantly among the peers. Although these systems were designed with symmetry in mind, Saroiu et al. maintain that they recorded clear evidence of client-like or server-like behaviour among the populations of both systems. Peers deliberately misled other users regarding what bandwidth they had, so that they would upload less and be able to download more. A case study of BitTorrent (Pouwelse 2004) found that only 17 % of the users remained online for longer than one hour after they had finished downloading. After 10 hours this number went down to 3 % and after 100 hours to a mere 0.34 %. With BitTorrent, every minute the user stays online after the download is completed is important because the entire file then acts as a seed, being available to other users.

An earlier survey (Economist 2000) noted that the amount of users who offered no files to download for other users (in other words, only receiving but not contributing) was a lavish 70 % of a group of about 31,000 people connected to the Gnutella file-sharing system during the 24-hour survey period. 'Those who did share their collections [of CDs] did not contribute evenly. A mere 20 % provided 98 % of the material. Indeed the most generous 1 % served up about 40 % of it' (Economist 2000; Adar & Huberman 2000). Another study (Sen & Wang 2004) found that less than 10 % of the IP numbers on a particular network filled about 99 % of all p2p bandwidth. Liebowitz et al. (2003) noted how KaZaA traffic was highly concentrated around a small minority of large, popular items; in fact, a more pronounced concentration of user behaviour than previously reported. As few as 2,500 files (a mere 0.8 % of all detected files) accounted for as much as 80 % of the traffic.

P2p traffic can often be found to follow a mathematical principle, *Zipf's law* (Hart 2004). This law is most commonly expressed as a 'power log;' a logarithm of diffusion of variability. Put simply, it is a mathematical expression of the tendency of networks to contain a small number of files that are extremely popular, while containing a huge number of different files in a 'long tail' that are, however, not popular at all (Ripeanu et al. 2002; Liebowitz et al. 2003). This phenomenon has also been observed among Internet usability experts in an era of 'Web 2.0;' small percentages of users contribute with the vast majority of material (see Nielsen 2006). More recently, Hargittai & Walejko's findings (2008) suggest that 'creative activity is related to similar factors as it was in previous times: a person's socioeconomic status' (14). User skill is another determining factor.

Early accounts of file-sharing showed that users were ostracized due to their upload-download ratio. Giesler & Pohlmann (2003) tried to download a file from a Napster member and received the following instant message from "Tom" (connected via cable, sharing 639 files): *'Hey, asshole! Don't see a single file on your drive! No sharing, no Napster! Either you immediately add some or I kick your ass...'* See also Eytan & Huberman (2000). There appeared to be two reasons for this defensive behaviour: (1) limitations in bandwidth and (2) a subcultural propensity (central to the hacker/warez ethos) towards "being eligible" for taking part in the accumulated collections. However, as technical efficiency has progressed (with protocols such as BitTorrent), not only have download speeds and storage capacity increased, but the oligoptic visualisation of what peers one is actually downloading from has shifted the view from seeing only the singular peer with whom one interacts, to a cluster of individually fragmented data transfer processes happening simultaneously – to and from various peers, regardless whether they have still uploaded the whole file or not. The download is here represented by a multicoloured *progress bar* (see fig. 3) constituted by all data sources fed into one, rather than by a flag indicating which

singular user alias is currently downloading your file. A *polyadic* rather than dyadic exchange (Giesler 2006).

> So we're part of this gigantic matrix of music [...] so it also becomes pretty difficult to distinguish who is giving and who is taking.
> (alias 'Jeff,' in Giesler 2006: 287)

Furthermore, as p2p-based file-sharing has become a mundane, widespread vernacular it is no longer characterised by the propensity numbered (2) above. The ethos of *deserving to download* is no longer seen as a requirement to the upkeep of networks, as is documented in more recent accounts of p2p and in my own research findings. 'Leeching' could be understood as a break with an expected online solidarity, but it poses little threat to the material sustenance of the network. The overall operation of the network appears largely unscathed (Zerva 2008).

Any attempt at formulating p2p-based file-sharing in 'parasitic' terms (Giesler & Pohlmann 2003) here becomes problematic: The resources are not finite, as in Hardin's 'tragedy of the commons' (1968) – but they are not entirely limit*less* either. It will be shown below that 'leeching' behaviour is in fact not as widely frowned upon as the early literature on file-sharing might indicate. I have already established that the media corporations' alleged drop in profits due to file-sharing is hard to prove, and that it is hard to determine who would be the most harmful actor involved, as the peers participating in the active uploading tend to shift all the time. What remains more stable, however, are the actors facilitating the actual networks and platforms. Some of this agency is redistributed among end-users (such as the creation and posting of BitTorrent links) yet the construction and maintenance of certain infrastructures (like the actual indexes of these links) tends to be done by discernable and corporeally punishable actors.

4.12. A very public battle: the crackdown on file-sharing

Although much of the journalistic discourse and research data on file-sharing is U.S.-based, the phenomenon is widespread throughout the Western world. According to Oberholzer-Gee & Strumpf (2004), 13 % of worldwide p2p users are German, 11 % Italian, 8 % Japanese, and 7 % French. IFPI (2005c) states that notably Sweden, Finland, France, Spain and South Korea 'have been drastically hit by music piracy'. Swedish anti-piracy private investigator Pär Brumark defines the two biggest international hubs for 'advanced Internet piracy' as Sweden and South Korea. He argues that the limited upload capacity of U.S. American domestic broadband connections has meant that 'degenerate' developments have been stalled there, despite an overall high rate of broadband connections (Löwenfeldt 2006). Such declarations confirm how the international 'anti-piracy' lobby prefer a "tiered" Internet diagram, suited to broadcasting (slow uploading/fast downloading).

Sweden has also had a comparatively late implementation of the EU-wide Directive on Intellectual Property Rights[19] (IPRED), a legal framework allowing rights holders to retain traffic data from ISPs in order to target file-sharers. For many years, another ideal was in fact advocated, as an alternative to IPRED. Before 2008, several commentators – most notably Peter Jenner (2006; Arrington 2006) in the UK and Roger Wallis in Sweden – argued for an extended 'blank media levy' or 'broadband tax' on private Internet connections in order to extend the current system of collecting societies to also be monitoring and reimbursing p2p-type circulation of copyrighted material. For examples of such arguments, see Fleischer (2004a), Gustafsdotter & Ilshammar (2006), Wallis (2008), STIM (2008). Similar proposals have been made in Canada and the UK. These remuneration systems are thought to "make up" for sales otherwise lost. They are based on the assumption that downloads (partially) substitute sales (Liebowitz 2005), but do not provide an answer as for to what degree and what

[19] Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights.

types of content. There are more problems with these remuneration proposals (some of them best left out here due to brevity). The main issue would be whether it would be legally feasible at all, in an international perspective, to implement a *carte blanche* for unrestricted file-sharing in one country. Reforming copyright law in such a fashion would violate WTO agreements (Berne convention), UN conventions (the WIPO copyright treaty), and EU directives (Kuprijanko 2006). Since a broadband tax would in practice allow "free" file-sharing, the copyright industry would be likely to be deprived of means to continue fighting it. Further, it would allow for file-sharing hubs to be located in Sweden while serving the whole world (TPB is the prime example). IPRED is designated to target ventures such as TPB, but overlooks the aggregated, co-distributive role of individual peers on a p2p network. The pooling and sharing of metadata can be done in an anonymous and decentralised way, where no single actor can be held liable for infringement. If file-sharing were to become even more decentralised, by utilising proxies, encrypted 'darknets,' and fragmented storage and transfer, both IPRED and a centralised remuneration authority would be toothless. For the above reasons, it currently seems like both file-sharers and industry representatives have become increasingly sceptical towards broadband taxation. As for the consumers, a similar remuneration system is already in place for all sorts of 'storage media' in Sweden (Faultline/Rethink Research 2004; Fleischer 2005).

Since the entertainment industry have, in practice, nevertheless been allowing for large degrees of unrestricted sharing, their initiatives towards a more repressive regime should perhaps rather be understood as pedagogical strategies, aiming to change norms, habits, and ultimately the self-regulation of individual users (Yar 2008; Söderberg 2008). By introducing a legal difference between uploading and downloading, the IPRED directive might encourage an ontological understanding of the Internet which is based on the client-server mode of communication, where individual *down*loading is sanctioned but *up*loading morally and legally disallowed. Within the

more hard-lined approach, two types of entertainment industry strategies can be distinguished: (1) To attack the proprietors of particular networks (as in the Napster case, the Grokster/Stream Cast Networks lawsuit, and the Pirate Bay trial). (2) To attack the end-users of any network, trying to prove that illicit content has been wittingly shared by individual users. This distinction is however partially eroded by the fact that the actual posting of content on different networks is done by individual users. The overall approach has essentially been a *combination* of these two strategies.

4.12.1. Going after the network proprietors, as well as the end-users

In 2001, a federal court in San Francisco ordered for Napster to close down. Legal measures taken in 2004, in order to reach the originators of the Grokster and Morpheus file-sharing software clients were not successful, since the court argued that due to this technical design the proprietors should not be held responsible for the content made available by the users. A lawsuit was launched by MGM Studios against Grokster and Stream Cast Networks in the U.S. Supreme Court. Defence attorneys and journalists made parallels to a preceding case, the 1984 VHS versus Betamax legal process, when the U.S. Supreme Court ruled in favour of Sony against Disney and Universal Studios, and held that the manufacturer of a device used for copyright infringement could not be held liable as long as the device in question had substantial uses that were non-infringing. Although archiving copies of copyrighted material was deemed illegal, the court ruled that recording broadcast material for personal viewing at a later time was legal. If a product is expected to have been designated for substantial amounts of 'fair use'– then it should also be regarded as legal (Lessig 2004: 75; Miller 2001: 75). A general question of interest arises, especially with regard to discourses on user agency: When does an infrastructural facilitator become liable for the copyright infringements committed by users of its service?

> In recent years, the law settled on a relatively simple rule: technology innovators could avoid liability by highlighting the lawful uses of their products. For example, the legal use of a VCR to play noncopyrighted home videos protects distributors from liability even if VCR users also illegally duplicate copyrighted movies.
> In *MGM v. Grokster*, the U.S. Supreme Court developed a new test for determining whether a distributor of a "dual-use" product (one that is capable of both lawful and unlawful use) might be liable for acts of copyright infringement committed by users of the product. The court ruled that distributors are liable for third-party misuse of a product if the distributors' marketing efforts actively induce copyright infringement.
> (Griffith & McKinney 2006)

The fact that neither Grokster nor StreamCast charged a fee for their service, but were advertising-based, led the Supreme Court to argue that their financial successes depended on high-volume usage, which was known to be primarily of an infringing nature. A central conclusion here is that the law does not make an *a priori* decision on final responsibility of the uses of a service, but that this is a question inherently open for discussion, which then tends to become settled on a per-case basis. Despite the sometimes vastly different legal systems, also the European cases tend to show this.

In 2003 several lawsuits were launched by the RIAA against a large number of users of file-sharing networks, worldwide (see fig. 4). If 2003 marked an upsurge in lawsuits against end-users of file-sharing networks in America, 2004 was the significant year for Britain, as the entertainment industry began prosecuting civilians on the basis of engaging in 'illegal file-sharing'. Legal prosecution of end-users also began this year in Austria, Denmark, France, Germany and Italy (IFPI 2005c). 2005 saw a similar strategy also in Sweden (Emretsson 2005), as well as the Netherlands, Finland, Ireland, Iceland, and Japan (IFPI 2005a). A strategy of attacking p2p network providers in order to shut down entire services and to seize "customer information" also became visible during these years: In February 2006, for example, authorities from Belgium and Switzerland shut down one of the key servers for the eDonkey p2p network (Zamanov 2006; BBC 2006a). Three months later, German police seized upon 3,500 file sharers (BBC 2006c). House searches were carried out among those users

with more than 500 files available for exchange (altogether, 130 houses were raided; see Kleinz 2006).

A similar procedure was simultaneously initiated in Sweden; after a controversial raid against commercial ISP Bahnhof in March 2005, where the Swedish anti-piracy lobby actually bribed a man to fabricate evidence by putting copyrighted material on the confiscated servers (Karlung 2005), a much larger raid was initiated on May 31st 2006 against TPB. After having been alerted by the MPAA, 50 Swedish policemen raided the server halls of TPB and Piratbyrån, arresting three individuals and in effect blocking numerous unrelated websites which were hosted in the same server halls. The operation was very controversial, especially since it involved indications of direct unilateral lobbying by American interests on a national level. Three days later, the Pirate Bay service was resumed, operating from temporary servers in Holland. Two weeks later the service once again operated on Swedish ground. No incriminating information about individual users had been hosted on the confiscated servers, nor were any copyrighted 'content' hosted on the servers, only metadata about the content's circulation. On April 17th 2009, the Pirate Bay founders were found guilty of abetting copyright infringements, with appeals currently pending.

In terms of data traffic, the Swiss company RapidShare (the leading provider of so-called 'one-click,' web-based file hosting) stands for a share that is arguably as significant as that of TPB. Still, the two service providers appear to be treated fundamentally differently not only in the public discourse, but by legislators and copyright holders as well. RapidShare has not been targeted by the copyright industry in the same way as TPB has. This is due to their operational difference, which directly impinges on their visibility and functionality as indexes, argues Fleischer:

> While The Pirate Bay is a large centralised index, pointing at a decentralised archive, RapidShare is a large centralised archive with no public index and no search function, leaving it to the users to build small decentralised indexes by posting links in web forums and private chatrooms.
> (Fleischer 2008a)

Although some ISPs deliberately block sharing sites like RapidShare due to the often illegal nature of the material hosted, the site has no policy of screening what is uploaded; instead they locate the responsibility entirely with the user. They only filter content when being notified that it is illegally hosted. Similarly, TPB see themselves merely as carriers, while taking an even more dedicated stance in the eye of criticism, refusing to remove links (unless they are classified as child pornography by the Swedish police) and provocatively answering back to its complainants.[20]

In the UK, as well as in other European countries, the prospect of disabling broadband services for persistent offenders has been repeatedly debated; a move which effectively means that authorities would force ISPs to monitor and penalise their users (Knapton 2008). French authorities have devised a 'graduated response' by which ISPs will warn persistent copyright abusers and ultimately sanction them with loss of Internet access for up to 12 months. Since 2004, the British Phonographic Industry (BPI) has been launching civil lawsuits against uploaders; 'the dealers rather than the junkies' (Hobson 2004). Since compilations of several thousands songs are not uncommon, the theoretical bills can in these cases amount to staggering sums. In effect, cases tend to be settled out of court and for fractions of such theoretical bills, yet still in the range of thousands of pounds. The great obstacle for the prosecuting agent is identifying whom to attack. Normally, the only clue as to who a person actually is online is the IP address, which most often is temporarily assigned to a user every time he or she logs on with his or her ISP, and therefore not permanently guaranteed to remain directly attached to a particular, physical user. (Although usernames are attached to physical persons, they tend to be anonymously submitted; there is no simple way of proving that username x would be undeniably linked to person y.) The prosecutors have to apply to a court to force a particular ISP to disclose the names and addresses behind the IP addresses. The ISP could counter such demands by claiming

[20] See http://thepiratebay.org/legal.

that their involvement begins and ends with the relay of transient data packets, and that they have no involvement, wittingly or unwittingly, in the actual copyright infringements (Hobson 2004). Using IP addresses to identify individuals tends to be a 'complicated and imperfect process at best. It will never identify who was using the PC at the time,' argues Joel Watson, a lawyer representing the Canadian ISP Telus Corporation (p2pnet.net 2004). Several people might for example share the same wireless router.

The EU-wide IPRED proposition allows organisations representing the copyright industry to retain IP addresses from ISPs, in order to litigate directly against potential copyright abusers. In Sweden, the directive has been dubbed a 'private-police law' since it would allow private actors to conduct their own police work. Fleischer argues that this shift in strategy, targeting 'uploaders' and service providers, reflects a legal/moral stance where the act of *down*loading content without permission is in practice permissible, while the act of making the same content available and meaningful to a larger population (by *up*loading or indexing them) becomes unlawful.

> In actual fact the file-sharing battles have less and less been aimed at individual file-sharers. Surely, the private-police directive opens up for a new wave of civil lawsuits against individuals in order to frighten them, but personally I see it primarily as a way to redefine (reterritorialise) the three "parts" involved. (Fleischer 2008b, my translation)

These three parts are (a) the *rights holders*, (b) the *network facilitators* and (c) the *Internet users*; categories which all are vaguely defined and ontologically unsettled (Fleischer 2008c). Of these three parts, only (a) and (b) are institutionally organised, and the legal remit for the rights holder to target the network facilitator might be a reflection of the fact that these agents are more visible and situated than the individual peers, and are seen as the agents "orchestrating" the overall operation (note that the 'network facilitator' can be an ISP as well as a p2p client like Grokster, or an indexing site like TPB). Whether these agents can be argued to *aid and abet the copyright*

infringements committed by its users, and whether this happens *within a commercial remit* then become the primary questions for the law. Fleischer argues that while copyright used to primarily regulate *works*, from 2000 and onwards the focus has increasingly shifted towards regulating *tools*. Both DRM and the targeting of service providers must be seen from this perspective (Fleischer 2008d). This can in turn stimulate certain forms of governmentality: By ostracising certain uses that are deemed deplorable – like uploading and indexing – a mindset can be fostered that privileges downloading over such activities; by extension, a broadcast-type vision of the Internet. Consequentially, Fleischer speaks of DRM as a form of 'Mental Rights Management' (2007b).

IFPI has conceded that the cases (generally combinations of criminal and civil suits) 'are aimed at "uploaders" – people who have put hundreds of copyrighted songs on to Internet file-sharing networks and offered them to hundreds of people worldwide without permission from the copyright owners' (IFPI 2005a). Despite being skewed in focusing on such 'heavy users,' or 'uploaders,' the lawsuits say something about the file-sharing demographic; the first year of legal actions in Europe resulted in 248 individuals, 'mostly city-dwelling men aged 20—35', facing sanctions or being fined (€3,000 each, on average; IFPI 2005a). The most common turnout of this type of lawsuits, at least with the American precedents, is settling for cash payments and promises of ceasing the trading, rather than long-winding court processes (Krim 2005). The largest of the European cases involved a French uploader of 56,000 tracks (IFPI 2005a). A German 51-year-old who had illegally offered more than 8,000 music titles was forced to pay €15,000 (IFPI 2005b). IFPI claims to be targeting a range of applications: eDonkey, DirectConnect, BitTorrent and Gnutella. Although 'heavy' uploaders tend to be a minority on most file-sharing networks, the global accumulation of lawsuits has been soaring, and in fact doubled between 2004 and 2005. In April 2006, the total number of legal cases against individual file-sharers worldwide was

estimated to be over 23,500 (of which 18,000 were within U.S. jurisdiction; BBC 2006b). In other words, the total amount of lawsuits was officially up 104 % on the previous year, when the same worldwide number amounted to 11,500, of which 9,900 were within the U.S. (IFPI 2005a).

The official BPI, IFPI, RIAA and MPAA tactic has been to avoid giving after to 'political correctness' (Hobson 2004). Targeting children has been part of this deliberate inclemency, something which can be assumed to have contributed to the image of the record industry as a bully (Roberts 2003). A 12-year-old living in public housing in Manhattan, was targeted as an illegal file-sharer and her mother (despite adverse publicity on behalf of the prosecutors) was forced to pay $2,000. A British woman was similarly fined £2,500 after her 14-year-old daughter was accused of illegally sharing music on the Internet (BBC 2006b). There has been a significant global outpouring of antipathy expressed not only by active file-sharers but by consumer groups (see Borland 2005 for the Consumer Federation of America's recent defence of p2p-based file-sharing; fig. 5). A plethora of articles and message board posts hostile to this strategy can be found on p2p community websites such as Zeropaid and Piratbyrån. This hostility was notable also among my respondents, and was taken up as a reason for rejecting the entertainment industry. Many respondents appeared to have a high level of knowledge, and their argumentation paralleled that of the more well-known pundits, specialists, and commentators. A lot of this specialist knowledge seemed to be shared by the administrators and heavy users in the more mundane setting that my research focuses on. What follows is a summary of their common tropes, extending the list inspired by Yar above.

4.13. Central technical tropes

4.13.1. Peer-to-peer being the 'default' configuration of the Internet

At its core, p2p can be said to directly correlate with a diagram of end node-to-end node communication (akin to the postal system, or email), which is inherently different from that of centre-to-periphery (broadcasting, newspapers). As is shown above, the Internet was originally modelled on p2p, but took on certain client-server properties in its period of rapid commercial uptake, to ultimately return – at least in some key aspects – to a p2p diagram. Further, its infrastructural properties restrict certain modes of usage; one example is how ADSL (common in Britain; fast down speed, slow up speed) is suited to the client-server model whereas fibre-optic cable (more common in Sweden; fast down speed and up speed) is more suitable to p2p.

4.13.2. An Internet *telos* of decentralisation and resilience: its development being 'unstoppable'

The trope that file-sharing is "inevitable" is now a commonly occurring one, also among Nobel laureates in news press editorials: 'everything that can be digitized will be digitized' (Krugman 2008). This trope is empirically well-founded: technical properties, actual examples, logical arguments all attest to the validity of the argument. Unless the Internet would be razed, file-sharing will continue.

Two inherent tendencies to digital materiality could be traced; the first one being the more obvious one: (1) A radical dissemination of content by means of discretionary copying requires active effort – both for seeding, for maintaining the circulation of content, and for finding it. Pure file exchange alone makes for low visibility and oversight; file-sharing is in this sense a highly nebulous phenomenon. Knowing this, the second tendency becomes more obvious: (2) Digitisation radically eases also the accessibility and guidance to this content – but only by employing metadata, indexing and search functions. This would require some form of editorial effort. These two tendencies can both be argued to be progressive in their own right; the latter one in fact

being a possible remedy for the traditional 'content' industry, albeit a tendency which is currently only thoroughly exploited by unauthorized entities like TPB. Wallis (2008) notes how despite that sales are dropping in terms of units, concert revenues are increasing. He also notes that cultural diversity is allowed to flourish largely thanks to the unrestricted flourishing of digital realms. He argues that p2p cannot be consistently stopped without far-reaching impact on cultural diversity, and that this diversity is in fact lubricated by p2p networks. In other words, these networks cater also for tendency (2), and this should be acknowledged by the entertainment industry. However, the notion of penalising 'seeder' behaviour drastically crashes with his proposal, and would in this perspective damage cultural diversity, since this diversity is effectively made possible by the illegal seeding of individual 'enthusiasts'/activists.

The social dimension of file-sharing – its potentials for creation of meaning, community and coherence – is also what the Piratbyrån think-tank emphasises.[21] The nebulous, resilient tendency of p2p (1) is not enough for this; it is essentially the ease that digitisation brings to editorial efforts (2) that stimulate new forms of community. In noting the absurdity of an alleged reversal of the former tendency of digitisation (1), as if 'non-copying' was a possible order given the Internet's architecture, they reveal the impossibility of a repressive ban on (1), without however making any categorical proposals for individual self-regulation. It remains to be seen whether the current clampdowns on digitisation's editorial efforts (2) will have any effect on the degrees of pure file exchange (1), for example by narrowing the variety of available material. At the moment, nothing indicates this.

A practical assessment of the legal apparatus makes apparent that it can only operate if its subjects are *visible* and *numerically viable* to be regulated by the law. The p2p infrastructures have the possibility to react to harsher measures by *decreasing visibility* and *diverting responsibility* among impossibly large groups of individuals.

[21] See Piratbyrån's Walpurgis manifesto (2007): http://piratbyran.org/walpurgis/

Targeting hubs, indexes and seeders – which seems a likely outcome of the IPRED directive – would in this view prompt a likely response among these agents, to cloak themselves by various technical means and by massively distributing their agency, thereby diverting responsibility by sharing/decentralising also the act of coordinating content, tendency (2).

The attempts at regulating infrastructural operators hence appears to be intended not to perhaps stifle the cunning actors at the top of the alleged 'pyramid' of piracy, but rather to foster voluntary self-regulation among those ordinary users who are afraid to be targeted. It remains to be seen whether this prompts an increased militancy among ordinary file-sharers. This question is too speculative to be answered in this thesis, while my fieldwork might however give some indications on how strong this notion of militancy is in the user discourse. What will be offered, nevertheless, is an indication of the extent of this argument of 'unstoppability'.

4.13.3. Voluntary regulation rather than "from above" (general aspects)

According to Lessig (1999) and Galloway (2004), Internet technologies – due to their highly code- and protocol-governed character – allow for significant degrees of governance by directly material means. The hardware involved is configured to effectively stratify usage in various ways:

- ADSL (connections via ordinary phone cables) restricts uploading.
- The TCP protocol is specifically applicable to *asynchronous* communication (torrents rather than streams) and allows multiple connections, encouraging "bandwidth hogging" behaviour.
- ISPs and Internet "connecting points" are a heterogeneous category of actors. Some allow for more anonymity, personal integrity than others, making a total transparency where "peers" are thought to denote "human users" nigh impossible (open wireless routers are but one example).

These observations verify Latour's (1991) interpretation of technology *making human behaviours durable:* some habits can on the Internet be "built away," something which is significantly harder in a non-protocol based environment. Similarly, the inherent *traceability* to Internet technologies (Latour 2007) makes possible a potential monitoring and archiving of user activity; a concern underpinning many of the debates surrounding these infrastructural phenomena, both in Sweden and elsewhere.

David Post (2000) has criticised this view by giving empirical evidence of how attempts to universally standardise or regulate the Internet have failed, globally – while local censorship still occurs. The mp3 format is one case in point, where competing DRM initiatives (SDMI), as well as technically more sophisticated ones (FLAC, OGG Vorbis) failed while the standard taken up by most users was universally adopted. There is scope for competition, where the standard most liked, or most welcomed, gains success. Secondly, he notes how technical implementations tend to be non-foreseeable, and that the 'path dependency' inherent in technological development is by no means pre-given. To take a recent example, the cipher-based encryption of the DVD Blu-Ray in fact made the tool for actually cracking the encryption *more mobile*, once the decryption key was found, as this tool itself consists of a code.

Goldsmith & Wu (2006) list various successful (local) attempts at regulating the Internet. By extending its historical means of land, capital and money onto the material Internet infrastructure, the state apparatus can exert legally sanctioned forms of regulatory violence. As pointed out above, this violence can be directed at locating and penalising individual users, or by targeting structural actors (ISPs, email operators, indexes, and search engines). The former mode of control often happens by utilising the latter actors as proxy. This form of regulation need not be antidemocratic. Goldsmith & Wu note that, for example, e-trading is only possible when the digital infrastructure is linked to individual, corporeal actors. However, with the establishment of more radically decentralised p2p innovations (encrypted, routed,

anonymised) and ubiquitous, anonymous connection points to the Internet like open wireless LANs, this "anchoring" of digital infrastructures is in large parts undergoing an undoing (Lundblad 2006). Researchers like Mlcakova & Whitley (2004) have demonstrated how p2p users 'shape technology by means of deliberate, as well as situated, actions. The more technically experienced users tended to view and *use* the technology as a simple *tool* to be altered and *controlled* for the purpose at hand' (2004: 100, emphasis in original), summoning 'counter-control' of the technology, in order to customise it to suit their own purposes and interests. The question is what the limits are to the scope of action. This is in many ways another instance of the classic sociological struggle between structure and agency.

There is an ontological complication in that personal computers are essentially tools for universal modulation, and are themselves vastly malleable. Computers are – as machines – thus able to compromise any external regulatory attempts. The "godfather" of the Internet, Vint Cerf, has argued that the ideal of a "trusted" Internet, with maximum integrity in terms of who can send data and what types of data, is an impossible dream, given the actual root structure of the global network, both in terms of hardware and software:

> Every machine that can be compromised is a potential hazard. A machine that was OK yesterday is certainly not OK today: it may have ingested an infected memory stick. At the very least, you have to keep validating it. My bias right now tends to be "It's every man for himself" – you need to be suspicious whether you're inside the trusted cloud or not, and when it fails, the house of cards tends to collapse. (Cerf, in Schofeld 2008b).

In sheer quantitative terms, any attempt at regulating the Internet involves a pragmatic assessment of the potential damage caused by a wrongdoer, and the cost of targeting and reprimanding this actor. This cost is increased as the amounts of "wrongdoers" are radically multiplied, and as they are made harder to monitor/trace. The cost-to-damage ratio is further skewed if there are significant doubts as to what economical damage illegal sharing of copyrighted material constitutes and how severe it actually is.

The telos of non-trackable and radically decentralised p2p solutions as a response to stricter regulatory measures, invoked by many file-sharers, relies on the promise that *the scope of user freedom generally outweighs any probable external regulatory attempts*. Given this, the only effective mode of control is one that prompts *voluntary Internet user self-regulation*. The material restrictions of hardware and software obviously limit the scope of user freedom, yet the given possibilities within this infrastructural realm are significant enough for the 'copyfight' to be very likely to continue.

I will now turn to more specific observations regarding p2p-based file-sharing, beginning with this issue of *regulation*, then continuing with the *primacy of convenience/acquisition* (in other words, a pragmatic rather than deliberately politicised use), the vulnerability of the current networks in that they rely so much on active programmers, hackers and users *facilitating the centralising, metadata-intensive, highly visible and thus targetable infrastructure*, and finally the inherently *non-overseeable, amorphous nature of the actual exchange*, happening as a result of all of the above.

4.14. Specific regulatory properties of p2p-based file-sharing

Mlcakova & Whitley (2004) identify the locus and content of regulation in peer-to-peer systems, and explore how individuals actually use and configure the technology. Their enquiry is somewhat 'myopic' in that it focuses on the specific, situated experience of technical regulatory features when searching, browsing, and filtering. Their particular questions follow: *Which features of the software are purely technical, and which attempt to regulate human behaviour by inscribing certain values into the software?* An integral technical feature that the authors point to is the search engine interface, the search results interface and the number of search results shown. Although the authors typify these as technical, it must be noted that all of these features are regulatory in the sense that they constrain or enable certain actions, and that they depend on a pre-

existing code-governed architecture, common to Internet applications, which prescribes retrieval of data by way of an active search function. However, Mlcakova & Whitley argue, these features do not have a particular interest or goal *inscribed* into them; they are simply there because there must be certain structure to the search engine in order for it to exist. Further, the applications tend to include default settings as for numbers of simultaneous downloads and uploads, for the folder in which downloaded files are placed, for the folders that are to be shared online. Some of these defaults can be seen to be set in order to promote file-sharing behaviour among the end users (making the default mode a sharing instead of 'leeching' one).

Do they attempt to shape the technology and if so, how? 'All of the users attempted to shape the technology in one way or another to suit their own purposes' (Mlcakova & Whitley 2004: 99); tricks in order to maximise up and down speeds, blocking out ad- and spyware.

Are people consciously aware of these rules and regulations embodied in the software? There was a general consensus on the way the systems incorporated a trade-off between user freedom and infrastructural restrictions. More technically knowledgeable users tended to customize the software, play with settings etc, whereas less knowledgeable users were generally 'just happy to have it work' (Mlcakova & Whitley 2004: 100). *Awareness* of a technical restriction thus seemed to beget user intervention. What was noted was, generally, a problem-oriented approach: 'Although users might not be aware of controls in the software and the regulatory aims of the system designers, they will still attempt to shape their environment *if the problem is compelling enough.*' (100, my emphasis).

The authors thus confirm my own hypothesis on a stratification of user knowledge and skill within the overall population of file-sharers, and also confirm the strongly convenience-orientated propensity within this same population (however mitigated by the very same degrees of knowledge and skill).

4.15. Summary: The primacy of convenience and acquisition

4.15.1. Political by implication, not necessarily by intent

> Haha.
> You guys are just too funny. I download all the time and I'm so content I don't need to pay for it. Stop me if you can.
> (anonymous comment, signed 'Satisfied,' in SvD 2005, my translation)

What makes file-sharing controversial is the ease and casualness of cultural sharing, when acted out between millions of total strangers on p2p-based networks. Given that the user interface of a file-sharing network is as ubiquitous as the general interface of a personal computer, it appears that the differences (in terms of ease, casualness, and seeming unavoidability) between friend-to-friend and stranger-to-stranger copying become negligible, from the perspective of the end-user.

A survey by Antoni (2007) shows a high emphasis on convenience among the cinema-going Swedish file-sharers; only 3 % expressed what the researchers call a 'ideological attitude' regarding the choice to download instead of go to the cinema. The survey also showed a very high correlation between age and the opinion that 'all file-sharing should be allowed': the younger the respondent, the more positive to deregulation. Similarly, blue-collar respondents were more positive to deregulation than academics, civil servants or entrepreneurs. Students, people with immigrant backgrounds, the unemployed, and avid cinema-goers were particularly positive to deregulation. In these groups, around 50—70 % were in favour of total deregulation. Also those with good access to technology and those with flat screen TVs/home cinemas were more positive. No link to political allegiances was found (Antoni 2007: 37—38).

Furthermore, pollution of content is very common on most p2p networks, a problem which could arguably be inherently attributed to carelessness, and even outright malice among the end-users. Liang et al. (2005) examined the nature and extent of pollution, and found that pollution was pervasive on the FastTrack network;

more than 50 % of the copies of popular recent songs were damaged. There were indications that much of this pollution was intentional. For older songs, pollution was less prevalent and appeared to be more unintentional. Although KaZaA allows users to vote on the quality of files, this seemed not to work. Hence, the recording industry has argued against file-sharing thus: 'The larger masses of people are on KaZaA, where you get a lot of rubbish. And that is what we can compete with' (IFPI representative, quoted in Kittel, 2004). However, the problem of pollution has been addressed in the system design of some of the more recent networks. In Pouwelse's account of BitTorrent/Suprnova (2004), a small group of moderators (around 20 individuals) collaborated with numerous other volunteers in order to weed out incorrect or polluted content. The monitored nature of torrent links makes them relatively labour-intensive, but much more accurate in terms of content quality and easy to use for its vast group of end-users. Polluted content is much less of an issue with BitTorrent.

From the perspective of the downloader, BitTorrent also lessens the visibility of the actual uploader, whose files one would be copying. With protocols like DirectConnect, the sharing is much more akin to remotely accessing someone's hard drive, while BitTorrent (with its simultaneous sharing from many partial uploaders) rarely gives the impression that one is downloading from only one person. The relative anonymity of p2p-based file-sharing (as in stranger-to-stranger, rather than friend-to-friend) thus becomes further exacerbated by this protocol.

It is very likely that this low public visibility, relative anonymity and ease of access engenders opportunism in terms of acquiring content. The fact that pornography is very common on the BitTorrent networks is indicative of this; if the sharing was conducted more openly, choices of content would be more flagrant and most likely more calculated. Research on avatars and online anonymity (Turkle 1995) indicates that subjects are more likely to act in morally questionable ways when not personally accountable to the same extent. Hence, this opportunism would be expected to play a

central role for the individual motivation of any file-sharer. Why do people generally use these networks? Despite the rhetoric of stealing, file-sharers are arguably doing exactly what customers are supposed to do: get the most possible gratification for the least possible money (Condry 2004: 348). Christopher May makes a similar conclusion: 'intellectual property issues are symptomatic of the political problems with which the information society may be concerned, at least at present these thefts *are only political acts by implication, not intent*' (May 2002: 103, emphasis added).

4.15.2. Barriers of entry: access depends on metadata and pre-existing user knowledge

File-sharing is only convenient for those who know how to use and access the technology. At the same time as being branded as opening up a new kind of public sphere, p2p networks could just as well be criticised for demanding quite substantial degrees of knowledge, labour and time in order to be discovered, learned, and subsequently used.

There have been attempts to make user interfaces and installation of client programs easier, yet this inclination seems to constantly having to be 'traded off' with the increasing sophistication of the programs. 'If every new peer-to-peer service requires the user to download, install and configure a new program, it will remain a craft shop for tinkerers' (Oram 2000). Despite seemingly comprehensive user interfaces (with user-friendly graphics and extensive help documentation), the software is often notoriously tricky to install, setup and fully master. In this perspective, some applications (most notably Gnutella and BitTorrent) are more interesting in that they rely on a more rudimentary – one could even say non-existing – central user interface. It is common practice, for example, for bloggers to hyperlink directly to BitTorrent files without giving any description of the link, as if acquaintance with this file format would be taken for granted. In many ways, p2p as a mode of cultural consumption pre-supposes an active, knowledgeable user;

> Peer-to-peer is good if you have a strong idea what you're looking for but have no idea where it is. A centralized system like Yahoo is better if you only have a vague idea what you're looking for. [...] No one would be able to find much on Napster if they couldn't obtain the name of a band and its songs beforehand. Ironically, many people depend on traditional sales channels like Amazon.com to obtain names of songs before they troop over to Napster and download them. Thus, Napster requires a pre-existing, outside infrastructure.
> (Oram 2000)

The consequence of this is that p2p systems tend to rely either on pre-existing user knowledge or on metadata (extraneous information about the content itself) in one form or another. As a third option, there is an alternative strength offered by p2p as well: recommendations among interconnected peers (Oram 2000). Even if you do not know what to look for, you can contact a knowledgeable member or casually browse that particular member's offered content, in hope of finding something interesting. As has been shown, a flat, decentralised topology risks becoming non-predictable, non-overseeable, non-accountable, and ultimately *more exclusive* than more formally organised structures (Enzensberger 2003). Hence, there are good arguments for well-functioning infrastructures external to the p2p networks in question (like, for example, recommendation systems and/or editorial outlets).

Some authors argue that p2p networks have potential of serving as alternative public spheres, as a vast diversity of non-pirated material can be found on the networks; books, magazine articles, reference guides, audio books, radio shows, television programs, court orders and legal documents. Bauwens outlines how two spheres currently co-exist – the dominant sphere of commodity-based capitalism, and the sphere of cooperative exchange – and how a conflict manifests itself between these. He even argues that 'new subjectivities' arise, that desire 'self-unfolding of their creativity and peer-based working relationships' (Bauwens 2002). Nevertheless, even Bauwens soon admits that this informational capitalism to significant degrees relies on the fact that active programmers, hackers and users are often themselves academics, students or have other sources of income, and that 'peer-to-peer in the technological

sense is the domain of technology-savvy hackers who have the same "absorptive capacity" to collaborate on software projects; *it is and remains a technological elite*' (2002, emphasis added). This echoes Jenkins's 'brain trusts' (2006: 39).

4.15.3. A "non-overseeable" phenomenon

Despite the utopian allegories sometimes attached to it, p2p system design can be criticised for disallowing sufficient *transparency* (referred to by Oram et al. as the 'cannot act as stock market' argument), *overseeability/predictability* (the 'when and where did they say they would be here' argument), as well as *accountability* (the 'who to blame or ask when things go wrong' argument). Furthermore, participants are generally anonymous to each other and to the greater public; this ties in to a general issue not only of invisibility/visibility of the self whilst being online, but also to the self-image of the users themselves. Given the statistics on downloaded material, it appears that many users feel that they can give in to even the most private of desires, protected by the invisibility and anonymity of these networks (for example, in the case of downloading pornography).

Given this (with especially BitTorrent technology making for a low individual visibility of the peers involved) the activity of p2p acquisition and circulation would thus – in the perspective of the end-user – *not* be characterised by 'conspicuous consumption' in the sense of the publicly visible *bricolage* presented in traditional subcultural activity (as in various studies by Dick Hebdige, Mike Featherstone, Pierre Bourdieu, et al.). Rather, it is much more of a "mute" activity, acted out in private, as its spatial location generally delineates singular, spatially separate workstations (either in domestic or school/work environments).

Also the flow of data is invisible. An end-user cannot see, touch or feel the information passing by. One can only see the indicators, progress bars, at the respective end points of the transmission. For many people it would be unclear exactly *how* these

'magical bits' fly from one point to another. As Pouwelse (2004) points out, quite substantial division of labour has to be devoted to run for example the BitTorrent network; the question is how many end-users actually see this on a daily basis, or even realise it.

This is a common theme in information technology; already in the 19th century, cadres of clerks, messenger boys and engineers were required to run the telegraphy networks on a daily basis. Heterogeneous, materially hybrid networks of overland and submarine cables, pneumatic tube systems and messengers were required for the transmission of messages; transmissions that to unwitting customers appeared mundanely straightforward or unproblematic (Standage 1999). The same can be said about the Internet in general; in the 1990s, long lapses or blackouts were commonplace throughout the global email system – lapses that were due to highly physical restraints, like heavy work load during peak hours on the American coasts, and server or router breakdowns. The fact that the Internet after all is a material, earth-bound, labour-dependent entity clashes with its illusory nature of being so inherently *im*material; much of the early discourse surrounding the Internet was duly confused by this dual nature.

Additionally, the networks are truly *global*. As Arjun Appadurai (1990), Ulf Hannerz (1996), John Urry (2002), and others acknowledge, global connections and exchanges are particularly hard to conceptually grasp or overlook (mainly due to their staggering reach). We are, quite literally, surrounded by a mind-blowing flow of data – regardless of defining it as communication, 'content,' or immaterial commodities – and yet we cannot ever physically grasp the scale of these flows. Truly global connections and networks can only be understood conceptually, analytically or imaginarily. This thesis is an attempt to map such an understanding in a methodical, exhaustive and critical way; in essence, to understand the users' own understandings.

File-sharing is commonly understood as not only a global economy of exchange, largely made invisible due to its technical nature. It can also be seen as a form of *underground economy*, much like the transnational flows of gifts, drugs, weapons, pornography and even people, that remain unnoticed by institutionalised capitalism (see Lee 1993; Schlosser 2004; Levitt & Dubner 2006). No one really knows the exact extent or intensity of such flows; they can only be roughly estimated. P2p-based file-sharing also falls into this category, as its global networks comprise heterogeneous, semi- or even illegal, non-governed forms of organisation (some might say disorganisation), and hold these properties as maybe their strongest advantages in the face of legislators, authorities, outsiders – but also documenters like myself. The abovementioned problem of regulation is preceded by this impossibility of total overview.

Another aspect of the file-sharing world is how p2p-based networks often rely on the age-old phenomena of rumours, hearsay, and word of mouth. Online and offline, informal dissemination of news, innovations and applications create loose, informal networks of information exchange alongside the actual infrastructural webs of computer applications. This was confirmed by my own fieldwork findings (chapter 6) as well as in Perkins-Svensson's quantitative study (2006: 20), where 76 % of the respondents held that they got to know about Direct Connect (DC++) primarily through friends. New online innovations get advertised to a large extent by simple hearsay. This is significant, because it strongly contradicts the widespread notion of information technologies and new media as being ontologically separated from everyday, offline, mundane practices. More so, it also contradicts the ill-considered notion that these technologies are efficient and uniform in making information available to precisely everyone who stays connected.

4.16. Conclusion

This chapter has served as an overview of p2p-based file-sharing, balancing "mainstream" American accounts (like Oram; Miller; and Shirky) with more critical discourses found on Swedish, British and American blogs and discussion boards, alongside a critical interpretation of the macroeconomic and infrastructural properties of the phenomenon. Particular attention has been paid to how the phenomenon is defined by an interplay between the aggregated level (invoked above in the form of networks, protocols, and statistics) with the individual one (invoked in the form of users' behaviours and discrete legislative actions). The issue of regulation is paramount, as there is a tension between regulation "from outside"/"from above" and voluntary, discrete self-regulation. Another issue is that of motivation: Individual accounts tend to rely on aggregated bodies of discourse expressing a certain consensus; a consensus that is based on actual material experiences, technical understandings, and ontological definitions of the phenomenon. The discursive dimension of p2p constantly intersects with its material and habitual dimensions, as follows from the conceptual model of approaching the phenomenon outlined in this thesis.

In sharing a common futurology with also some of the critical accounts of the Internet in cultural studies, the "mainstream" discourse of Oram et al. can be said to overstate the 'shock of the new,' generating a narrative that is overly progressivist. Focusing only on the newest developments – as contemporary news media tends to do – simultaneously overlooks the continuity and remainder of "what is left behind". It is clear that there is a glut of public discourse (on blogs and message boards) which acknowledges the ubiquity of unauthorised file-sharing and advocates a more lenient regulatory framework, something which has been taken up by mainstream newspapers. Paradoxically, laws like the EU Directive on Intellectual Property (IPRED) have simultaneously been implemented, which in effect grant significant investigative and jurisdictional powers to the copyright industry.

Similarly, both the utopianism and dystopianism of many academic accounts in the late 1990s can be criticised for reifying 'change,' and implying a view of human subjects as increasingly protean, progressive, and prone to forms of action which are transcendent in relation to what historically precedes them (the immanent transcendence of 'cyberspace' being the perhaps clearest example). However, by contrasting this neophilia with actual historical developments of technology, an account is generated that partially helps to counter those grand claims that precede the actual adoption of new technology. A historiography is required which recognises the mundane, grounded aspects of technology. This allows us to question the altruism – or even sharing – implied in much of the existing discourse around it.

What this chapter has also shown is the foundational role of p2p-based file-sharing to the operability of the Internet at large, as the original Internet Protocol essentially interconnected servers on a p2p grid. Given the subsequent *de facto* popularity and relative ease of unauthorised file-sharing, this notion of p2p as being innate to the Internet lends considerable normative weight to the file-sharers' own argument of the "naturalness" and "unstoppable" nature of the phenomenon. The fact that no direct causal link between file-sharing and declining CD-sales can be proved is also occasionally taken up by the pro-file-sharing discourse as an argument against further regulation.

The technical and historical conditions lend credibility and validity to the argument that the overall agency is fractured, in the sense that no single agent would carry the entire responsibility, since p2p involves so many human and nonhuman actors, while the entire infrastructure itself propagates the sharing; it was built on sharing and it strongly appears to legitimise and sanction further, largely unrestricted sharing.

Chapter 5: Sweden as a situated context

5.1. Introduction

This chapter is intended to put file-sharing into a specifically Swedish, national context. Both in the immediate context of actual computer literacy and technical dissemination and in the more general and theoretical notion of contemporary modernity, the tendencies observed are not intended to be read as simply particular to Sweden as a discrete geographical location, but as tendencies found in contemporary Western capitalism in general, albeit variously. According to my interpretations, these tendencies have been significantly rapid and palpable in Sweden, prompting an understanding of this national context as one that might currently prefigure some tendencies that are to be found throughout the Westernised world. Arguably the most significant tendencies relating to the thesis at hand are: the expansion of technical competence and an enabling of this competence by widespread access to information technologies; radical individualisation (which is both highly reflexive and opportunistic); and the personal ethical stance pertaining to collectivism and individualisation in an era of such radical individualisation (a stance partially outlined by Berggren & Trägårdh in the Swedish context and, among others, Nikolas Rose in a broader, Western context). Tellingly, very similar observations have been made, completely independently from my work. Strandh (2009) notes how the case of Sweden is unique in that it combined rapid infrastructural development with a uniquely strong secularism. This secularism has fostered strong individualism and a reflexive questioning of normative ideologies, Strandh argues. He adds to this the particularly strong libertarian ethos among the "geeks" who had a key role in establishing companies and services. This libertarian ethos is related to the 'Californian ideology' discussed elsewhere in this thesis, and is historically rooted in what Swedes refer to as the early version of the file-sharing 'scene': software copying, hacking and BBSes.

Regarding my own particular focus on Swedish file-sharers, there are several explanations of this beyond the primacy of focusing on the user or media consumer, and the pragmatic reasons of choice of method and access to respondents (chapter 3). Sweden as a country is particular, not only in terms of demographics, class disposition and – as documented below – its characteristics regarding individuality and reflexive modernity, but more specifically in terms of its national techno-cultural context of widespread household broadband dissemination. In a case study of Sweden, one would note (a) the significantly early establishment and subsequently quotidian status of broadband, and (b) the significantly lively debate (also in the mainstream media) regarding the topic of file-sharing, given its widely established popularity and its more recent controversy. During my work on this thesis, I have benefited greatly from the commentary function of the leading Swedish newspaper Svenska Dagbladet (SvD), as this paper was writing extensively on file-sharing between 2005 and 2009 and many of the articles attracted a lot of comments. The commentary functions and message boards of Piratbyrån and blogs like Copyriot also proved hugely helpful. Alongside the 2009 Pirate Bay trial, two different books on file-sharing were published in Sweden: Rydell & Sundberg (2009) is the journalistic, dramatised story of TPB, while Ernst (2009) contains a series of interviews of various members of the political and cultural establishment in Sweden, on unauthorised file-sharing and digitization. These were preceded by Söderberg's critique of the Swedish file-sharing debate (2008).

The demographic of file-sharing is one characterised by an already widespread access to Internet technologies, both in terms of knowledge/skill and of wealth. Sweden is a rich country characterised by relatively small gaps in income distribution, making access to technologies like broadband very commonplace. In recognising this, the heuristic of this thesis becomes a focus not so much on class or gender *per se*, but instead a foregrounding of the question of what kinds of subjectivities the activity of file-sharing engenders. The defining feature becomes one of inclination and reflexive

choice: A typically post-Fordist, 'late modern' attitude made possible by reliance on those greater collectives and infrastructures facilitating that choice, something which is not unique to Sweden but to the increasingly pseudo-rational, reflexive individualisation of Western societies, a tendency outlined by many contemporary sociologists.

The singular most helpful work of theory for this chapter has been Berggren & Trägårdh's *Är svensken människa?* [22] (2006). This work examines the historical continuity of what they define as a typically Swedish notion of personal independence; that true love can only flourish between people who are economically independent of each other, and that this personal autonomy is – seemingly paradoxically – granted by means of a uniform, all-encompassing state-dependence. This insight ties back to the never-ending sociological conundrum of individual agency *vis-à-vis* structural/collective agency, and will hopefully prove to be central to this thesis, given the elaboration of this theory also into contemporary techno-cultural spheres, extending not only to the politics of the welfare state but to technological, networked formations as well. This chapter will be the starting point of such an elaboration, and will constitute a lens through which we can read the respondent arguments and the material references that these arguments invoke.

Regarding p2p-based file-sharing *per se*, an extensive quantitative study of p2p-based file-sharing in Sweden, *MusicLessons,*[23] has run chronologically parallel to my own research. The explicit focus of this research program was 'to deepen the understanding of how p2p technology will support new business models and to evaluate and compare threats and opportunities, providing a better basis for policy-making' (Findahl & Selg 2005); an approach that is different to mine. However, the insights gained from the qualitative approach presented here are intended to complement quantitative data such as that generated by Findahl et al. Similarly, this

[22] Trans.: '*Is the Swede human?*'

[23] http://w1.nada.kth.se/media/Research/MusicLessons/

chapter has gained from some of the insights from MusicLessons, most notably in the demographic context outlined below.

There has been some domestic Swedish research on the actual motivation and normative attitudes of file-sharers. Unfortunately, much of this research is unpublished and not peer-reviewed (in the form of MA dissertations and the like). Hence, my overview of such accounts will be brief. Some of the studies suffer from functionalist presumptions, such as the idea that societal norms could be neatly categorised into separate categories that each answer to "areas" such as qualification, competence, ethics etc (Engström 2005) or 'market discourse,' 'democracy discourse,' 'generational discourse' etc (Jonsson & Thyrfing 2008). Still, some of these works contain some quantitative data that might be of interest, and will be invoked incidentally in chapters 5 and 7. The more useful of these studies were Linde (2005) and Perkins-Svensson (2006), as the former gives clues to the rationale of operations like Piratbyrån while the latter explores the ethical motivation and reflexive stance that Swedish file-sharers in general seem to have, in terms of their cognitive understanding of the current legislation as well as in terms of their opinions about this legislation.

The relative accumulation of academic interest in recent years can be said to constitute a domestic attempt at better understanding the internal motivations and justifications of active file-sharers. Alas, most of these studies have been modest in scope and flawed in parts – either having limited ambition, a functionalist or social-constructionist bias, or (in the case of the academic work of Piratbyrån representatives) being somewhat partisan. Certain studies have become influential within the national discourse, alongside the writings in leading national newspapers (Aftonbladet, Expressen, DN, SvD).[24] One example is Sundberg's (2009) pedagogical references to various academic studies in leading newspaper SvD, as a complement to the Pirate Bay

[24] Notable names here are Isobel Hadley-Kamptz (Expressen), Sam Sundberg, Tobias Brandel, Adam Svanell (SvD), Håkan Mildner, Alexander Kuprijanko (Sydsvenskan), Anders Rydell and Tony Ernst (book authors).

trial. Such references to actual academic studies have made a welcome addition to the sometimes more partisan debate that has been spearheaded by the Pirate Party, Piratbyrån and TPB on the one hand[25] and Antipiratbyrån, IFPI and legal representatives on the other.

5.2. Sweden: broadband a widespread infrastructure, its consequences widely debated

During 1996—2000, the number of individuals having access to the Internet increased drastically in Sweden; from 4 % to 56 % (Lorentzon 2002). The percentage of broadband connections among private individuals increased steadily between 2000 and 2003. This increase did however slow down; compared to other OECD countries, in 2003, Sweden ranked as number seven in terms of broadband penetration (OECD 2003; PTS 2004). However, the country ranks highest in terms of users of other types of connections than DSL and cable TV, indicating a high share of optical fibre connections (where up- as well as down speeds are very high, easing heavy file-sharing). In 2004, approximately 2.8 million Swedes aged 15—74 had access to broadband at home, according to media analyst Mediavision (Brandel 2005). Users with broadband connections are generally more active than non-broadband users: Two out of three Internet users with a broadband connection use the Internet daily, compared to 19 % of modem users (Blomqvist et al. 2005a). In 2004—2005, approximately 80 % of all Swedes had Internet access[26] and approximately 40 % of all Swedish households had broadband[27] access, while the figure for British households was 32 % and the EU average was 15 % (SCB 2005; Demunter 2005). However, these figures have been rapidly changing; in early 2005, 44 % of all Swedes utilised a broadband connection, which comprised a marked increase compared to early 2004, when the equivalent

[25] Notable names here are Rasmus Fleischer, Magnus Eriksson (*Piratbyrån*), Christian Engström, Rickard Falkvinge (the Pirate Party), Peter Sunde (*The Pirate Bay*) and independent bloggers, experts and journalists like Oscar Swartz, Nicklas Lundblad and Johanna Nylander.

[26] In comparison, the EU average was 47 % and the British average 60 % (Demunter 2005).

[27] With broadband, the SCB survey refers to Internet connections via ADSL or SDSL, other fast connections, for example via cable TV or a local area network (LAN), and wireless connections via 3G.

figure was 30 %. Over 90 % of all Swedes aged 16—44 used the Internet during the first three months of 2005, and the differences between men and women were small (SCB 2005).

Approximately 1,000,000—1,300,000 Swedes (national population: 9 million) have been estimated to be regular users of p2p-based file-sharing networks; approximately 20 % of the adult population. Blomqvist et al. list a lower figure, whereas Brandel (2005) quotes media analyst Mediavision's figure of 750,000 broadband users admitting to use file-sharing applications. In 2005, the governmental statistics office, SCB, estimated that more than a million Swedes were file-sharing (SCB 2005). In December 2006, new statistics were published, indicating that 1,3 million Swedes (approximately 20 % of the population aged 16—74) had personal experience from using file-sharing software. Among males aged 16—24 this share was 57 %; among males aged 25—34 the share was 48 % (SCB 2006a). The number of women admitting having used file-sharing applications was less than half than the number of men (SCB 2005). Blomqvist et al. (2005b) point to a European survey indicating that digitization has practically made the computer the main storage of music for every two out of three Internet users. According to an IFPI survey (2006), what actually makes countries like Sweden, France and Spain different from Germany and the UK is that a higher share of Internet users in these countries actually use p2p networks than legal services (such as iTunes), while Germany and the UK have seen a development where legal retail of digital files is estimated to be as popular as illegal p2p. According to IFPI, only 11 % of European Internet users would swap files on p2p networks. Fewer, around 6 %, download from p2p networks on a monthly basis. File-sharing penetration (based on monthly activity) is highest in Sweden at 15 % (compared to 4 % who 'paid to download monthly'). Spain and France are in the next tier at 11 % and 8 % respectively (of all Internet users). The survey was conducted in Germany, UK, Spain, France, and Sweden, and consisted of face-to-face and telephone interviews. I would add, however,

that their calculation was based on *per capita* users and not on amount of files downloaded. It could thus be expected that IFPI (being an organisation representing the copyright industry) would label someone a 'legal customer' who might in fact only have downloaded occasional files from iTunes, while each 'illegal file-sharer' might have downloaded thousands of files from KaZaA.

The commonness of p2p-based file-sharing indicates that it is a mundane and established activity among vast groups of broadband Internet users. In April 2007, the Swedish SOM Institute (Göteborg University) concluded that, based on their statistical surveys, 75 % of all Swedish 15—19 year-olds had 'downloaded' music, and 50 % had 'downloaded' films. The figures for 20—29 year-olds was 63 % and 45 %. Approximately 70 % of all men and 32 % of all women aged 15—29 had 'downloaded' films (Antoni 2007). The validity of this report can however be questioned in part, since it uses the imprecise term 'downloading'. The report concludes that such 'downloaders' of film and music are active music consumers and cinemagoers as well.

File-sharing is, as most of my respondents confirmed, seen as **'something that everyone does,'** as pilot study respondent Basim expressed it. What was further noted among my respondents was that the initial "buzz" of novelty has in many cases waned. According to a recent survey (Jönsson 2007), significant parts of the target group of Swedish 15–35-year-olds are following American TV shows before they have even been licensed for broadcasting in Sweden. According to Swedish media analyst MMS, 4 % of a group of surveyed 16—30-year-olds followed the NBC series *Heroes* on a regular basis – primarily by means of p2p-based file-sharing. At the time, the first series of *Heroes* was only available on DVD rental, and only on the U.S. domestic market. It had not aired in Sweden, while the second series was running on American TV. For the similarly popular *Prison Break* series, 35 % of those in the surveyed group who had seen it in the last month had seen it 'in downloaded form'. Altogether, 40 % of the surveyed 16—30-year-olds were regularly watching 'downloaded series'. The

validity and accuracy of this report can be questioned, since it was a web panel survey. However, the tendencies expressed in it point towards something that was noted also in the fieldwork for this thesis: content acquired through file-sharing is, in Sweden, and particularly within the abovementioned age group, becoming as 'normal' a mode of media consumption as TV once was. In addition to the knowledge, skill and material setup required to acquire, digitally decode and play the desired files, language barriers could also be thought of as an obstacle here. However, the ubiquity of English language skills within this cohort compromises this notion. Moreover, a frequently visited site for the Swedish market, undertexter.se,[28] exemplifies how free subtitles (as simple data files, designated to be played alongside the video files[29]) are widely available for many shows. It constitutes another facilitator for this once alternative, now increasingly "mainstream" system of distribution.

This is analytically useful because studies of file-sharing should avoid seeing the phenomenon as a novelty, or a sudden, conflictual burst of activity, and rather see it as an established, increasingly permanent condition, typical for a societal infrastructure characterised by a firmly established, high degree of broadband Internet connectivity, and of freely acting, highly active, discerning subjects, skilled and highly knowledgeable in their (productive) consumption patterns.

Regarding the discursive dimension of the phenomenon, the Swedish debate on illegal file-sharing has been notably lively, especially in the aftermath of a highly publicised legal change in July 2005, where, in accordance with EU directives, it became illegal also to download (and not only to distribute) copyrighted material without the consent of the rights-holder. Daily newspapers published information on some significant court cases, alongside brief explanations of the phenomenon in question, often relying on assumptions and the polarised framing of the debate along

[28] 'Undertexter' means 'subtitles'.

[29] A subtitle file is a file which is played back alongside the film. Instructions for how to merge these subtitle files with the playback of video files are provided at http://www.undertexter.se.

the axis of "industry vs. pirates". Arguably, this added to a high media visibility of politicised agents rather than everyday, less politicised users without explicit alignment to either of these sides. The presence of entities like TPB and Piratbyrån was vital to this mainstream media framing of the phenomenon. In the months following the highly publicised police raid on TPB and its affiliated hosting servers (31/5 2006), not only did national media interview the representatives of TPB, but overseas publications like *Vanity Fair* and *Wired* gave coverage to what was rendered a phenomenon of global interest (Daly 2007; Quinn 2006a; 2006b). Swedish public service television covered the phenomenon in several news reports, alleging that the raid was executed due to U.S. American coercion; the largest national newspaper Aftonbladet interviewed key managers of TPB, alleging that 'the [Swedish] people stood behind them' (Nilsson 2006); and the SvD national newspaper ran a mini-site entirely dedicated to the topic.

In January 2008, Swedish prosecutor Håkan Roswall filed a lawsuit, on behalf of several music, film and video game companies. The 2006 raid on TPB was used to collect evidence of infringements of the Swedish Copyright Act. It is noteworthy that similar cases of abetting copyright infringement have never previously been tried by Swedish courts (Ebadi & Johansson 2009). TPB's representatives repeatedly asserted that they had not breached any Swedish law, as they merely provided *access* to works on their website and were not *hosting* any of the actual works on their servers. The prosecutors argued that the database of torrent links that they provided – placed in categories and directly searchable – thus constituted a more dedicated service than the general ones that companies like Google provide.

More interestingly for this thesis, the founders of TPB were not only accused of financing and maintaining the website (thereby abetting copyright infringements) but of actively supporting and encouraging a dismissal of copyright and, in effect, a boycott against the entertainment industry. This made the trial a political one, as turned out in

its aftermath, when it transpired that the judge and several of the prosecutors were members of pro-copyright organisations.

Many of the institutions that oppose copyright are rhetorically united under the provocative 'pirate' heading, although some Swedish activists seem to have shunned the 'pirate' heading in later years, in web campaigns like the deliberately faceless 'Kopimi' movement, and grassroots campaigns against increased governmental supervision and data retention. As the situation at hand is characterised by conflict, one way of seeing these formations would be to define them as partisan and countercultural. However, as they come to represent such large populations of Internet users, they can equally be seen as expressions of popular opinion. In Sweden, the interest has been big enough to see the foundation of a national Pirate Party, in January 2006. Consequently, European organisations representing the entertainment industry have warned of 'the danger that Sweden, normally considered to be a strong upholder of EU standards and a promoter of culture, should instead be seen as the haven for a cult of copyright infringement that has achieved global reach' (IFPI 2008: 22).

Especially Piratbyrån and TPB can be defined as being motivated by a countercultural, yet highly decentralised and spontaneous 'hacktivist' agenda – arguably so informal that it is hard to consider an agenda at all. This is exemplified by the hazy, provocative stance of their publication *Powr, Broccoli and Kopimi* [sic] (2009). Merely by existing, they perform a rhetorical function of asserting the justification for p2p-based file-sharing and the obsolescence of copyright in its current form – as their mere existence is, according to some critics, controversial. What is more, their impact confirms that despite being demographically more established here than in most other parts of the world, p2p-based file-sharing remains a discursively contested activity in Sweden. I will outline below how both TPB and Piratbyrån characterise a typically Swedish approach to collectivism while in some ways being highly antithetical to it.

The strong presence of these semi-institutional actors has also entailed a practical dimension, regarding increased ease of access. The web forums of TPB and, more notably, Piratbyrån simplified the process not only of gathering initial, rudimentary data, but of approaching the respondents in the main, interview-based study. Tellingly, one of my respondents noted:

> Veritas: **'It is because of Piratbyrån you are making this interview with me, it is they who have stirred up interest and started getting people to call stuff into question. Before Piratbyrån was founded, in 2002, no-one spoke of file-sharing in the open; it was something you did secretly.'**

The significance of these entities cannot be explained by market logics or the communitarianism of the hacker ethos alone. As is shown below, it falls logically within a pattern historically specific to Sweden, and arguably to Western welfare states in general, where the individual compulsion towards self-fulfilment and self-expression has been effectively harnessed by a historical continuity of 'people's movements' ultimately seen to be serving not only the individual but the public good. The potential of forming separate, closed, perhaps even semi-private communes (as part of civil society, in the continental and Anglo-American sense) has in Scandinavia been subsumed by an ethos of transforming such associations to become more *gesellschaft*-like, more open to public access and scrutiny. This transubstantiating drive has had wide appeal in Scandinavian countries since it, when resulting in accountable, de-personalised institutions, serves to minimise corruption, capriciousness as well as personal commitment and liability (Berggren & Trägårdh 2006: 333—364). The modest size of the Nordic countries also means that such formations tend to enter into the national debate more easily. This drive towards more all-encompassing formations can be thought of as molecular grassroots formations reaching more molar forms.

5.2.1. Brief information on the Swedish piratical organisations

TPB labels itself 'the world's largest BitTorrent tracker,' and its primary function, as this label indicates, is to track and index torrent files. Due to the ability of the BitTorrent protocol to handle extremely large files, torrent files are widely used for sharing films, software packages and large music sets (often entire discographies). The site was founded by Piratbyrån (see below) in early 2004, but since October 2004 it has been a separate organization. In the police raid on the site (31/5 2006) not only the servers of TPB but several other ones (including those of the Piratbyrån, whose function is explicitly political) were confiscated, leading some commentators to label the operation a politically charged and arguably constitutionally illegal one. Paradoxically, the clampdown generated even more publicity and traffic to the site, which was up and running only three days later, thanks to temporary "hosting" in Holland.

TPB has also garnered significant international publicity in maintaining a deliberately provocative stance towards the copyright holders who have approached or threatened them. The site's administrators have been renowned for their prankster-like exploits and die-hard dedication to hosting all sorts of material, even in the face of controversy.

Piratbyrån (literal translation: 'The Pirate Bureau') is a loose collective which serves as a propaganda institute, think-tank and alternative news agency for the pro-file-sharing movement in Sweden. Its website is a practical 'how to'-guide and web reference to file-sharing and can be seen as a portal, similar to *Zeropaid* in the U.S. The Piratbyrån activities are however somewhat unique in that they tend to formulate a more academically informed critique, not least thanks to its leading spokesmen Rasmus Fleischer and Magnus Eriksson. For example, in April 2007 Piratbyrån organised alternative Walpurgis festivities on a hilltop in Stockholm, burning their own book (Kaarto & Fleischer 2005) as a symbolic event marking a new, non-dualistic conception of the issues pertaining to file-sharing, conceptually erasing old dichotomies that they

held as no longer applicable to file-sharing: legal—illegal; private—public; free—pay; art—technology—life [sic] (Piratbyrån 2007).

Piratbyrån is small in terms of active membership (its operation is restricted to the Swedish language, and they have no offices or money). It is led by a handful of spokespersons formulating an intellectual critique of issues pertaining to copyright and file-sharing, drawing strongly on concepts of media materialism and contemporary critical philosophy. In an interview, they define themselves thus:

> Piratbyran [...] is best described as an ad hoc pro-piracy think tank, but Fleischer's partner in the effort, Marcus Kaarto, won't even go that far. "We're like a gas," Kaarto says, laughing. "You can't get a hold on us."
> (Quinn 2006b)

The organization was founded in 2003 as a reaction to Antipiratbyrån ('The Anti-Piracy Bureau'), a similarly *ad hoc*, non-governmental anti-piracy organization that is sponsored by the entertainment industry.

Linde (2005) observes how Piratbyrån deliberately choose not to be *anti* anything, but emphasise instead how the file-sharing movement is *for* all forms of digital copying. This is a strategic decision. Despite being founded in opposition to an alleged Other, Piratbyrån is based on a positive affirmation; they intend to anticipate rather than react to the copyright industry, avoiding a defensive position. They continuously have to prove their seriousness in order not to appear as a consumer revolt by teenagers wanting everything for free (Linde 2005: 36—37). By forestalling the copyright-industry representatives by offensive strategies, they can focus on building a strong, autonomous image for themselves, focusing on issues of their own choosing. They seek to avoid a "reactive" tendency where the enemy is construed a monolithic, catch-all nemesis (as in the leftist movements of the past invoking "the man" or "the system"). This, however, means that they might be seen as more ambivalent in their standing than traditional political movements: they can be seen as

leftist in their anti-corporate mode, or more right-leaning in their libertarian one (Linde 2005: 29).

Piratpartiet (the Pirate Party) is a Swedish political party, founded in 2006, claiming to stand outside the left-right scale, and focusing exclusively on issues of Internet privacy and reform of Swedish laws pertaining to 'intellectual property'. Early on, the party garnered a lot of publicity, but only managed to assemble 0.63 % of the overall votes in the September 2006 election for parliament. In the 2009 European Parliament elections, however, they assembled 7.13 % of the votes, and gained one seat in the European Parliament.

The commonness of broadband and file-sharing in Sweden, and the presence of the above strategic, politicised entities has meant that the file-sharing debate has been particularly lively in Sweden. The leading exponent of the Piratbyrån line is Fleischer, whose blog Copyriot presents an erudite critique of copyright and digitisation. Several other bloggers contribute with variably politicised and often well-informed writings. A more libertarian, acerbic critique comes from TPB's Peter Sunde, from the Pirate Party representatives and from IT entrepreneur and journalist Oscar Swartz. This all contributes to a relatively sophisticated debate, where derogatory tropes such as likening 'pirates' to terrorists (see chapter 2) have been relatively absent from the debate. The notion, for example, that *frequent file-sharers tend to be frequent media consumers as well* was picked up on in Sweden before it started to become widely noted by key representatives of the European copyright industry too: Swedish reports like Findahl (2006) preceded the arguments that EMI representatives began putting forward in early 2008 (see Gibson 2008b).

5.3. At the margin of the centre: balancing individual autonomy with the concern for the common good

Sweden, as most of its Scandinavian neighbours, is characterised by a particular outlook on the globalised cultural industries, where the linguistic appreciation of English-language media is at a very high level, as is the general cultural and technological literacy ("keeping up" with the latest films, computer games, and gadgets). This is, however, somewhat countered by the country's position as a small, linguistically separate economy, repeatedly measuring itself against the surrounding world. Living in Sweden prompts a subjective disposition which involves not only looking at one's direct, national surroundings, but also – primarily due to the direct economic necessity of this – bigger economies (in terms of audiovisual media, most notably the US and the UK).

The Swedish economy is based upon import and export (comparatively more so than many other small industrial nations) and is characterised by high consumer prices. Regarding audiovisual media, direct import is common among more discerning consumers, something which many respondents also mentioned while also expressing an oppositional stance against what they perceived as a somewhat "insular" national policy in terms of media output, starved of domestic variety and dependent on imported, mainly English-language material. They lamented how the multinational entertainment companies have been ignoring prospective markets, and how the general public has been satisfied with the more provincial national output of products and services. In this aspect, the respondents appeared to favour increased transnational communication and trade. Much of their discontent with current policies derived from a notion that these policies were not making sufficient use of the new potentials that digitisation provides for increased geographical transcendence and deregulation of trade barriers. Amid their cynicism towards corporate interests, an acceptance (or even enthusiasm) towards globalisation, transnational collaboration and outsourcing was noted. I did not primarily infer this stance to derive from their being file-sharers, but to

the more general disposition that could be said to be typical for *discerning, demanding consumers*, expressing a strong need for independence and gratification.

This chapter is an attempt at portraying Swedish society in the context of contemporary capitalism, emphasising the reflexive character of the typically Swedish civic subject in the present era. I will argue that this individual subject is highly knowledgeable, highly discerning – while being caught between a propulsion towards *solidarity and public collectivism* and a predisposition towards *individual autonomy* and *personal freedom to maximise pleasure.*

Moreover, the particular arena of p2p-based file-sharing offers a further complication; that of balancing between *rights-holders*, *producers/artists*, *governments*, and *consumers* as separate collective interests. This latter, ultimately macro-economic issue is not of primary concern for this thesis, but it is an unavoidable dimension – especially in the context of national specificity. What will follow is an account which will initially be about a particularly Swedish flavour of reflexive, post-industrial individualism, which informs the more specialised question regarding Swedish file-sharer subjectivity, given a context of advanced capitalism and 'reflexive modernity'.

Berggren and Trägårdh's observation of a particularly Scandinavian ideal of equality – where the state guarantees individuals not to risk confrontation with other individuals out of anything else than free will – is ultimately inherited from the political science of Jean-Jacques Rousseau. It can be seen as directly premised on his definition of 'autonomous individualism' facilitated by *an abstract, evenly distributed dependence on the state* as a legal safeguard against all interpersonal dependence (Berggren & Trägårdh 2006: 44—50; see also Karlsson & Rider 2006). This ideal, which might seem paradoxical at first, is different from traditional continental liberalism which places emphasis on *secondary instances of power*, acting as intermediaries against overly dominating state interference or monopoly (either by way

of local communities/churches/corporations or by constitutional safeguards). The constitutional structure of Sweden lacks those power intermediaries ('estates' of governmental power) which grant a legal security net for individuals in quandary with state authorities. Lawyers, priests, doctors, social workers are generally appointed by the state and it is not possible to take one's case to the Supreme Court by appeal to any notion of "constitutionally protected," fundamental human rights. Civil rights, as they are expressed in Swedish law, are generally defined as 'social rights' fit for the people in general, often declared as *responsibilities of the state* instead of acknowledging 'rights' as *demandable by individuals*. This structural deficiency in the Swedish system has led some commentators to define the Swedish government as a form of 'parliamentary dictatorship' (Berggren & Trägårdh 2006: 373). This could be seen in the Pirate Bay trial, which was criticised for entailing a politicised legal process, regarding the question of 'intent' among the accused and the bias of judge and jurors.

If any particular mindset could be said to be typical for my respondents, it was one which combines the hacker-like predilection for tinkering and autonomously "finding one's own way" with new technologies with a concern for the own, collective "home territory" of implementations and forums related to file-sharing. This latter territory partially consists of the networks themselves and partially of entities like TPB and Piratbyrån, which in this Swedish context can be said to act as "home territories" also in the national sense, being attached to a sense of national belonging and even pride.

Moreover, what has also been notable in the public debates around file-sharing is (at least ostensibly) a concern for the collective interests of artists/producers. In Sweden, this debate has, due to linguistic boundaries, mainly come to invoke national actors. Also this national concern for artists/producers can be seen to be rather typical for Sweden, in that it comprises a balancing of collective interests against one another (seeing recording artists as unionised collectives), in addition to the more general

moral dilemma facing the individual regarding the overall, universalising collective (the individual versus the state).

Scandinavian, and more specifically Swedish modernity is thus found to be significantly different from its related Anglo-American or continental conditions. Finnish Cultural studies professor Mikko Lehtonen uses a Hegelian dialectic to describe the particularly (eastern) Scandinavian, highly reflexive 'structure of feeling' towards modernity and capitalism:

> Since the margin [...] is not the First, but always the Other, always defined by its Otherness also in its own eyes, the margin has to create an acute awareness of differences between itself and the centre. Hence the margin must be, at least to some extent, aware of its own specificity. And hopefully this awareness of specificity and specificities helps also those in the margin to see that the centre's claims for its universality are, in the last instance, unfounded.
> (Lehtonen 2007)

The shared history of being located on the fringe of a Western capitalist bloc, bordering a Socialist one – *de facto* being, as it were, 'the margin of the centre' (Lehtonen 2007) – prompts a school of thought common to Sweden and Finland where solidarity, nature and a particular form of structuration involving "the greater good for society" as an agreed ethos are the main tenets. More significantly, this "greater good" is facilitated primarily by a form of benevolent state intervention.

This seemingly collective ethos is, however, balanced by a similarly strong version of the Western invocations to individual freedoms and rights. The specific social autonomism of the self-owning farmer – although being strongly outmoded as a cultural trope – is in this sense not only a mythical concept; it still informs Scandinavian ethics. For a Swede, "utility maximisation" is, in this sense, when one's own personal gain also contributes to society at large – yet without transgressing the consensually established limits of existing structural (state) interventions that are beneficial to the individual (which means that for example private charity would be antithetical to the Swedish social project, in that it distorts the power relationship

locally between individuals). Mauricio Rojas, a Swedish-Chilean politician who relates these concepts to migrancy, is quoted by Berggren & Trägårdh:

> The result is a peculiar combination of a very strong stance of maintaining freedom and [personal] territory and a similarly strong tie to the community which defines borders and boxes in, but also guarantees, this freedom. It is a balance-act between public collectivism and private individualism, between group-thinking and keeping [personal] territory, which is extremely hard to understand for a foreigner.
> (Rojas, in Berggren & Trägårdh 2006: 27; my translation)

This archetypically Swedish stance could be understood as continuously very balanced and reflexive; a drive towards *compromise* which echoes the rather well-known Scandinavian inclination to avoid conflict, an ethos which strongly underpins the historically significant ideology of state corporatism and 'mixed economies,' as advocated by social democrats throughout the Western world. From 1938 until the economic crisis and shift in government in 1991, Sweden was characterised by a societal model of compromise between the actors on the labour market and a strong state-apparatus, coupled with high rates of subsidies distributed through the public sector (Thullberg & Östberg 1994). Based on Keynesianism and the progressive tax scale, this ideological model came to be influential also on British governmental initiatives such as the NHS and public housing. The Swedish model of modern housing, as devised in the 1960s and 70s was only rivalled in scale by the GDR and the Soviet Union at the time.

Arguments that lack utilitarian motives are rarely successful in the Swedish political debate. The Swedish right failed in launching an alternative political agenda of 'civil society' (in the American, communitarian sense) in the 1990s, allegedly because truly lasting civil societies (charities, churches, fraternities) were recognised as demanding significant degrees of individual commitment and dependence, something which compromised the Swedish model of civic independence and *gesellschaft*-like operational equality of social institutions. Traditional communitarianism can also be argued to be outmoded throughout the Western world, since it is a nostalgic reaction to

the currently inevitable forces of individualism (Beck & Beck-Gernsheim 2001: 208). Also in the cultural field, progress is coupled with an unyielding appeal to reason and "the greater good," compared to the more nostalgic British approach to cultural habits and customs. Socio-cultural novelties and changes in habits thus appear to be commonly embraced, with fervour rather than with restraint. Here, the account of Swedish modernity anticipates the recognition by Anthony Giddens that utilitarianism, specialization and trust in experts and abstract systems has overcome the conventional notion of 'tradition' as something more *gemeinschaftlich* or familial (Beck 1994).

It is not surprising, then, that several respondents partially welcomed the idea of 'broadband tax' or as a form of remuneration system for recording artists. This idea was however rendered largely unworkable with the implementation of IPRED in 2008. What is interesting is that both of these propositions rely on state corporatism. The first one in a leftist, anti-authoritarian, economically redistributive way; the second one, IPRED, in an authoritarian way where actual judiciary powers are redistributed to private entities. As social democracy has often been supplemented by state corporatism (favouring oligopolistic, large-scale corporations), this corporatism has fluctuated between these two forms of state intervention, ideologically quite different. Maybe the political appropriation of unauthorised file-sharing can be thought to operate along a similar scale between authoritarianism (or vanguardism) on the one extreme, and corporatism (social democracy) on the other. Interestingly, both the traditional left and the traditional right seem to contain these tendencies. The Swedish centre-right parties, for example, contain opponents as well as proponents to the EU-wide authoritarian policies like IPRED, ACTA and data retention. The same goes for the political left.

One need not envisage the debate in such a polarised form, however. One alternative is to replace the binary of either/or with an organic notion of emergent processes from the molecular (dispersed) to the molar (organised). Here, the activity only becomes critical, in national political terms, when it takes on a molar character;

only then it is seen as a potential challenger to corporatism and as an object for state intervention. This notion of molecular and molar can be connected to Latour's concepts of visibility, tracing and scale. As contemporary digital networks lack panoptic overview, any local instantiation of file-sharing would have to rely on a 'myopic' interaction with one's available local clues to the molar connectedness, universality and ubiquity of the network as a whole. A way for my respondents to grapple with their own, molecular interaction with the wider world of file-sharing was to use the recurring metaphor of defining file-sharing as a veritable 'people's movement' ('folkrörelse').

This concept of 'people's movements' (or, as was also noted, 'folk sports') appears to be a particularly Swedish way of establishing institutional intermediaries against the evils of anarchy or despotism; independent associations which balance the potential totalitarianism of a strong state apparatus (Berggren & Trägårdh 2006: 104). However, the latter role of such intermediaries has, in Sweden, been obscured and subsumed by the strong historical impetus of national progress and the state as a benevolent entity. According to Berggren & Trägårdh, the Swedish labour movement bred a romanticised image of its 'people's movements'. The original purpose of these movements as self-help associations was erased in favour of an overstatement of unity and solidarity with the working class (often with direct unionist/syndicalist ties). Once the welfare state had incorporated the educational role and charity work that was earlier managed through such associations, what remained of them was mainly their rhetoric of unity and solidarity; a kind of "false consciousness" of a romanticised past, obscuring the essentially individual benefits and constitutional counterbalance implicit in any such 'civil society' formations that the U.S. American communitarian tradition so wholly embraces.

Defining the inescapably "non-overseeable" phenomenon of file-sharing in terms of constituting a 'people's movement'/'folk sport' is thus to formulate it as a valid collective, and to give it a rhetorically powerful, organised form (albeit perhaps only

appropriated in the abstract). It allows the phenomenon to be invoked alongside the already formulated macro entities or established institutional actors of the copyright lobby, thus serving an argumentative and legitimating purpose, in the sense of Boltanski & Thévenot. It lends an otherwise invisible, nebulous phenomenon a legitimising thrust; in some way sanctioning it, for example by pointing to its documented popularity and adoption among wider layers of the population, something which further asserts its supposedly 'unstoppable' nature. It is also a way of "branding" one's own movement in market terms.

These notions are all central to the conclusions that will follow. What the actual solidarities with these supposed grander totalities look like, in more specific terms, is elaborated in the fieldwork analysis (chapter 6) preceding my final conclusions.

Central to the self-recognition of a 'movement' of file-sharing is the emphasis expressed by the slogan '*sharing is caring*': an abstract, contractual "love" which counters the anarchy and egoism that a free-for-all system might be thought to cause. The radical de-territorialisation and *laissez-faire* normativity of file-sharing could be thought to induce a war-against-all opportunism. However, the ethos of individual solidarity that this 'caring' implies, works in direct opposition against such balkanisation, while still maintaining the scope for opportunism and individual utility maximisation. At the core of this slogan lies the very insight that what is common to all is also the source of happiness for the individual; something which directly brings to mind the core elements of the Swedish political philosophy outlined in this chapter (Berggren & Trägårdh 2006: 96).

Ironically, also the justification for file-sharing thus seems to take on corporatist form, albeit of a very different kind than the strong-arm corporatism implicit to IPRED and suchlike. The phenomenon does not remain an impotent, endlessly fractured mass of molecular, atomised instances; it is shaped and moulded – not only discursively, but

performatively – into interest groups, organisations, national arms and lines, unified under shared banners.

While the *act* of political mobilisation, in its conscious and intended form, is a ground-up movement, from the molecular to the molar, the *prescriptive agencies* allowing or disallowing this action all stem from the configuration of the system as a whole. An understanding of the state which is derived from the philosophy of David Hume rather than Thomas Hobbes is one where the state is seen as a 'productive rephrasing' of the multifarious powers and desires of individuals 'in ways that produce a collective good' (Wark 1997b) rather than seeing the state as a limit to free action. This is also one of the fundamental social democratic understandings that seem to underpin the Swedish concept of liberty.

However, ground-up mobilisation tends to generate entitlements and spokespersons (Wark 1997a). To speak for the network is an act that generates an entitlement. The deterritorialising tendencies of p2p networking are here seen to be contrasted by reterritorialising, molar tendencies of political mobilisation. The question is to what extent this mobilisation is conscious or non-intended. The formation of strategic structures like TPB is the intentional work of a few activists, but it is only made possible by harnessing a wide range of actors and agencies, both human and nonhuman. The reflexive act, exclusive to human subjects, of personally relating to one's own habits and actions becomes a speech act which is performative in itself in that it identifies singular actors (or idealised 'actants') by way of its discursive invocation. Every such speech act makes some form of delineation, underscores some form of particular tendency immanent to the phenomenon at large. It points out a molar order in the molecular entropy; be it when blaming the individual file-sharers for ruining the record industry, or by invoking file-sharing as "the natural order of the Internet". Every invocation of something particular acts to strengthen one's own entitlement and to (wittingly or not) formulate a stance which is political.

That is one of the reasons why it makes sense for a researcher to interpret the discursive tropes of those actively involved in file-sharing, according to a methodology which identifies those instances where the referents invoked in the discourse become 'actants' of this more idealised kind. The trial of TPB (February—April 2009) that coincided with the completion of this thesis became subject to plenty of estimations and even speculations regarding a range of issues: Is unauthorized file-sharing is detrimental to sales? How widespread is it? Do file-sharers buy more or fewer cultural goods? Where does the agency lie in the act of illicitly circulating copyrighted material? What role does TPB ultimately have in this ecosystem? As lawyers, engineers, and industry experts were all struggling with the inherent vastness, opacity and heterogeneity with the phenomenon, every judgment was shown to be exactly that: an estimation.

While different estimations carry different normative weight and can be more or less well-argued for, any such estimation frames the phenomenon in certain ways, and requires scrupulous and critical assessment. Furthermore, what the work of Boltanski & Thévenot shows us is that many of these arguments, or even whole groups of reciprocally related arguments, become incommensurable when compared to those of the opponent, simply since they derive from analytical standpoints that are worlds apart. Scandinavian-style, benevolent corporatism – where the state comes to sanction large portions of unrestricted file-sharing (as in the proposals by Wallis, Jenner, and others) – is arguably based on politico-philosophical foundations radically different from those of the opposed position. The opposing tropes listed in the previous chapter can thus be put in a national context. One overarching governmental principle is the securing of the public's well-being at large, while another one is the safeguarding the more local, smaller structures of various trade associations. As has been shown, the former position invokes a normative ontology of the Internet which accentuates globality and the inevitability of unrestricted file exchange, whereas the latter invokes a

normative ontology of the Internet where exchange is regulated, safe and sanctioned by designated, institutionalised providers. Both of these positions can be seen to give rise to discursive microcosms which might be internally cohesive and sensible in their own right. When directly faced with each other, however, they appear incommensurable. Hence the lack of consensus.

5.4. A particularly reflexive modernity: Swedish capitalism and its subjects

Historically, Sweden's shift towards institutionalizing the so-called service or tertiary sector is arguably one of the historically most dedicated and pervasive. A rather weak feudalism, and a heritage of strong self-owning farmers directly liaising with the king prompted a sociality where, already in pre-modern times, families were founded on compulsory choice more than out of feudal necessity. This was directly institutionalised in social democrat reforms of family and childcare laws, from the 1930s and onwards, where childcare was increasingly taken up as a responsibility of the state in order to grant entrance to women into the labour market (Berggren & Trägårdh 2006). The fact that Sweden has, by far,[30] the highest percentage of single households in the EU (Boverket 2005: 23) is arguably directly correlated to such reforms and this general inclination. Sweden is here leading what is, statistically, a general tendency throughout the EU: increasing numbers of people are inhabiting single-person households. Likewise, regarding secularism and the priority given to individual self-fulfilment, Sweden shows extreme values in a global comparison (see fig. 6; Inglehart & Welzel 2005). A recent survey of Swedish and Danish secularism reveals a deeply utilitarian attitude to existential questions. Interviewees held that there was simply no need to ponder on such questions, as they are ultimately unsolvable (Ström 2009; Zuckerman 2009). Further, the Swedish welfare model does not prioritise the family unit (as a

[30] According to Boverket (2005), Sweden had in 2003 on average 1.9 persons per household (followed by Germany, 2.1; Denmark and Finland, 2.2). 47 % of Swedish households were single-person ones, a significantly higher number than any other EU country: Finland had the second highest proportion, 39 %; Germany and Denmark 37 %. The UK proportion, by way of comparison, was 31 %.

recipient of social benefits) to the same extent as Germany or USA. Neither are semi-private institutions (like charities) as important as they are in Anglo-American societies, nor is there any particularly strong emphasis on local communities, as is notable in for example the UK (Berggren & Trägårdh 2006; Economist 2007).

The influence of social democracy – crucial to Sweden throughout the entire 20th century – has in later decades however been confronted and partially weakened by globalisation and neo-liberalism. The existential freedom of inter-personal independence, personal responsibility and the right to self-fulfilment which was earlier harnessed through an essentially social democrat/'people's movement' framework has, to a significant extent, being overtaken by market forces. Sweden is, however, not at all wholly neo-liberal. The drive towards globalisation and neo-liberalisation has not come to pass in the all-pervading, particularly (U.S.) American way pointed out by for example Mitchell Dean (1994: 192) where market rationality is extended to family and childcare politics. Instead, the state-institutionalisation of said sector could be argued to have subjected it to an instrumental rationality based on pervasive state intervention and legislation. In fact, several English-language critiques (Berggren & Trägårdh 2006: 328—332; 368—371) were pitched against the Swedish welfare state in the 1970s and 80s: Huntford (1971) depicts a country where the term 'state' is synonymous with 'society' and which verges on totalitarianism, albeit in the name of democracy. Other notable examples are Wolfe (1989) and Popenoe (1988); both conservative critiques of the Swedish deconstruction of the family unit. Also left-leaning social critics like Susan Sontag found the Swedish consensus stifling. Michel Foucault laid the grounds of his seminal *History of Madness* (2006) at the University of Uppsala in the 1950s, partly basing his work on Swedish archives of lunatic asylums and workhouses. His analysis of the self-governing nature of power is thus correlated with a Swedish modernity 'where law-abidance and social control is so engrained in the souls of its citizens that

more resolute measures by the authorities are seldom necessary' (Berggren & Trägårdh 2006: 370, my translation).

In an ethical sense (using the term as the later Foucault would, emphasising the inherently self-governing reflexivity of ethics) and in an aesthetical one, Sweden is as much as the surrounding Western world characterised by increased deregulation and privatisation, coupled by a 'revival of a culture of the self and self-improvement' (Dean 1994: 193). Especially in the domain of new technology, Sweden is characterised by a clear impetus towards a neo-liberal condition of the 'entrepreneurial self,' a term elaborated by Nikolas Rose. In outlining the history and psycho-social implications of the working subject in management theory, Rose points to two visionary models, based in different ideologies but striving for the same goal: an increased workplace efficiency and productivity by maximising the well-being and self-fulfilment of the individual worker. The first one, the 'Quality of Working Life' (QWL) ethos, had its source in the 'democratic corporatist political rationales that became influential in a number of Scandinavian countries in the 1960s' (Rose 1999: 106) and was successful in Britain in the 1970s. While emphasising humanism, solidarity, and citizenship, these rationales were ultimately seeking 'to align these with a new image of the employee as a unique individual seeking a personal meaning and purpose in the activity of labour. Rose points to how a neo-liberal management theory, rooted in positivist psychology, gained ground in the 1980s, formulating an ideal of 'excellence' in corporate stewardship, based on subjective motivation and a calculated implementation of goal-orientation throughout all levels of an organisation; in the collective totality as well as among employees as individuals. By harnessing the desires of the ego, a new corporate governmentality was put into practice, where high performance 'was not ensured by rewards but by intrinsic motivation. [...] for when people felt that a task was inherently worthwhile they would commit themselves to it' (116). This latter paradigm came to feed back into the aforementioned humanistic ethos also in countries like Sweden. Rose

argues that this new approach came to govern more than workplaces. It shaped the constitution of the self, as the leading principles were 'flexibility, adaptability, initiative, ad hoc groupings, cross-divisional collaboration, experimentation, informality, and the personal commitment to the excellence of the product. At root it was based on a different image of the person. People were not that rational, they were self-centred, they liked to think of themselves as winners not losers' (115). Accountability (enforced through rigorous control mechanisms of targets, inspection procedures and quality control) was replaced by a continuous reinforcement of individual success, treating work as an essential component of self-fulfilment.

The constituents, listed above, of this post-Fordist theory of management are easy to relate also to wider norms of both technology and contemporary society. Similar ideals are embodied in the hacker ethic of Himanen (2001) as well as the flexibility implicit in discourses (both FLOSS and proprietary ones) around new informational technologies. Alongside the obvious references to Foucault and the governing of the self, Rose can be read in a Marxist way, where the *realpolitik* of labour relations and workplace management determine the shape also of culture and society at large. A contemporary factor to consider, especially in Scandinavia and the Eurozone, is how high degrees of unemployment force young people to compete in entering the labour market, a contributing factor to the development of an ideology of constantly improving oneself and construing the personality around an entrepreneurial ethos. Such tendencies would arguably have been further encouraged in an era of neo-liberal individualism and deregulation: the liberation of allowing the exposure of the private self to the public world (Sennett 1996) and the related societal agreement of individual self-fulfilment and the right to maximise one's own personal pleasure (Fiske 1989). Considering also these tendencies, shared by all Western capitalist countries, the Swedish social contract – which was during the late 20th century internationally regarded as a haven of solidarity and pseudo-socialist collectivism – turns out rather

differently. It is seen to embrace and even encourage individual pleasure-maximisation and self-fulfilment. The main premise of managerial 'excellence' is that not only employers, but society at large would benefit from this individual ethos. This notion of *the private ego as directly essential to the sustenance of society* needs to be related to the distinctly Swedish individual-collective relationship outlined above, as it indicates to what degree individual gratification and pleasure maximisation is directly sanctioned – not only in the private sphere but in public and official domains of life.

As Swedes tend to hold their state apparatus in high esteem, not out of chauvinism or notions of ethnic heritage but rather out of a *gesellschaftlich* instrumental rationality, Berggren & Trägårdh (2006: 50—51) thus argue that 'Swedishness' is in fact defined more by strong reliance on functioning societal institutions, efficiency and hi-tech progressivism, maximising civic equality and interdependence, than by any explicit notions of heritage or "motherland". In terms of cultural capital, it has historically been said that Scandinavia's relative ethnographic homogeneity, economic egalitarianism, and concept of 'Jante' have left little room for the kind of individuality that is connected to eccentricity or difference (like, for example, strong cultural heterogeneity or individual rights exclusive to some and not to others). 'Jante' is a Scandinavian norm, observed by Sandemose (2005), summarised by the statement *"do not think you are special, or that you are any better than us,"* synonymous with an obstinate concern for equity, where any unjustified exception is a systemic error. However, this normative constraint on individuality appears to have lessened in recent decades, as Sweden has moved towards an agenda of post-Fordist, neoliberal individualism.

High levels of reflexivity, education and literacy, and an apparently strong desire to monitor global trends and markets make for a younger generation which is culturally and technologically discerning. Approximately 42.3 % of the Swedish population aged 25—35 have attended higher education (SCB 2006b), and the government has stated an

objective of having 50 % of each age cohort embark on higher education by the age of 25. The smaller gaps in incomes between different classes make for certain homogeneity in terms of lifestyle choices and attitudes; broadband connections, mobile phones and video games are ubiquitous. Many working-class youths have mp3 players and advanced mobile phones, and many of them watch American TV series long before they are terrestrially broadcast. Nevertheless, high unemployment rates and certain curbs on social benefits makes for a strong requirement on the individual to strive for employment and career maximisation.

One can therefore observe an agonistic reflexivity towards the home culture. A broad complacency with Swedish modernity (with relatively homogeneous attitudes to for example taxes and bureaucratic procedures, alongside a shared, taken-for-granted appreciation of trends and "lifestyle" choices) is paralleled by a strong self-critical and entrepreneurial stance, which compels individuals to constantly strive to renew and improve themselves, adopting any exotic influence if it is perceived to fit an urban, modern lifestyle and boost their cultural capital. This tendency is arguably a central element of 'reflexive modernization' in general – a concept of considerable applicability to a country like Sweden, which qualifies as one of the more advanced economies in the world, with notably lower class distinctions than the Anglo-American world, and with an acute emphasis on the individual as the central unit of sociality.

5.5. Self-reflexive opportunism and hedonism: tracing a post-Fordist subject

> 'They just want stuff for free.'
> (sign. Mark, commenting Bode 2009)

If the mainstream 'copyleft' literature (Lessig 2004; Liang 2004; Vaidhyanathan 2001) sees online gift economies as primarily beneficial, and instrumental for a 'digital commons,' there is a post-Marxist strand of critique which attempts to problematise this notion and reconnect it to relations of labour, as significant work is being done by the active media consumer every time he/she acquires, decodes and appropriates a

media text. As this chapter is intended to explore the national context in terms of 'reflexive modernity,' the notion of 'socialization of labour' needs to be considered, as the economically productive and inherently reflexive forces of individual consumption are vital to the concept of file-sharing.

Scott Lash (2002: 32—33) argues that culture itself is increasingly consigned to the instrumental rationale of enframing (*gestell*). That is to say, he argues, that the principle of accumulation is seeping into every sphere of human life, including the cultural. Earlier meaningful, symbolically loaded forms of life become 'mere "lifestyles" and strategies for accumulating the various forms of [symbolic, cultural, social, bodily] capital, themselves all valorizable external goods' (33). Robins & Webster (1999: 234—236) similarly describe a conquering of the life-world by order and rationalisation, exacerbated by technocultural developments in the 1990s; a surrender to the 19th century concept of 'the factory-like mind'; a concept which can be related to Mario Tronti's notion of 'the social factory,' where 'the whole society becomes an articulation of production. In short, all of society lives as a function of the factory and the factory extends its exclusive domination over all of society' (Bonefeld et al. 1992: 137). This view of the life-world as being increasingly appropriated by forces of accumulation is common to critical theories of contemporary society and culture, echoing some of the elements in Italian autonomist thinking, without necessarily taking on board the arguments for social revolution and the dichotomy of 'multitude' versus 'empire' (see Dyer-Witheford 1999; Terranova 2000; May 2002; Galloway 2004; and Söderberg 2004). More productive, in the Swedish context, however, is the notion of how individual gratification and egoism can be harnessed to benefit the greater collective. Paolo Virno has recently written about capitalism's reliance on individual opportunism, while American sociologist Daniel Bell noted, in the 1970s, the centrality of hedonism and egoism to post-Fordist modes of labour organisation.

The concept of 'post-industrial society,' outlined by Bell, outlines a technocratic society where techno-scientific logic precedes politics (Bell 1976a). Post-industrial society can be defined as a society where the majority of those employed are not involved in the production of tangible goods, and where knowledge (in addition to property, and political criteria) is increasingly becoming the base of power. This can be paralleled by Scott Lash's argument (in Beck 1994: 119) that contemporary Western societies are facilitated by 'flexible specialization' of industrial production and, more centrally to this thesis, *increasingly specialized, individualised consumption patterns.*

Considering the observations of Swedish late modernity established above, one could define this country as one where the tendencies of individualisation and reflexive modernity have excelled, despite the country's documented historical concerns with solidarity and collectivism (noted, for example, in the centrality of 'people's movements'). These tendencies, typical for 'late modernity,' are of course notable throughout the Western world but tellingly, the societal patterns and individual attitudes can, in this thesis, serve to illustrate the particular strength in Sweden of several of them.

Here, the individual self is increasingly thought of as a reflexive *project* (Rose 1999; Bauman, in Beck & Beck-Gernsheim 2001) while older categories such as class, profession, or gender are becoming less determining for what identities individuals form. Individual specialization comes to involve a plethora of categories; some of them miniscule, perhaps even banal, especially in a chronological sense (subjects might often only adhere to them at very short intervals); others more long-lasting, even comprising entire life-projects. Some are more fundamental to one's personal identity than others. Thus, the heuristic in this thesis is to avoid the assumption that certain categories would define identity in an *a priori* way. A person may be a computer user, a sci-fi fan, a girlfriend, a tourist, a car driver, a parent, a file-sharer or 'pirate' (the list can be virtually endless) but it would be methodologically unsound to decide *in advance* which

category would have more bearing than others in determining this person's identity in relation to certain contexts. The various subjective valuations people make of such constitutive roles can be accessed by way of empirical analysis. However, the case study at hand should show how this is not necessarily only done by means of ethnography. The example of file-sharing shows how vital the material settings and the discursive framing are for even beginning to define the abovementioned categories.

The concept of 'reflexive modernity,' as well as Bell's concept of post-industrial society, places great importance on institutions. However, if the concepts used are of the more specific kind outlined above, institutions should also be thought of in novel forms. Ideology (in the conventional sense of the term) becomes less of a defining factor, while arguably more technocratic modes of organisation engender new institutions; the most monumental example being the organisational principle of 'New Public Management,' of which Swedish and British public institutions are the leading exponents (see Hasselbladh et al. 2008). Moreover, those institutions and organisational principles (that are distributed on a global rather than national scale) become prescriptive not only for individuals but for the local and national institutions that are systemically subordinated. According to Beck (1992; 1994), contemporary societies are increasingly being affected by such prescriptive structures that have global reach. Often these defining, universalising structures are products of phenomena that are emergent in their own right, and have no single point of causal agency. This transgresses the 'copyfight' dichotomy. One of the aims of this thesis is to show how such prescriptive structures emerge, despite the respective actors' allegedly oppositional approaches to regulation. The principles of material accumulation and maximisation of both personal gratification and of functional efficacy are, for example, shared by both sides of this alleged dichotomy.

Molar, coherent structures arise out of neo-liberalism's scattered individual, atomised, molecular interactions – largely by means of technological, disseminated

modes of agency where no one actor can be said to be in full control. Moreover, many of these formations take on a strongly universalising, globalised character which acts as a normative, prescriptive force for society at large, in that its effects appear unavoidable and ubiquitous. There is a peculiar *standardisation* that goes hand in hand with individualisation. This can be applied to many defining global systems of our era: transnational communication and global media; the global financial economy; the global environment; and so on. Similarly, the Internet can be understood as a heterogeneous, global, 'network of networks' which is based on unrestricted file-sharing (see chapter 4) – yet peculiarly standardising in that it begets the common use of certain protocols and techniques.

This is also where the accounts of Beck et al. are most concordant with the above account on Swedish modernity. While institutions such as markets, property, law and education on the one hand do bring about individual emancipation, Beck argues that they, on the other hand, require and re-produce significant degrees of individual dependence. Scannell (1988) elaborates on this dependence on structural macro-agency in relation to the techno-economic system of broadcasting: the civic range of action in the everyday time-frame is dependent on individuals' affiliations to institutions, which operate in the *longue durée* of either national accumulation (property systems), indexing of identities (markets) or governing of bodies (legal systems), or – what Scannell explicitly refers to – imagined communities (nation states and the recurring instances that serve to commemorate them). In an era of increased individualisation by replacement of familial bonds with state-sanctioned 'independence,' individual life-situations become increasingly independent from inter-personal bonds, yet paradoxically *institutionally dependent* (Beck 1992: 130; Beck & Beck-Gernsheim 2001: 23). According to this view, institutionalised media such as television might seem individual but in fact becomes standardising (Beck 1992: 132). John Thompson (1995) similarly refers to the 'double-bind' of mediated dependency:

> While the availability of media products serves to enrich and accentuate the reflexive organization of the self, at the same time it renders this reflexive organization increasingly dependent on systems over which the individual has relatively little control.
> (Thompson 1995: 214)

Wendy Brown (1995) argues that over-emphasising contemporary Western societies' capacity for free choice, 'resistance' and 'empowerment' would be to over-emphasise individual agency in the face of aggregated macro-agencies (be they institutional or hegemonic). She holds that the systematisation of freedom through instrumental rationality (the prime narrative of Berggren & Trägårdh's account of Sweden above) actually negates and hinders freedom as much as it facilitates it. Moreover, she argues that individual freedom entails extraordinary personal responsibility, for in order to be beneficial to the individual in the long run, his/her freedom 'requires inventive and careful use of power rather than rebellion against authority; it is sober, exhausting, and without parents' (Brown 1995: 25).

In the context of unrestricted file-sharing, the quick decisions and the relative 'freeing of agency from structure' (Beck 1994: 119) that characterises late modernity should not be understood as propagating indifference and carelessness. Contrarily, the individual's own awareness of repercussions fosters increased calculation and shrewdness on her behalf. Bell (1976b) observed this tendency in Western capitalism already in the 1970s. What has been the increasingly apparent tendency throughout later decades is the commonly agreed, pan-societal agreement on the axial principle to 'engorge any and every style' (Bell 1976b: 13). Hedonism is officially sanctioned; the entire logic of consumer society relies on it. Capitalism mainly becomes a system for harnessing this individual lust in collectively useful ways. Paolo Virno defines a set of characteristics that characterise the workforce in contemporary Western societies:

> Here are some of them: the ability to react in a timely manner to the continual innovations in techniques and organizational models, a remarkable "opportunism" in negotiating among the different possibilities offered by the job market, familiarity with what is possible and unforeseeable, that minimal

> entrepreneurial attitude that makes it possible to decide what is the "right thing" to do within a nonlinear productive fluctuation, a certain familiarity with the web of communications and information. As one can see, these are generically human gifts, not the result of "specialization."
> (Virno, in Joseph 2005)

This involves an unprecedented degree of reflexivity on behalf of each individual subject, a pan-societal awareness akin to a modern-day "social contract". According to Virno, this awareness allows a nihilistic mentality (of instability, disenchantment and anonymity) to become one of the defining characteristics of society. The transparency of extensive digital communications thus risks allowing individuals to extensively scrutinise their own life-world; 'to know the price of everything but the value of nothing,' as the famous aphorism goes. Unrestricted file-sharing's immediacy, superabundance, choice, minimisation of monetary cost and reliance on active intellectual labour can usefully be understood within this framework.

In summary: The increased positive liberties of the individual in late modernity can be seen to be centred on hedonism, self-fulfilment, convenience, gratification – but they simultaneously entail a reflexive sensibility. One has to consider two notions:

(1) Great individual (molecular) power is only made possible through greater (molar) entities of a societal, collective, universalising kind. That is, they entail nonhuman elements and aggregations that are so large and non-overseeable, that they take on emergent properties (agencies partially external to human planning and control) as for how they are constituted and develop. They also take on ubiquitous, prescriptive and normative properties as for how they relate to singular individuals.

(2) This great individual empowerment also requires great responsibility on behalf on the individual – not only when dealing with 'risk' technologies, but in one's personal, post-Fordist management of one's career and everyday life. One has to maximise utility not only for the collective but for oneself. This mode of organisation, where the individual herself is increasingly blamed for her own

misfortunes, acts to produce a subject that can, I would argue, be interpreted as opportunist.

5.6. Reflexive modernity does not necessarily constitute an atrophy of institutions, but a renewal

Reflexive opportunism need not entirely break up old collectives; it can act to reinforce collectives or create new ones as well. The relative freeing of agency from structure can in be seen to regenerate new structures, most notably in the virtual or discursive realm that the Internet can be said to constitute. In an era of time-space compression through new technologies, these new affiliations have the prospect of being radically different from the old class-, gender- or space-bound affiliations of early modernity (Beck 1992: 92) but can also reinforce old hierarchies (consider, for example, the actual material and cognitive barriers to p2p technologies). In an everyday sense, the Internet is often said to increasingly allow for associations to occur outside of traditional social structures (such as family, local society, nation, and class). The actual p2p networks and the strategic sovereigns constructed by the 'pirates' would here constitute a good example; these platforms are largely premised on habits and choices that exist prior to and external to file-sharing and the Internet (note how the pop charts of illegal file-sharing mirror those of conventional, sanctioned consumption). The delimiting effect of DRM (itself a form of industrial 'flexible specialization'), can be said to generate re-territorialising boundaries, seeking to allow only that file-sharing which is authorised or sanctioned.

Many of these new structures would be "informal" in the traditional sense, but nevertheless "institutional" in that they form entities which in some way speak for or represent groups of actors, which may be objects or subjects: consider for example the institution of property, which operates thanks to the accumulated agency of objects (May 2002). As the very term "association" can stand for a single inter-personal link, it also stands for the process of making a deliberate constellation of people; a

constellation which formulates itself, by its own making, into an institutional entity. Moreover, as any constellation of human agents requires material infrastructure to various degrees, the particular material nature of the Internet (where the ongoing interpersonal discourse automatically gets textually engrained into the infrastructure) gives this condition a novel and arguably more central role than before.

Lovink (2003) recognises the possibility of a critical political approach to the network age: according to the approach of 'agonistic pluralism' (Mouffe 2000) there is a clear need to acknowledge differences in an era where interest groupings of alterity are garnering such influence. In rivalry and violence, Lovink points out, there is always a possibility of exchange, prompting a similarly 'agonistic' approach to network architectures. The Internet itself, being riddled by controversies and irreconcilable positions, could 'foster a structural dissent' (Lovink 2003: 45). What he argues for is a form of acceptance that the differences at hand are not being reconciled. This detachment might, however, no longer hold when molecular actors cluster to form molar, (semi)institutional groupings, as institutions tend to rely on consensus and have a strong influence on the definition of what is 'safe' or 'sanctioned'. Not only state institutions and corporations could be understood this way – entities like Piratbyrån and TPB also implicitly formulate a didactic normativity by their own discursive operation; in order to gain rhetorical clout, a certain "unity" is needed, which would be to give up the detachment Lovink argues for. Consensus is a temporary surrender to hegemony; a stabilization of power that always entails some exclusion and freezes the possibility of rupture and change (Mouffe 2000: 104).

In her critique of the way copyright has helped in institutionalising a specific rendition of the concept of a 'public sphere,' Rosemary Coombe refers to Celia Lury's historical survey of European modes of cultural reproduction (Lury 1993), where it is suggested that the category of the author served 'to legitimate [...] cultural exclusion and political disenfranchisement' (Coombe 1998: 253) and to reinforce the particular

formation of a bourgeois public sphere. Here, the system of distribution worked 'to limit the number of cultural producers who might claim authorial privilege'; certain modalities of production, circulation, and consumption were sanctioned (253). The bourgeois notion of the solitary author was a product of the exclusivity of printed works, and it is telling how this notion has been increasingly criticised during the last decades. It was sternly opposed by my respondents. They thought of cultural products as increasingly *corporate constructs*; a view that has been echoed also by Piratbyrån.

Unauthorised file-sharing is thus sometimes said to play a key role in the fragmentation of institutionalised 'producer,' 'consumer' and 'distributor' roles. Yet, noting the "renewed" institutionalisation that goes in hand with the above notion of individualisation, what is offered is *not* a total "free-for-all". Alternative formations rise out of the new habits and political choices made by technologically enabled subjects. It is a diversified structuration: some users cluster around and actively contribute to more politically charged associations such as the hazy political collectives of Piratbyrån and Zeropaid. Other, larger groups of users benefit from the informative, educational endeavours of such groupings. Add to that the related, but less politically charged forums like undertexter.nu, Wikipedia and imdb.com, and the vastly perused torrent indexes and search engines like TPB, Mininova, isoHunt and Google.

As has been argued, the structural modalities of p2p-based file-sharing can be said to constitute a normative framework for how the technologies are to be used. Beyond the obvious infrastructural logic of stranger-to-stranger sharing implicit in the very concept of p2p, there is the setup of 'ratio systems'. These can be thought of as social and technical protocols which stimulate uploading and minimise pollution. They also involve more subtle indicators of certain "preferred uses":

- The utilitarian rationality implicated in the user interfaces (offering little more than search forms, continuously updated lists of new material, availability status and direct links).

- The discursive emphasis on sharing (see, for example, Ghostnet 2006).
- The devotional yet simultaneously pernickety interest in cultural products encouraged both by the 'pirate' and the fan ethos.

The tacit knowledge that millions of other individuals are using the networks in this imagined way (constituting a veritable 'people's movement') adds weight to this implicit normativity. In a society that already harnesses and accumulates individual opportunism to collective benefit, everyone can understand systems that thrive on opportunism while generating collective benefits. In a society of de-personalised mass media, everyone can relate to a means to gratification that is both easily attainable and de-personalised (as you act virtually anonymously, in the crowd). Given this, is unrestricted file-sharing really an anomaly to capitalism at large, or in fact constitutive of it? This makes Jenner's and Wallis's question of possible compensation systems even more difficult, as it might turn out that file-sharing on the whole benefits the promotion of artists and cultural products. What is then left to compensate?

As a globally implemented system, the Internet has a structural impact on various sectors of society. These determining tendencies have originated in the techno-economic realm, extraneous to the recognition and decision-making of the traditional polity. The technical logic of p2p was in this sense not anticipated by any conventional boards, corporate, jurisdictional or governmental. As has been pointed out also by Castells (2001), there is no return to an era before the network society – 'the network' is in this sense 'the message' (Lovink 2003: 45).

5.7. Conclusion

In the recognition of a societal shift from a Fordist manufacturing society to an 'information-' or 'network society' – in other words, that labour generative of profit is becoming increasingly immaterial – lies an argumentative thrust that fundamentally clashes with the older notion of media audiences as 'duped masses'. In contemporary Sweden, where more than a third of the population is university-educated, religious

dogma has largely been replaced by devout secularism. Protestant fulfilment by self-improvement has transmuted into an ethos of the entrepreneurial self, carried by self-gratification and that utopian charge which is central to modernism (Bell 1976b). New kinds of institutions, sustained by the aggregated, active labour of the people, have risen to prominence. The extreme self-expression and secular rationality of Sweden thus finds its outlet in individual agency which, partly due to its dependence on collective infrastructures, generates new structural entities and regenerates old.

Due to the particular nature of public Internet file exchange as being visible while occurring (yet anonymised or semi-anonymised pertaining to the individual subjects involved), and due to the nature of web discourse as being stored as it is typed in, these spontaneous structures which might appear *ad hoc* in the time-frame of the everyday subject are made permanent in the *longue durée* of collective structures. Seen from outside, in this latter perspective, the file-exchange becomes a permanent, ever-ongoing fixture which gives continuous clues to the aggregation that is constantly going on (an aggregation which is nonetheless amorphous and ever-changing). The web discourse (in the form of blogs, message boards and communities like Piratbyrån) is a fixture too, giving similar clues to what is constantly going on in the background. This web discourse has been constitutive of the overall public debate in Sweden.

In the subjective time-frame and 'myopic' computer interface of the individual, the activity of file-sharing remains a spatially isolated one. However, one could ask whether it in this respect amounts to atomisation. Is the systemic individualisation and autonomy outlined in this chapter in fact paralleled by different forms of 'political privatism' (Beck & Beck-Gernsheim 2001) and hedonistic experimentation with personal freedom and the public challenging of taboos? The respondents' accounts occasionally captured this essential element of subcultural experimentation; namely, the element of *exploration*, venturing into the unknown. As is outlined in chapter 2, the myth of the 'pirate' ethos has some core propensities that are explorative, transgressive,

and in this sense extraordinary. This was partially confirmed by the respondents, although they tended to distance themselves from this 'pirate' ethos. Despite being primarily associated with exploitation for direct commercial gain, criminality and societal harm, 'piracy' can also connote also exploration, transgression, adventure and risk.

This spirit, often all-important for teenagers, is sometimes lost in academic recounts of subcultural activities. Accounts which manage to consider it are often those which focus on subcultures that are borne out of resistance: hip-hop culture and graffiti (Wimsatt 1994); skateboarding (Peralta 2001); club culture and drug use (Thornton 1996); do-it-yourself fashion (McRobbie 1989); and hacker culture (Levy 2001; Walleij 1999). The sheer, dogged determination that drives subcultures often becomes overshadowed by an emphasis on conspicuous consumption and cultural capital (which obviously also has a vital importance in such subcultures). What became clear from my fieldwork was that this propensity for exploration is not exclusive to youth or gender, but can be better understood as a cultural stance that is more dependent on personal inclination. This was also mirrored in the respondents' repeated preference for decidedly individualist explanation models, emphasising individual *ability* above any particular other demographic factor. It has been shown in this chapter that this ability is, in a country like Sweden, facilitated by high levels of computer literacy and access to broadband. In addition, what is required is a strong personal inclination to govern one's own media consumption, to discover new media texts and explore new technologies – in short, to *manage* a media consumption which is personally experienced as autonomous.

As has hopefully been made clear in this chapter, the paradox in all this is that this autonomy relies on aggregated, technical infrastructures which ultimately come to constitute collective formations or even institutions in their own right (albeit in novel forms). This appears to be an intrinsic feature of autonomy. It inevitably relies on

collective structures. Collective, or structural macro-agency begets individual agency. What is particular to Swedish reflexive modernity is the degree to which the nation state has come to serve as the single most primary such structure. The aggregated character of such huge collectives seems to be instrumental for individual autonomy in that they become large enough to do away with personal (friendly or familial) bonds. The collectivity becomes impersonal, semi-anonymous, bureaucratic, ultimately *gesellschaftlich*.

The networks of the Internet, and p2p in particular, are similarly non-familial; they are essentially stranger-to-stranger, non-overseeable (at least beyond a set horizon) and strictly governed by protocol. Hence, the parallel between an autonomy facilitated by (national and increasingly transnational) collective institutions and a technologically facilitated autonomy like the one inherent in p2p networking is an analytically useful one.

Chapter 6: Discursive findings

6.1. Introduction

This chapter comprises an analysis of the main fieldwork, emphasising the distinctions that users make – between each other, between different networks, between human and machinic agencies – in order to make better sense of this technology. Some central, introductory observations are made. To begin with, certain "main narratives" were repeatedly emphasized among the respondents, most notably the idea of *technology being literally 'unstoppable'*, and the idea that *digital information is inherently flow-like and manipulable* (implying that what is shared is 'information' rather than discrete artefacts). Further, many of the more politically charged discourses involved a *telos* of sharing; the idea that it is a result of the system architecture, a "common good" for everyone involved and an affirmation of liberty. This liberty was even expressed as a common *'right' to take part of and to share cultural products.* The slogan 'sharing is caring' implies an online collectivism, something which in traditional Internet discourse often gets symbolised by the metaphor of 'online community'. The chapter will show that here, collectivism becomes an ethos which is grounded not in altruism or in communitarianism but in notions of *maximising network efficiency* ('contributing to a better Internet,' which ultimately facilitates individual comfort and gratification); *comradeship*; and that it constitutes a *strategic collective entity*, where the networks are thought of as literal bulwarks for continued, unrestricted sharing.

Despite the common description of file-sharing as a distinctively collective phenomenon (embodied by the above slogan), the chapter reveals a strong focus on *molecular agency* both in a human, individual sense and in a machinic one. If human individuality is expressed in terms of interest, devotion and knowledge, the necessary technical means are found in the obvious reliance on individual PCs as network nodes, and on high-speed connections between them.

Connected to this structural exclusivity and the barriers of entry (in terms of interest, devotion and knowledge), and central to the user discourse in general, were the distinctions that respondents made in relation to *other, imagined users* (central notions being, for example, 'data hoarders' and 'leechers'), and between *different networks and applications* (in terms of accessibility, operability, newness, interaction and anonymity). By noting also the *valuation of cultural products*, and how it becomes more diversified through digitization and file-sharing, the appreciation of the phenomenon is once again shown to rely on pragmatism and the notion of what is most beneficial to both the individual and the collective. The collectivity of sharing here appears to ultimately facilitate an increased ease in access, and a wider variation of files. This has consequences for mapping the motivation and rationales of these active, dedicated file-sharers. I found that the motivation is not the staunchly political, activist, anti-corporate one which the discourse of activist sites like Piratbyrån and Zeropaid could lead one to believe, and that the respondents conveyed an ambivalent relationship to the 'pirate' label.

However, the arguments of these strategic activists appeared to be rather influential among many of the respondents, prompting a stance which strongly opposes the allegedly monolithic 'content' industry, as it emphasises the informational nature of content, together with the alleged 'right' to share. While such arguments are based on direct experiences of this new, disruptive technology, it appears as if they simultaneously serve to underplay the alleged negative repercussions of the activity. If the copyright industry representatives see file-sharing as the unauthorised (co)distribution of copyrighted *works of art*, my respondents tended to emphasise the informational nature of the files copied, as *raw data*, alongside the primacy of copying to the Internet. The perceived *nature of the Internet* is thus invoked; an image that suggests a mode of usage where it is **'in the life-blood to share'** (Agge) for both man and the machine.

6.2. Who is the file-sharer?

6.2.1. Respondents as self-reflexive, productive subjects, each emphasizing different narratives

The chapter primarily draws on the main fieldwork that was conducted in the spring/summer of 2006 (see chapter 3). Not only did this time frame mean that little emphasis was put on the subsequent raid, court proceedings and Pirate Bay-related debates. As is noted above, the whole method was to deliberately avoid framing the issue along the tropes of 'law,' 'copyright' or 'pirates' while instead letting the respondents elaborate upon the discursive justification for unrestricted file-sharing in a wider sense. The networks referred to below are primarily BitTorrent, DC++, FastTrack (KaZaA) and SoulSeek. As has also been noted, some previous empirical work has been conducted in Sweden on the file-sharer demographic, and some of its findings (Findahl 2006; Perkins-Svensson 2006) will be referred to in comparison with some of my own findings.

All of the respondents in the main fieldwork were anonymous, and biographical information about them was only available by means of interpreting their own discretionary, email-mediated accounts. In the following, any personal data other than gender and age has been withheld, and the names/aliases disclosed have been altered in order to maximise anonymity. What was of interest was the individual ethical and cognitive stance at the heart of the file-sharer identity, with only peripheral reference to categories of class and gender, avoiding *a priori* socio-economic characteristics other than the availability of domestic broadband and being a Swedish citizen. Hence, there was no deliberate probing of information pertaining to what 'class' position a respondent would hold, given (a) the complexity of defining a class subject in Sweden (see chapter 5) and (b) the compromise such a probing would entail, in terms of personal integrity. This anonymity actually created a slight conundrum in terms of gender, as one of the respondents, Vega, whom I assumed for a long while to be female, in fact turned out to be male. When confronting him with the draft transcription of my

fieldwork, he responded and confessed he had been deliberately reserved in regards to gender. He strongly felt that the shared identity of file-sharers was more determining than any shared gender characteristics, and therefore remained coy on the subject. Only a small percentage of my respondents were female. In Findahl's study (2006), 71 % were male and 29 % female. The quantitative data of both Engström (2005) and Perkins-Svensson (2006) had a more extreme gender distribution of around 95 % male and 5 % female. This statistical over-representation of males is further problematised below.

In terms of class, the respondents on the whole appeared to represent a strata in society presumably more well-educated than the average; it was clear that several of them were either university students or worked in the creative industries (advertising, filmmaking). However, given the ubiquity of higher education in the demographic aged 16—35 in Sweden, this is not surprising. Virtually all respondents used linguistic cues that indicated relatively well-educated backgrounds and a reflexive, critical ability. This, to me, partially confirmed the commonness in Sweden of an ethos of reflexive individualism and dedication with regard to the use of technology (chapter 5). Findahl (2006) similarly notes that 'education level and income does not seem to be very important, but most file shares [sic] have a broadband connection (80 %)'. An approach to cultural consumption which was critical, discerning and active was found among all respondents. Many of them appeared to be genuinely *culturally productive*; some more decidedly so, some slightly less. A majority of them revealed personal inclinations towards significantly productive media habits; a significant number of them having had experience as Piratbyrån moderators (Vega, Svenzzon, Veritas, LB). This was notable, since (1) what was of interest was their political inclination in regards to activism and supportive instances like Piratbyrån, and since (2) another central objective to was to query how a possible identification with cultural *production* might

relate to the respondent's own opinions on the right to copy immaterial works, versus the right of the author to control what should happen to these.

The respondents ranged between 15 and 42 years of age. All of them expressed a partiality for free file-sharing, noting that their range in taste and cultural exploration had been significantly widened by it. They shared a progressivist, utilitarian view, especially LB (f42), who ran a BitTorrent website and whose view of cultural economy was akin to social Darwinism, in applying a notion of 'survival of the fittest' to technological protocols and paradigms. This is similar to the one advocated among software designers, where applications are rated depending on the extent of their uptake and usability, and where openness and a wide user-base make for beneficial mutational potentials ('given enough eyes, all bugs are shallow'; Raymond 1999). P2p makes good sense systemically, she held, for harnessing resources. Several respondents saw a society-wide gap with regard to whether one *is aware* of file-sharing at all – which in most cases depends on whether one has actual experience of it or not.

All of the respondents were relatively advanced computer users, several of them self-taught, regarding the Internet itself as a vast reference database, in terms of knowledge and problem-solving. Vega (m22) moderated a discussion board and ran his own server for file-sharing (including a public BitTorrent tracker). Esse (m17), Svenzzon (m31) and Veritas (m21) were Piratbyrån moderators. Svenzzon was quite politically committed (primarily opposing what he described as the potential terrors of surveillance, criminalisation and control) while Veritas was much more technologically knowledgeable, pragmatic and moderately in favour of (a nevertheless limited) copyright. Agge (m32) was a professional cultural producer, listing his experience as scriptwriter, writer, musician, and cartoonist. Further, both Pringle (m24) and Pontus (m15) could be labelled as "tinkerers" and hobbyist cultural producers.

Pringle was the one respondent who most clearly interpreted questions his own, distinct way while simultaneously confirming some of the "main narratives" noted

above. Besides stressing the comradeship and mutual affability on these networks, he often pointed to what he saw as an absurdity and as the main reason for the current controversy: the fact that laws had been created outlawing this widely spread phenomenon *long after* the phenomenon had gained everyday popularity. To someone like him, who considers file-sharing as the normal state of the Internet, seeing p2p as disruptive is unwarranted. He held that over the years, the phenomenon has become deeply established among the greater public, as a very well-established, habitual cultural form, as until July 2005 it was legal to download unauthorised copyrighted material in Sweden. He said that he had become more cautious ever since, due to the implementation of that year's anti-downloading law and surge of public interest surrounding it.

Other examples of recurring themes were Agge's expressions of strong dissent towards the present corporate structures for distribution of cultural content in Sweden, coupled with a general dissent towards Sweden as a high-cost, limited-choice, structurally conservative country; Pontus's repeated expressions of the primacy of the existing technological infrastructure and the obvious pragmatism in making use of it, as it simply "exists" there, in front of you; and Vega's stress on pluralism and subcultural/artisan uses of file-sharing, where uploading obscure material that otherwise would not be made available becomes a prime motivation for sharing, and a vital force in the breakdown of the distinction of "producers" and "consumers" that he argued for.

The small corpus of previous Swedish research on the attitudes and justification of individual file-sharers is sketchy and relatively unreliable, consisting mainly of student dissertations. It is however noteworthy that all of these studies (Bazancir & Carnö 2004; Nettleingham et al. 2005; Strand 2005; Canales Olguin et al. 2006; Tegnér & Poturovic 2008) point to similar observations:

- Generally, a highly pragmatic attitude.
- A desire for the content, at the lowest expense available (not only in terms of money but in terms of effort and time).
- Emphasis on speed, convenience and ease.
- Dissatisfaction with the price of CDs, DVDs, books, and other products. The ability to preview products before purchasing them.
- No real fear, not many moral doubts.
- Social acceptance, habit.

The following observations also appear, albeit less frequently:

- Antipathy towards multinational entertainment companies.
- Deterministic views on laws and technology.
- Utopian notions such as the collectivism of sharing and the idea of a levelled, universal access to culture.

It is worth noting here that virtually all respondents in these studies are university students, which might entail a bias in regard to monetary spending abilities and to anti-corporate sentiment. Consequently, these were aspects that I attempted to continually heed in my own interviews, for example by using critical follow-up questions.

6.2.2. More about interest and devotion than gender

The emphasis in this thesis on a highly individualist, discerning subject could in fact serve as a provisional, *a priori* answer to the more specifically demographical question regarding *who file-shares*. Statistics on illegal file-sharing are inherently vague (I have established that the phenomenon is hard to define, hard to fully oversee, and legally contentious), while it is nevertheless wide-spread enough in Sweden to be almost ubiquitous among those with access to broadband connections. The statistics imply a slight overrepresentation of young males; however – as was pointed out by many respondents – this should not lead us to succumb to stereotypes. In the mass media

debate around file-sharing, a stereotypical trope has been the notion of a computer-savvy, relatively young man standing in as a metonym for the file-sharing community at large. Piratbyrån and TPB have had young, male spokespersons like Fredrik Neij, Gottfrid Svartholm, Peter Sunde, and Rasmus Fleischer. Also, in the dramatic events like the raid on TPB and on the Bahnhof ISP, the proponents and representatives of unregulated file-sharing were all male. It is hard to discern whether this public imagination had influenced the consensus that was found, initially among the pilot study respondents, that the "typical" file-sharer was, primarily, *a young (however, not necessarily male) person, from a developed nation.* After a long email exchange, I deliberately asked pilot study respondent Lisa the following question:

> Is all this actually only about the right for some privileged, computer-savvy, mainly young male computer users in the Western world to be able to acquire as much free material as possible? Or would you describe it differently?
> Lisa: **'Yes (very leading question but I agree). Because the only reason for me having access is through the young knowledgeable man, my little brother! Which could prove the point you're making.'**

Her younger brother was the person initially introducing her to file-sharing. Pilot study respondent Anna told a similar story: She was introduced to the phenomenon by, in succession, a (male) student at her halls of residence, her boyfriend's younger brother, and her uncle. Lisa explained how she felt that **'the "grown up" world'** would see it as more controversial to do something which is presumably illegal, including file-sharing. She also connected the reluctance about the phenomenon in this allegedly older age-group to **'virus fear'** and their general lack of knowledge. However, Anna's account disproved the exclusive prevalence of young people when she referred to her 45-year old uncle, who **'happily downloads anything'**. Once again, knowledge and skill were seen as the central factors, rather than age or gender predispositions. The consensus seemed to be that someone who has the ability and inclination to file-share is expected to do so. Among my respondents, the norm was to file-share or at least to

have experienced it: that is how widespread and taken-for-granted the phenomenon is throughout this largely young demographic.

For Pontus, the conventional stance would be the one of the establishment (that is, those with the ability to ban things): **'Many older people often come with arguments like "the musicians must also earn money". Of course... *but!* There are other ways. Should radio and TV be prohibited as well, do they think, or?'** Tellingly, this quote also manages to put file-sharing on par with TV and radio. That file-sharing was so directly related to these two much more established media forms implies that this technology certainly is highly "naturalised" in this demographic. Vega explicitly projected himself as part of a generation which has grown up with a uniquely rapid development of computers and Internet access. As for public attitudes to the phenomenon, he partly stressed age as a factor, but viewed the incidence of whether one has got actual experience of the phenomenon or not as a more important one. LB also noted this; those who do not file-share would most often not know anything about it, neither technologically nor ideologically, she maintained. Vega somewhat disputed the age argument: **'this activity is spread in all possible groups! One thing I could generalise about, a certain degree of wealth is required to afford the necessary equipment'**, coupled with the importance of knowledge and skill, he added. He would see his own file-sharing patterns as fairly typical. In terms of gender, LB would not necessarily see herself as a *typical* file-sharer, but nonetheless *representative*; **'not alone in being a middle-aged woman online, "window-shopping"'**. She held that campaigns against youths were misdirected, as it is just as likely that their parents are the ones file-sharing. For her, devotion means **'keeping informed'** about legal and political issues in the field, and although most of her time (besides work) would be spent **'in the file-sharing world,'** active downloading constitutes only a small part of this. Agge expressed a similar stance: **'Today, the technology for file-sharing is easy, but complicated for**

people in general'. He made a distinction between media for **'unknowing beginners'** and (implicitly) more exclusive media, maintaining that the former sphere would become much more DRM-protected. The centrality of knowledge capital and materialism re-appears:

> Agge: **'It's not only about getting a client for torrents, you also have to know where to look (PirateBay) and what to look for (DVD-files or DIV-X?). Then you must also know how to unpack the files (RAR or ISO?) and you must know how to burn them onto media (DVD-R or CD-R?). Then you must also know whether your stationary player, or the computer, is the base for the playback – will the stationary player handle all burnt films, or must I invest in a video card and carry the computer out into the living room every time I'm about to watch a film?'**
>
> Basim: **'If you're looking for something which isn't that popular, it often takes a while before it appears on the screen. So, sure, you're a bit led by chance. But you do control what you want to hear and what you don't want to hear. That I think no one can take away from you. If you're not already brainwashed by MTV and the like, you can still mess around with all your computer files. Everything comes down to having an interest.'**

The latter quote mixes derision towards an alleged, mainstream "MTV model" of music distribution with the recognition that file-sharing is, from the viewpoint of the user, essentially a pastime which relies on a high degree of activity and self-determination. Further, this quote constitutes an acknowledgment that it does take time to find what one is looking for, and that random factors do play a role as to whether the particular file you are searching for will appear or not – it might be dependant on one single user, somewhere, being online at the same point in time as you are: a *temporal specificity*, as well as a spatial one (as in being "on" the right network). This exemplifies how p2p technologies are dependent on human presence enmeshed with technical settings in very particular ways.

Interestingly, this strong devotional aspect does on a superficial level run contrary to the widespread notion that new technologies in general, and the Internet in

particular, would "make life easier", as is often said in common vernacular. Some of the respondent accounts complicated this notion of ease, on the grounds that their particular file-sharing activities do not simply "stand in" for any alleged earlier (chronologically preceding), near-identical yet more time-consuming activity. The activity of file-sharing is to a significant extent a new type of activity, an addition to the range of things possible to do in front of the computer screen. The time and effort spent is, in this sense, only *one more* activity to spend time and effort on – not necessarily time-saving, but time-consuming in itself. This is not to say that the overall *phenomenon* of file-sharing is an entirely "new" media form. Bearing on Bolter and Grusin's concept of remediation (1999) the phenomenon – as a totality – incorporates and refashions older phenomena, as any new medium does. In the case of file-sharing, the older phenomena that this new phenomenon builds upon do not exclusively extend to older media, but also to older worldly, material socio-cultural activities like the barter and exchange of goods; second-hand retail systems; copying and re-recording derived from cassette culture; record digging; and radio listening. Pontus noted that without file-sharing it would have taken much longer to get hold of a game, but thanks to file-sharing he would download several games instead. It was pointed out, however, that one does not have to spend much time to initiate a download. All in all, what remains central is a form of *channelling* of time and effort, where the initial effort is deliberate, but the outcome is non-determined, unexpected, and a result of various forces acting upon one another.

6.2.3. Data hoarders and leechers: distinctions among file-sharers themselves

> The pirate does it to make money. File-sharers do it out of interest.
> (Perkins-Svensson 2006: 26, my translation).

The self-image of the file-sharers relied on certain distinctions made in-between the file-sharers themselves, splitting the global collective of file-sharers along vectors determined by access to, or choices of particular networks, in turn influenced by

cultural preferences (films, music, games) and technical preferences (amounts of data, types of connections). A common denominator here seemed to be "lifestyle" affiliations, closely tied in to distinctions of cultural capital; differences of knowledge and taste (Bourdieu 1984).

Agge differentiated between commonly perceived 'ideal types' of file-sharers: (1) the 'rippers', 'seeders' engaging in spreading new material before anyone else; (2) "heavy" or significantly active or knowledgeable file-sharers; (3) the majority of 'everyday people' (Agge's term) who do not contribute much ('leechers' in the file-sharing idiom). Out of this latter group, several can be assumed, he noted, to be "non-partisan" users who download what they desire but do have a bad conscience about the illegality of the phenomenon, and would rather buy the material if they could afford to. This can be directly related to the observation that the vast majority of users tend to contribute rather little to the content in circulation (see Adar & Huberman 2000; Saroiu et al. 2002; Sen & Wang 2004; Pouwelse 2004).

These 'ideal types' can be seen as 'actants' that the actual participants adhere to, more or less faithfully. Interestingly, Pontus noted the prevalence of people who download although they think it is wrong, but do it out of convenience or price sensitivity. Similar distinctions have appeared where users differentiate between those peers who want content monetarily gratis (while being required to take some legal risk and to have the necessary determination and patience – in other words, time) and those who can afford to pay for content and thus want it legal. Pontus confirmed that both type (1) and (2) would exist in the more devoted file-sharing field. Both the activity of speedily and deliberately making new content available (1) and the associated political conviction behind this deliberate distribution (2) are seen to exist among the more devoted actors managing the infrastructures, such as the three TPB administrators accused in the 2009 trial. One should beware of assuming a split between these two alleged ideal types; they are not necessarily exclusive of each other,

and were referred to among the respondents more as *modes of action* than actual "personas" that one would personally identify with. Hence, what the above schema could be said to outline are *modes of consumption* rather than deterministic identity "placeholders". As was noted in the section on the alleged 'pyramid' of piracy (chapter 4), a person can occupy several of these 'tiers' at the same time.

Before conducting the main fieldwork, I had already observed the tendency among file-sharers to define oneself either in terms of cultural capital ('qualitative' material) or in terms of an allegedly more technical fetishism which tended to value 'quantity' of content. In fact, all of my respondents described themselves as being inclined to the former rather than the latter, in the sense that they clearly seemed to value the particular pieces of music or film retrieved more than the actual acquisition of them (both as a process of acquisition and a display of it). The two particular dimensions of distinction were however observed; one regarding *cultural* knowledgeability, in the sense of the 'selective tradition' of knowledge and consumption of particular works of art or entertainment (Williams 1961) rather than the anthropological, more holistic sense of culture-as-lifeworld. The other distinction is regarding *technical* knowledgeability (in the broad sense of "knowing the right networks" or of the more particular skills involved in *warez* activity). This was often directly associated with a dedication or preference for quantity of content; a form of tendency towards 'data hoarding,' something which appears to be seen as a central component of the *warez* 'scene'.

Virtually all respondents distanced themselves from this alleged 'scene'. The perception of 'data hoarders' among the respondents was thus comparable with the notion of a radicalised, hard-core 'other'; the extremist among the moderates. These alleged others were also seen as having much closer ties and a stronger community ethos than the majority of more mundane, casual file-sharers. Several respondents held that among certain users, it is the quantitative amounts (GB and TB) of data that beget

social status. Many respondents attributed the phenomenon to the *ratio systems* that are found in many networks (most notably DC++, FTP and other 'members only' communities) where huge quantities of data have to be uploaded in exchange for download allowances. Yet, it was pointed out that similar rules were ubiquitous already in the old "pre-Internet" BBS days. The respondents tended to distance themselves from this, not only because 'data hoarding' as an alleged mode of consumption is decidedly manipulative, but also because ratio systems were perceived as having been more common and more pervasive in the past, rather than today. Contemporary file-sharing as a totality was seen as one which is too heterogeneous, instantaneous and ever-changing to be rigidly defined structurally, making the pyramid or tiered hierarchy an ill-fitting metaphor for the phenomenon at large.

Just like the respondents in Engström (2005), my respondents tended to make a clear difference between copying for non-commercial purposes and for profit. Agge, for example, clearly distinguished between what he labelled 'pirate copying' (actively selling illegally acquired material) and 'private copying'. As a cultural producer himself, he strongly approved of the latter, in opposition to the former. The morality here seems to follow from *what one makes with the file*, something which connects also to the valuation of the file (economy) and how its technical form compares to other technical forms (ontology).

Agge differentiated between **'normal downloading** [...] **for private screening'** and **'extreme distribution via large FTP servers'**. 'Data hoarding' could here be seen as a form of tendency towards 'pirate copying', which would be more to do with the exchange/commodity value of a file rather than its use value. This notion implies that 'data hoarding' would be a substrate of the gift economy which is so manipulative, maximised, radicalised and professionalized that it is more akin to monetary-based commodity exchange than the alleged non-profitable file-sharing which all of the respondents were very keen to embrace. When asked about possible

"moral duties" that were central among file-sharers, Pontus referred to the very same thing: not selling copied material for personal gain. **'I only download what I need and share everything that I download.'** This corresponds with the findings by Perkins-Svensson (2006) where 60 % of the respondents held that a 'pirate' and a 'file-sharer' are two different things, mainly because 'piracy' in this respect was seen as making monetary profit on one's copying. Almost 33 % of those who differentiated between 'piracy' and 'file-sharing' in Perkins-Svensson's study held that the difference was to do with this. Further, 'piracy' was connected to theft and illegality whereas 'file-sharing' was connected with deliberately spreading copies.

Another definition of a 'pirate' is someone who explicitly disagrees with or deviates from an established system. The term is both positively and negatively charged. As is shown in chapter 2, one of its principal positive connotations is that of *a radical autonomy* whereas a more negative connotation would be the *deviant or illegal nature of this autonomy*. This definition was also shared by several respondents, and there was a considerable degree of distancing from the term apparent in many of their accounts. In the more specific context of file-sharing, most respondent accounts came to imply that a 'pirate' is not necessarily someone 'pirate-copying,' but someone who would be seen as actively sharing (most likely, large amounts of) material, who prizes rare material and whose affective investment in the activity is more than ordinary. Lisa held that the 'pirate' identity would actually be a "mismatch" to how many young users feel. As there is a minority of people heralding a self-professed 'pirate' identity (or brand), she saw these as playing the role of (more radicalised) spokesmen for the larger group of people (like herself) who would not stress the overt political dimension, who would not **'reflect on whether it is right or wrong,'** but who might, however, still agree that the music business is **'too expensive and commercialised.** [...] **I would** [...] **say that a pirate is the Robin Hood type who does this as an ideological**

real endeavour, rather than like me – making up arguments to legitimise my own use'.

With the distinction between *downloading for own use* and *downloading for selling*, the users' actions appear to be based on some form of tacit moral supposition – that is, not only on explicit utilitarian rational choice. While Lisa saw a difference between downloading for her own use and downloading for selling, she dismissed the (industry) argument that 'file-sharing is theft' as being *too* abstract – not in the often-assumed sense that the concept of intellectual property law would be too complex in itself (an argument duly made by Perkins-Svensson 2006) or that the simple argument of 'theft' would be easier to comprehend. Instead, for her, this alienating abstraction would lie in the way the argument of 'theft' simply becomes *disconnected* from the experience of those who actually file-share. For the respondents, calling downloading-for-own-use 'theft' would simply be too far removed from their own everyday understanding of it. In contrast, downloading-for-selling would however equate something more akin to 'theft' – granted that an actual purchase would be replaced. Ironically, Pontus noted that he used to buy counterfeited copies before he began file-sharing. From this, I noted an interesting twist on the "file-sharing replaces a purchase" argument: Non-profitable file-sharing could just as well be seen to replace commercial counterfeiting.

In regards to making money from illegally copied material, Veritas held that since he personally sees file-sharing as an explicit way to **'oppose capitalism,'** earning money on piracy would be paradoxical. He was the only respondent who actually presented an ambiguous stance towards both types of illegal copying ('private' and 'pirate'): **'I think most people are struggling like me in defending file-sharing morally. Even if the author isn't losing anything and even if you'd never buy the work anyway, it feels a bit wrong for many of us.'** He noted that to pay donations to authors, and to 'preview' to subsequently buy, are feasible ways to

ameliorate the possible damage from unrestricted file-sharing. Lisa experienced a similar moral conundrum: she strongly held that the rights holder or author should be duly reimbursed by anyone consuming his/her material, but she asserted that when file-sharing, she would **'turn off'** her morality, **'with the argument that I wouldn't buy it anyway'**. Both Lisa and Veritas seem to perceive file-shared content as at least sometimes commercially replaceable by a purchase, and thus partially detrimental to sales.

Many respondents reminisced about their initial experience of file-sharing, where a feeling akin to intoxication was recognised in the sudden availability of an abundance of content, accessible virtually without restraint. Vega noted the 'ruse' of quickly filling a hard drive, to the process of 'getting used' to file-sharing: **'I think it's most common among those who have just started to file-share, but after a while you can't be bothered downloading things that you have no use for'**. Regarding the individual management of an abundance of computer files, on can note a feeling of being "blunted," or "over-fed" on free, abundant digital content, and of easily losing count of the individual files amassed – one often ends up just browsing, not really listening. Pontus confirmed this: **'simply, you get spoiled'**. Other respondents similarly defined file-sharing as casual, essentially *mundane*: **'satisfying "basic" needs like f.ex. downloading a song which you are keen to hear'** (Vega). A form of quick, convenient gratification.

As the different *modes of consumption* need not necessarily correspond to allegedly predisposed types of consumers, any framing of users according to preordained 'types' should be thoroughly questioned. As with the problematic 'pirate' label, one needs to heed the risk of reification. There are no entirely one-dimensional 'aesthetes'; similarly, there are absolute 'data hoarders'. Actual actors are never fully commensurable with idealised, imagined actants. However, one and the same user can alternate between these different modes of content valuation, both of them seemingly

important for users, in distinctly different ways. The different modes put different emphasis on what type of value is preferred and moreover, the different modes of content valuation emphasise different types of knowledge and skill. Certain *computer-related knowledge* is always required on these networks while, equally, searching and finding mp3s can be seen to be dependent also on meta-information about the *cultural content* (the songs, the games and the films), as p2p networks only allow "findings" by an active querying of the name of the artist or the track one wishes for. In fact, the importance of meta-information and the notion of a 'media environment' for these activities cannot be overestimated: It could be argued that the very *lack* of metadata on the actual file-sharing networks might make the user even more dependent on extraneous sources and contextual conditions.

In terms of ways of positioning oneself towards other, alleged "non-sharers", Pontus expressed what can only be interpreted as a form of derision towards those who actually pay for material that file-sharers know how to acquire for free. He admitted to looking down on those who would not know how to find things for free; an implicit rejection of the present business models for 'legal downloading'. As for the potential lack of solidarity with non-file-sharers, Vega noted examples (from Piratbyrån's message boards) of file-sharers similarly looking down on, or deriding those conventional customers who buy CDs or commercial audio files. He attributed this derision to class conflicts where those who lack the money to purchase would deride those who have the money. He noted that he personally would be open to buying at least such material that would not be illegally accessible anyway.

Furthermore, going back to the distinctions made between different modes of usage, as well as between and within different networks, Lisa noted how the 'hub'/ratio system of DC++ exacerbates the division between those with large collections and those with more modest collections of material. Vega described the elitist contempt targeted towards everyday file-sharers from the more hard-core release groups within 'the

scene'. **'Some people within the scene seem to see** [public] **p2p as a threat to their own security, since they are afraid to be traced,'** he explained. Later in this chapter, I will note how such examples of positioning and dependence on anonymity tie into the individual rationales for file-sharing as exemplified by the respondents, and to the explicit political demarcations they make towards collective and corporate control.

6.3. The motor within: emphasising individualism and the machinic power of PCs

A remarkable level of individualism, bordering on social atomism, was conveyed in many of the accounts. This interpretation was directly interwoven with the particular mode of usage inherent in p2p: individual nodes accessing the network through the technical, infrastructural means available with a shared, central objective of *individual acquisition of content*. Pringle invoked the significant monetary investment in a PC as a justification for expecting to use it to the fullest; that is, utilising all the technical means available. This brings to the fore the material possibilities inherent in the networking of PCs as universal replication machines – and the realisation and expectance of this fact by virtually everyone who invests in one. Agge pointed to the relative "levelling" of opportunity that PCs bring; after having spent your money on a computer (and a complementary Internet connection), **'you're on the same level as everyone else'**, he maintained. You ostensibly have the same basic access as everyone else – and, as with Pringle, he noted that **'it is up to yourself'** whether to use the information available. This view presupposes an economically empowered subject, having the relative wealth, time and knowledge. Given the commonness of computer access in the Swedish demographic of 16—35, there seems to be an expectance that all but the most dispossessed would have access to personal computers. Pringle thus considered the individual as the primary agential entity to be held to account, morally and cognitively; if you do not have the required knowledge for finding and using these networks, it is your own loss, he maintained. Conversely, the most frightening threat online, he held,

was when private information about individuals is leaked and ends up in the wrong hands (he admitted to having been 'hacked' himself, so his concern was understandable).

Coupled with this "matter-of-factly" individualism, some accounts also indicated a bias towards the advantages of younger age and early adoption of computer skills, which was displayed in Pontus's view of those copyright-holders who oppose file-sharing. He labelled these **'retarded,'** and was furthermore not very concerned about the actual phenomenon of a "digital divide" when asked about it. Likewise, Agge said that he could not understand the alleged "fear" or reluctance about new technology that is occasionally expressed by some members of the public. Some other respondents expressed more sympathy towards such (allegedly) more technophobic standpoints, yet it would however be speculative to attribute this to anything other than a perhaps more modest mode of replying to the interview questions in these cases.

A form of affirmation of the "self-made," autonomous ethos outlined in chapter 5, as in part historically specific to Sweden, could be distinguished in Pringle's individualism. It was a modestly bashful and laconic stance, yet strongly self-motivated, productive and ultimately enabled by technology: **'Some make use of today's technology, others don't understand it.** [...] **Not everyone can mend their own car and they have to hand it in for repair while others manage to do it themselves.'** Agency is here seen as inherently individual and expedient. Technology is seen as enabling certain fertile outcomes, but it is essentially the individual's responsibility to be active and skilled enough to exploit it. Individual, deliberate law-breaking is welcomed in this case: **'If there are laws that you don't find justifiable, I think you could break those laws in order to make a point'** (Agge). He maintained that he was 'furious' about the current law – which prohibits citizens not only from what he distinguished as the allegedly harmful 'pirate-copying' proper, but also from allegedly less harmful instances of 'private-copying' such as

'previewing' films. Thus he would not tolerate it, and plainly kept breaking the current law, without ever feeling the need to 'explain' his choices.

The heart of the controversy seems to lie in the strongly felt "right" to entirely *exercise control over one's own, individually acquired cultural products*. This mode of voluntary individual control is, as chapter 4 has shown, attributable also to the infrastructural properties of the Internet in general. The "right" to freely dispose of cultural products is inherent in the doctrine of 'first sale' (Giese 2004) but is, according to the respondents, being directly proscribed by current copyright legislation. This individual "right" was in most respondent accounts seen as so natural that file-sharing would not even be primarily considered as breaking any laws. The respondents' understanding of the nature of file-sharing differed remarkably from the mainstream discourse of "malevolent" copying replacing sales, so that in their view, the law as it stands would actually "break" with the naturalness of the individuals' ability to freely dispose of their cultural goods (for example in terms of 'the doctrine of first sale,' in 4.10.2). The actuality of free exchange thus becomes the touchstone – 'the property of a proper' in De Certeau's terms (1984: 38) – to which the legal discourse of crime and delinquency becomes merely secondary. The law itself becomes a deviation from this established techno-economic norm.

File-sharing can be said to symbolise a shift in use and appropriation of Internet technologies from purely textual/informational exchange to an exchange of those digitised products (films, music, games) normally governed by extensive copyright regulations. My own studies and other technical reports and papers (see Nilsson & Blom 2005) are indicating that among media consumers and computer users, this shift is largely seen as *having already happened*. There was a notion common to virtually all respondents that digitisation is something which everyone has to conform to, that most Internet users have already done so, and that now the producers and retailers will have to follow. A strong ethos of technological progress was present among these

respondents, alongside the notion that new media technologies become naturalised over time.

Pringle held that the sheer technical power and versatility of computers would mean that unrestricted sharing will never be stopped and that technical development has happened too fast for anyone to steer it. This form of reasoning can be said to favour a teleological account of history, in the notion that determining technological changes have taken place (primarily the informational logic by which any digitized content becomes translated into malleable data) and that resistance against these changes would be somewhat futile, since all human agency involved would ultimately be overridden by this technological change.

An illustrative, recurring trope was that politicians and industry have become so restrictive/draconian mainly because they initially **'missed the train'** (Svenzzon, Veritas). Pontus put it thus: **'the problem is that everyone should see that copying can't be stopped'** – that is, institutionalised cultural producers and distributors too. Pontus had little sympathy for those who would not see this, while Vega expressed some sympathy towards those who have not adapted to this perceived techno-economic reality. Ironically, while there was confidence that tangible media would be completely phased out as a media technology, this was occasionally contradicted by an affection, expressed by several respondents, for owning DVDs in artefactual form. I will return to this contradiction below, and note the fundamental role of unrestricted file-sharing as a way of previewing material which should not be thought to have only one *a priori* carrier or mode of distribution. Unrestricted sharing thus has the potential to beget increased commercial plurality. In other words, it need not have a presupposed negative effect on sales. That view, *the myth of harm* (Yar 2008), is also teleological, but more common within the copyright industry.

Esse's reasoning was representative of the typical pro-file-sharing stance. He held that since digitization brings about a crumbling of the distinction between original and

copy, those who profit from selling originals are exposed to **'the most powerful of all competition,'** the cost-free. He then utilised two arguments, firstly: **'To uphold older principles with laws and restrictions will not work.'** Secondly: **'Since file-sharing is so extremely decentralised, it is a bit like shooting a mosquito swarm with a bazooka.'** His belief that total, universal regulation is practically impossible is both structurally and technically valid, as is shown in chapter 4. Esse's position as a Piratbyrån moderator does imply that he argues out of considerable actual experience, yet is probably also strongly informed by the already established, partisan line of argumentation often seen on those online forums. However, his first argument – that no restrictions or laws would work – is much more speculative. Not only do both arguments conceptualise file-sharing as something separate from traditional policing or control; the first position could be accused of being neophiliac, in that it implies a total breakdown of older laws and principles in the face of the new material reality. Moreover, the second position could be accused of technological determinism in that it presupposes certain properties of p2p that would put it beyond regulation, as being inevitable as well as irreversible.

A vital outcome of this teleological argument was exemplified by Pontus: After stating **'it's all because the situation is the one it is'**, he argued that *people now want culture for free.* A more detached interpretation of this type of reasoning would be that *many people have become used to certain forms of culture being available for free.* Following from that, his conclusion was a normative one: culture *should* be free. The notion that "information wants to be free" is thus underpinned not only by the analytical observation that people have increasingly started to acquire cultural content for free – it expresses the normative wish that this should be the natural state of affairs.

Paradoxically, alongside the narrative of progress and unstoppability there was a certain element of nostalgia in some of the answers. They involved a recollection of older applications in comparison to the newer, current ones, often likening the

succession of different networks to biological regeneration; a view similar to that of 'generations' of network protocols (chapter 4). Older applications like SoulSeek and Audiogalaxy were sometimes invoked. Correspondingly, virtually all respondents made explicit distinctions between different network applications. These distinctions were often linked to similar distinctions of what types of content various applications lent themselves to.

6.4. The notion of 'content': Producers want control over it, so do consumers

Some respondents strongly emphasised the habitual dimension of file-sharing in accord with the already established quotidian nature of the phenomenon. Together with convenience, instantaneity and economy, this regularity forms part of the rationales found in the individual file-sharers' own discourses. **'Many prefer "free" over "pay," without thinking much of morality. But most of all, many have probably made it an everyday habit – and habits are, as we know, hard to get rid of'** (Emelie).

In what follows, some indispensable elements of the quotidian, which are often overlooked in these popular discourses will be highlighted: the unavoidable dimension of *materiality* and *valuation of cultural content*, and the dimension of explicit *morality* and *self-image*, concepts that sometimes converge in the term 'piracy'. The chapter then seeks to break down some more particular, explicitly political attitudes and moral standpoints which relate to issues of materiality and content, mainly in the ways file-sharers ontologically define digital content, compared to how the entertainment industry often defines it.

It became clear that the respondents make a highly calculated, sometimes complex balancing of the different *types of value* that they assign to the digital content available on these networks. This helps to guide their rationales of 'making do' with the means available. Confirming some of the indications in Perkins-Svensson's findings that the practicality and the expanded availability of content is what most commonly

motivates file-sharing (2006: 21), most respondents asserted that they see the digital files downloaded primarily as ways of *previewing* material – something which directly fragments the alleged distinction of mp3 files as directly analogous to CD tracks, or of avi files as analogous to DVDs or video CDs. The valuation of digital files is central, since this would probably guide the user rationales for preferring one mode of acquisition and consumption over another. The individual experience of file-sharing thus influences the collectively shared rationales for it, the discourses and arguments for or against it.

Many have argued for a more subtle recognition of the changing face of 'old media' with the arrival of the new, as new media technologies refashion prior technologies by a process of remediation (Bolter & Grusin 1999). This manifested itself in the ostensibly changing habits and relations to 'old media' among the respondents – however, this happens in far more complex ways than simply by CD sales decreasing. In terms of continued popularity, 'old media' forms seem to endure digitization, yet in unexpected modes of distribution: instead of watching traditional TV, for example, file-sharers download episodes of foreign TV series, often well in advance of scheduled domestic broadcasting premieres.

In fact, many respondents strongly held that file-sharing had resulted in an *increase* in their investment in media products, allowing for new affiliations with previously unknown media texts and genres, triggering a more discerning, catholic, yet knowingly casual approach to media products, unconcerned about losing data or downloading one film too many. Some would even buy more DVDs since having begun file-sharing. Some meant that they consume in what they described as more conscious, directed ways, calculating expenditures not only monetarily but in terms of time and effort as well; a regime of administering also the pleasures of the self, which resonates with the description of Swedish reflexive modernity in chapter 5. In this sense, downloads seem to occasionally replace purchases, but only because the consumer has

made the active, knowledgeable and pragmatic *calculation* that the value of the object would not be high enough to grant a DVD purchase (especially in the Swedish context, where the purchase often would entail personally importing the item from abroad). Regarding buying artefactual content, some respondents initially explained that they had stopped buying CDs to a very significant degree since discovering file-sharing, whilst other respondents held that their CD consumption had not been affected much. Some held that they would only buy material if they could not find it online. More significantly, however, several respondents held that their consumption of DVDs (in particular) and other media (in general, including CDs) had gone up since discovering file-sharing. Veritas approximated his expenses on DVDs, CDs, games, and software in the preceding years to £6,000. Without file-sharing, he claimed, the figure would only have been approximately £1,000. LB noted that she would not always be happy with the (bit rate) quality and durability of file-shared films. She personally collects (legally purchased) DVDs and noted that her film purchases had gone up drastically since beginning to file-share. She also downloaded and bought whole series of TV shows.

The following quote from Basim might be more fruitful as a way to understand the interplay between illegal file-sharing and the potential purchasing of cultural products: **'if I like a record very much, and cherish the ownership of it, I'll buy it. If not, I'll always be able to download it "for free"'**. Firstly, this quote implies that his choice is never predetermined. He makes this active judgment every time he is faced with a new song. A positive, *a priori* answer cannot be deduced here, as to what choice of format will be preferred – it is determined locally, in each individual instance, depending on a range of factors. Secondly, the quote points to a central dimension in the experience of how the content acquired is valued. A differentiation between (higher valued) purchased artefacts and (lesser valued) ephemeral files still appears to exist – in other words, Yar's *myth of equivalence between tangible and intangible goods* (chapter 4) remains exactly that: a myth.

One reason for this lesser monetary valuation of the digital file would be that it is "non-artefactual", distributed for free, and having sometimes questionable integrity in terms of labelling (metadata) and quality (bitrate, resolution, DRM). Moreover, as was pointed out by other respondents, non-artefactual material does not seem to be as collectable as traditional, artefactual content.

> Veritas: **'I've never thought about it that way before, and I definitely value my originals higher than my copies. I guess it is because I've bought my originals and in some way fear that something would happen to them. The copies I could download again, if I haven't already got them on the computer.'**

This is not to say that the files cannot be valued in alternative ways, as some respondents expressed modes of appreciation of content also in the form of pure data, implying a disregard of medium/carrier, much as an alleged 'data hoarder' would do. However, this latter mode of valuation often appears to be more of a tactical, practical assertion in order to justify one's own use, than an analytical standpoint. It will be shown below how an appreciation of cultural objects as 'information' or 'pure data' facilitates the argument that it would constitute a civic 'right' to freely copy such objects.

As for possible reimbursement of the authors behind a certain artefact, two moral/judgemental dimensions can be observed: (1) A sense of fairness in terms of consumer rights (embracing the users' own freedom to tinker and to become co-producers, but also the idea of being able to directly reimburse cultural producers without the need for middle-men). (2) A significant degree of distrust and cynicism towards the established entertainment industry (and also towards authorities that strive to impose controls and structural interference with file-sharing). The following quote from LB can serve to illustrate this;

> LB: **'There is a rather strong trend in the file-sharing world that you should really pay for what you take and keep – although not to the**

prices that are set and with the possibility of refusing to pay for substandard products, that is, the right to return the goods.'

Agge pointed out a further reason for choosing to download illegally rather than purchasing a lawful copy: a downloaded film from for example TPB essentially comes in a "stripped down" form, often comprising only the film and no extra material (as commercial DVDs most often do). At the same time, current equivalent legal services are not anonymous and generate DRM-encoded films that expire after a certain number of viewings or hours. Therefore, he held that illegal copies are not only easier to use, but actually safer and more durable. In terms of durability, playability and duplicability, illegally downloaded files thus tend to appear *more* valuable than the corresponding digital data from legal online services: **'Region-free movies, no muck or DRM'** (Agge). However, as with the above, this interpretation seems to be more exclusive to those users who are sufficiently skilled/experienced. One often has to prepare the downloaded files in order to actually watch a film – a proviso which once again exacerbates the reliance on the material setup as well as the knowledge, skill and effort involved.

Both Svenzzon and Vega noted how some of the clandestine so-called 'release groups' paradoxically mirror the content industry in 'moaning' about their releases 'leaking' onto the file-sharing platforms. Svenzzon pointed out that also among more everyday file-sharers, complaints about so-called 'leeching' is still common. Yet, he added, those who are voicing the strongest complaints and indeed formulate the notion of 'stealing' as a continuously negative flipside to 'sharing' would be the copyright industry. LB similarly noted: **'Sometimes you have to keep from laughing when someone on a file-sharing network gets pissed off because someone has taken "his" or "her" idea, picture, rip or whatever it may be.'** LB saw these types of complaints as selfish and emotional rather than analytical reactions; a **'me me me bug'**. In a similarly analytical, distanced yet also opinionated vein as many of the other respondent accounts, she maintained that ownership rights have changed

historically (once upon a time you could own human beings!), and that morals and habits are fundamentally flexible, malleable, prone to change. The problem now, she held, is that consumers feel ownership when they buy things, but the seller wants to keep controlling the use of the product.

Many of the respondents' accounts elaborated upon the notion of a struggle over who should control easily duplicable media content in an era when both Internet users and traditional producers and distributors want to retain control over this duplication. Both Svenzzon and LB held that the increasing incidence of DRM and similar measures would be counterproductive, in fact prompting an *increase* in illegal file-sharing as a form of reaction. **'Who wants to buy a DRM-protected song if your friend can't transfer it to his mp3 player and then play it on his computer, without DRM messing the song up after a while?'** (Svenzzon). However, this standpoint is the one of the knowledgeable tinkerer. Also those potentially less skilled, less knowledgeable users need to be considered, who simply might not be aware of the implications of DRM, or simply do not care. Anna exemplified one such user, expressing a preference for the iTunes service. When asked about it, she maintained that she did not know about the concept of 'DRM-damaged' files (which is a very common notion among more avid file-sharers). However, she did note that **'if I want to buy a new mp3 player the music I've bought won't work unless I buy Apple's products, really stupid actually'**. She also claimed that she felt required to use iTunes Music Store, as **'the hardware only works with this'** – a claim which is correct insofar as the purchased iTunes music files (including DRM) would have these restrictions, while random mp3s from the file-sharing networks would not.

There is a popular understanding of what is posed as an underlying, systemic logic of p2p networks, that access to files is determined less by their numeric abundance than by their *de facto* presence; a file is theoretically accessible regardless of whether there is one copy or 100,000. This particular systemic condition is however

complicated by the proviso that for every one file listed on a file-sharing network, the requirement follows that the user making available that file must be online for it to be accessible; a temporal restriction that casual onlookers (or, indeed even some respondents) seemed to overlook in the popular, rather euphoric notion that "anything" would be available on these networks. The phenomenon of mp3 blogs highlights the absence of rare material on p2p networks, as well as the temporal constraints. These blogs often cater for very specific genres and carry obscure artists or songs, often hard to find on the public networks. However, the legal risks prompt many authors of such blogs to only make the songs available for limited periods of time. Moreover, many p2p networks make use of queuing systems when particular files are demanded by many users at once; this sometimes forces downloads of particularly sought-after files (most notably, brand new releases) to take considerable time.

Many respondents noted these complications. The search for more hard-to-find material is often painstaking, demanding time, devotion and patience – this makes for a tacit understanding that there can be no certainty finding any particular thing that is searched for, and that combining different search methods is often required. There is a consensus that the technical quality of material can wildly differ and is never guaranteed; the technical quality of illegally acquired songs can be of lower, or of higher quality than for example the iTunes material. To extract the best quality of material often requires manually sorting out bad (*'sub par'*) files. This once again testifies to the individualised collectivism found among the respondents: the collectivity of the network as a whole benefits from the maintenance that each user puts into his/her own collection, "pruning" it as it were.

The ideal of p2p networks as reliable, universally accessible archives of information was thus somewhat shattered: access is fickle (due to dependency on single, anonymous users temporarily making available files); file quality and tagging is unreliable; the possibility of overview of the total network is limited. Contrary to this,

however, Agge argued that due to the nature of digitisation, computer users would today save (or back-up) significantly more material than before, taking radio and TV broadcasts as an example. The key here would be to mobilise the content stored on individual computers, he seemed to imply; noting that **'as soon as a file has been uploaded to one person, its dispersion is doubled'**. From Pontus's perspective, p2p networks constitute libraries of material that would otherwise have fallen into oblivion. His particular account also prompted me to think about archives in a less literal way: although the integrity of these networks is far from perfect, they do practically operate like highly usable, accessible (albeit provisional) and highly scalable archives. However, this archiving function is arguably a side-effect and not the primary purpose of most p2p services (except for dedicated indexing sites such as Karagarga.net).

6.5. Distinctions between applications

The dimension of technical/computer knowledge can be further deconstructed into distinctions of knowledge about and experience of *certain networks*. There are some actual "barriers of entry" to the world of file-sharing, characterising the phenomenon as a highly *diversified* area of consumption, seemingly stratified (for example, in terms of some networks being seen as catering for particularly knowledgeable users), which is paradoxical, given the horizontal organisational structure of p2p. However, following my preceding study (Andersson 2003), this "stratification" of networks appears to have more to do with the differentiation of mainstream–underground provided by Thornton (1996) than with measures of universalised superiority. Despite an often pejorative language, the distinction of "familiar" versus "obscure", or the pragmatic distinction of "more effective" and "less effective" seemed to be more accurate than judgemental distinctions of "better" and "worse". Users individually select their network primarily on the basis of knowing about it, knowing how to use it, and deeming it appropriate for finding the desired material. Whether a network is allegedly 'better' or 'worse' than

another is essentially seen through a very pragmatic perspective, depending on how well it "does the job" for the particular, individual user (as the saying goes, "to each his own"). However, this did not prevent some respondents from distinguishing certain networks as universally more accessible and easier to use than others; "sweeping" statements (*"Network A generally has the properties X and Y"*) that are expressed in ways which make them sound more valid or objective, while what is being said is in fact subjective (*"I believe network A is not right for me, because of what I perceive as X and Y"*). Different networks are almost seen as different 'genres' (LB) containing different operational/pragmatic factors and material preconditions: "good" ones like convenience, safety, security, anonymity and supply of files, and "bad" ones like spyware and viruses. This confirms the local regulatory properties identified by Mlcakova & Whitley (2004), noted in chapter 4. Factors like *download-* and *search-speeds*, *variety* and *quality of content* were also invoked among those preferring commercial, well-established and legal services over more nebulous, unregulated file-sharing applications. Other factors among those expressing a preference for such services were *comfort*, the *fear and/or shame of being caught* and sheer *monetary reasons*. This might appear as a confirmation of the alleged 'non-political' nature of such motivations, but it will be shown below that these seemingly pragmatic reasons are in fact linked with morality and politics.

The most popular application mentioned was BitTorrent – because of its speed, simplicity and ability to handle huge datasets. However, it was noted that BitTorrent often would not facilitate as broad a range of content as DC++. Some respondents made strong distinctions and noted that in comparison, KaZaA, Gnutella and eDonkey would contain adware, spyware, malware, and the like. The BitTorrent material was generally considered of higher quality, better-moderated and thought out, while for example DC++ is more dependent on the particular 'hub' used.

There are significant degrees of fragmentation and specialisation within file-sharing as a cultural field, like specific 'members only' communities catering for specific types of content.[31] With FTP, specific servers constitute a similar function, while 'hubs' serve a similar purpose on the DC++ network; fragmenting and stratifying the total population of users by way of particular "rules for entry" like ratio systems demanding both quantity of files (amount of raw data) and quality (certain types of data). Such specialist sites are instances of specialization and consolidation which counter the notion of file-sharing distribution as a "messy" or "disorganised" system, compared to conventional retail outlets. These sites cater for a select audience, and require significant degrees of familiarity with the architectures and systems of metadata for file-sharing. As with Enzensberger's preceding examples of outwardly "messy" or "chaotic" media systems (2003), they become navigable (that is, democratic) only to those who possess the capabilities of accessing, understanding, and searching them.

Contrastingly, Vega expressed a preference for public networks over exclusive ones, and argued that openness is the key to wide adoption and thereby a wider range of content, as there will be more users, the easier the access is. The infrastructural architecture can be seen to have a direct bearing on the overall experience, but not in a directly predictable way. Actually, openness and wide range of content could be thought of as a means to increased specialisation, as bigger indexes such as TPB have shown, where surprisingly obscure material can be found.

Regarding the possibilities of conventional consumption patterns being re-instigated on the file-sharing networks, Vega once again stressed the centrality of the ethos of sharing, and what he saw as a mutual agreement among the users that material has to be deliberately made available and shared in order for the systems to work. His own stance, embracing a distinctly artisan/subcultural use of these networks, might be

[31] See http://karagarga.net/, http://asiandvdclub.org/ (mentioned by Agge) or http://www.torrentbytes.net (mentioned by LB).

criticised for being somewhat romantic; acknowledging that uploading obscure material is a prime source of gratification for himself does not necessarily mean that such behaviour would be the norm for most users. He saw no contradictions in his own embrace of obscurity in relation to the public openness of these networks – the main point is that they can facilitate both the obscure *and* the very common, thanks to the enormous variation in content.

However, the majority of files constituting this superabundance are of an originally commercial origin[32] and the p2p applications operate in a media environment where the output of the large entertainment companies is somewhat mirrored in the online content. This recognition stands in opposition to what some respondents described as a feeling of separation from the general marketing and penetration of music in the mass media when browsing the p2p networks. Especially with the more widely used protocols like Gnutella and BitTorrent, there is an abundance of "mainstream" media: TPB continually compiles an ongoing 'top 100' list of the most downloaded material, dominated by the most current Hollywood films, pornography, computer games and mainstream music archives. However, as noted in the comments to the Copyriot blog;

> sales statistics from [websites like Amazon and iTunes] speak a clear language: Chart-topping music/literature comprise a fraction of the total sales. The lesser-known is what sells. But since we are used to break down statistics per unit (book/album/author/artist), and there are so many more lesser-known artists/authors (the middle range becomes very crowded), this won't show on for example [The Pirate Bay]'s chart.
> (sign. 'Fredrik,' in Fleischer 2006a, my translation)

Although there was a general consensus that games, software and Hollywood films are particularly easy to find, whereas other films and, for example, e-books are significantly harder to find, Vega maintained that charts like the abovementioned actually do not reflect the total content very well; he thought of them as bad examples, because the

[32] This applies to the amount of *copies*, not *titles*. Peter Sunde of TPB argues that the absolute majority of titles available via this website are non-copyright ones (private conversation, 2009).

networks cater for the more widely varied material in what has been labelled the 'long tail' (Anderson 2006) of more obscure content. Regarding the range of content, these new p2p implementations certainly appear to widen the prospects for choice and trial, yet paradoxically do not seem to remove the preference for more "mainstream," popular texts, since these could be freely tried and tested – 'previewed' – as well. This correlates with the tendency observed by The Economist (2009) that digital media distribution appears to favour the very obscure and the very popular more than the categories in-between.

Simultaneously, less overseeable (and less targetable) p2p applications appear to contain properties designated to produce *closure* rather than openness. If the technical setup had been more user-friendly (for example using richer metadata, a centralised index, and/or distributed, cached search agents that would make tailored background searches) the process of finding particular content would not be as painstaking. Once again, there are distinctions of different applications' ease of use, while Lisa observed that DC++ (her network of choice) is actually not very **'open to the public'**, despite being easy to use once it has been installed.

> Lisa: **'It's just a basic program which you're expected to master without any instructions. The only reason that I managed to grasp it and enter into parts of it, is that someone initiated me. After that, no special competence is needed to use the program. It is mainly clicking, you sort of learn what you need to know.'**

Another example of limitations implicit in the technical setup is the fact that mp3 as a format distributes music in song-sized files, making complete albums harder to find and download on most networks. Entire albums and discographies are however more common on for example DC++ and BitTorrent, at least for well-established, "mainstream" artists.

Consequentially, more open and searchable networks (essentially relying on centralised indexes) were seen by the respondents to open up for a much more sizeable,

large-scale, "mass" sharing, and would therefore be seen as potentially bigger threats to the establishment. **'The character of the networks plays a part in the sense that they became open, they were originally closed, like FTP where you needed addresses and passwords. With Napster and KaZaA they became open and everybody could join in'** (Veritas). Smaller, more limited networks, however, would be more fickle in terms of accessibility of content, and prompt a mode of usage that would also be more dedicated, yet also more capricious, reactive – in other words, tactical (essentially relying on more adventurous, tinkerer-like usage, with higher degrees of dependence on other users in terms of helping each other with advice and access). In a historical context, these dimensions apply to earlier protocols that were both less frequented and less sophisticated in terms of searchability and purity, and therefore characterised by this latter mode of usage. References to BBSes, for example, sporadically occurred. Also current, more specialised networks like SoulSeek (a network originally intended solely for electronic music) could be placed under this header. More extreme, encrypted and totally anonymised applications could be seen as yet another example. The more "closed" a network is, the more adventurous a mode of usage it seems to prompt, with proliferation of illegal and/or disturbing material as an unfortunate result. Someone used to the convenience and ease of access of TPB would be very likely to feel unease when faced with the wild, faceless, nebulous manifestation of a totally decentralised, encrypted network like Freenet or WikiLeaks. The imaginary of such actual 'darknets' has been invoked among Internet activists, although the currently very limited popularity of such applications questions their real-term usability.

As with the overall usage itself, the levels of trust and anonymity involved were felt to result from a concoction of ever-shifting human collectives enabled by machine infrastructures. While breadth of content is felt to be important and the network openness thereby being utilised differently depending on user preferences, this

contrasts with the need for anonymity and personal integrity – something which is facilitated by network closure. This might seem a paradox, yet file-sharing applications manage to balance the two. One of the most successful examples so far is the BitTorrent protocol's combination of user-moderated (that is, humanly controlled) content management and decentralised, anonymous connectivity (much more infrastructurally determined).

Agge and Veritas noted the importance of feeling confidence in the chosen application – or as they expressed it, 'being in control'. They both gave accounts of how the degree of user control and confidence in reliability and network integrity has improved with later generations of network protocols. Agge differentiated between newer services like BitTorrent and older ones like IRC and FTP, **'where you had to trust other users and specific server lists. This required, back in those days, a lot more work.'** Agge explained (rather self-assuredly and somewhat conspiratorially) that the occurrence of viruses, trojans and child pornography is nowadays more or less negligible, and that stories about these should be considered rumours spread by anti-piracy organisations in order to warn off people from downloading. He noted that while such malign content existed in older protocols, with newer ones like BitTorrent he maintained that this happens very rarely.

In contrast to the noticeable awareness of the (however minimal) risk of getting registered or caught by copyright enforcement authorities, most of the respondents noted the significant extent of a perceived *anonymity* online (albeit relative, or arguably illusory). This implied that the numeric vastness and the absence of identity traits with online avatars creates a de-personalised, relatively "safe" environment. Although most of the respondents appeared very aware of IP registration, the general consensus seemed to be that, although you are not technically anonymous on most networks, you simply **'disappear in the crowd'** (Rutger, Vega), or see yourself as **'only a user in the crowd'** (Lisa, Pontus). The risks are minimal, Veritas maintained,

once again stressing the personal knowledge and skill in how not to get caught. An alleged **'fear of getting caught'** admittedly played a background role in Rutger's choice of what to share. Sharing notably large amounts of material would, he noted, increase the risk of getting registered or caught – however, he was not sure whether this would actually determine what or how much he would actually share. Pringle also stressed the individual responsibility of maintaining your own anonymity as a user – once again, confirmation of an individualist ethos of competence as a strictly personal responsibility. After the implementation of IPRED in Sweden in 2009, it was reported that services that offer encryption of personal Internet connections became popular. As this thesis spans a different time period, this is of minor interest here, but it is notable that the responsibility for this encryption is once again seen as a personal affair.

The general consensus was that the authorities' capacities for monitoring users are insufficient, which further diminishes the threat. Agge did not believe the technical skills among police and authorities actually enabled them to practically clamp down on many users, and noted that his main concern was with private interest groups (rather than state) taking on the role of police. Pringle explained that the anti-pirates are forced to use legal methods, which lessens their enforcement abilities. Svenzzon further noted that the BitTorrent protocol also makes the act of uploading a distributed one, so that no user should technically be accused of spreading an entire file (unless this user is the only user sharing the file). The majority of police crackdowns seem to have been on users with particularly large collections for uploading, but there is still a widespread feeling that the activity is never entirely without risk.

Hence, one could note a kind of trade-off between "anonymity" as an important ideal, and "community" as another one. Perhaps this dualism can more comprehensively be understood through a notion of a *relative* degree of anonymity, grounded in the very arbitrary nature of online aliases or avatars, which forces these to inescapably remain aliases, only indirectly connected with an actual image of an offline,

corporeal identity. By using online personas/avatars, the individual can maximise social experimentation whilst also maximising anonymity (Turkle 1995).

Since the networks as collective entities are ever-changing as one engages with them, with different users online and thereby different pools of content available depending on what point in time one logs on, the *temporal* specificity (that is, the point in time when accessing the network) arguably plays a more significant role than the *topological* specificity of where (or how) one would physically enter the network. The user control could thus be seen to rely on the network as a totality, forming the experience into one of partial fragmentation or dispersion of control, which acts in addition to the abovementioned, relative anonymity. This dispersion of control can lead to an experience of empowerment which allocates responsibility ultimately with the collective, rather than with oneself as an individual. This generates a sensation of being "only a user in the crowd," connected not only to a general sense of freedom to download whatever one prefers, unfettered by taste or moral judgements of others, but also to the tacit understanding that the shifts in network integrity and content continually follow from the total composition of users as a collective entity. Regarding being "in control," Lisa introduced the term **'control-lessness'**, when recounting how she had mistakenly shared private Word documents with other users whilst being on the DC++ network. This she initially experienced as embarrassing, yet **'at the same time, you are anonymous anyway,'** she maintained, **'so that if someone would have downloaded any file that I wouldn't have liked to share, it wouldn't have been the end of the world – however, it was a nasty surprise.'**

> Lisa: **'Regarding my downloading of other people's files, I don't know if you can be anonymous, I don't think so, my username is visible when I'm downloading a file. I think that anonymity on the Internet is very liberating and makes some people share private things, there are a whole lot of "private films" on DC++.'**

If this implication of 'control-lessness' (exerting little or no control over files that might mistakenly have been made public) is due to loss of subjective overview over one's own outward appearance, the converse implication would be the loss of overview over *other* users' behavioural/identity traits and actual content. Lisa repeatedly noted that it is hard to get (reliable) information about a file before downloading it, and whether it is the right one is often coincidental – sometimes one has to download from several different sources. **'But this is the job you have to do, when it happens to be free'**, she maintained; once again, certain degrees of devotion and patience are expected, as well as certain degrees of frustration over malfunctioning/unreliable software.

Judging from the fieldwork, the *integrity* of networks – that is, not only the anonymity of their users, but also the overall quality of their files and operability – is facilitated by clever network design, in combination with a certain *modus operandi* expected from the users themselves. These expectations are communicated to the users either in the offline world (most often by word-of-mouth) or by online, textual discourses, and by the "preferred uses" implicit in the user interface design of the p2p applications (see Mlcakova & Whitley 2004). A particular understanding of p2p-based network architecture was prominent throughout the respondent accounts; a notion that file-sharing without question relies on a crucial yet sometimes complex interplay between human and machinic agencies. LB listed both human and machinic properties as essential to the integrity of particular applications: **'confidence in those who release files, download speeds, and the social structure'**.

Svenzzon typified a discourse common for many of the respondents in the main study, which laid emphasis primarily on the operational properties of the networks: a good infrastructure; a high-speed connection; an up-to-date software client – all making for better overall efficiency in acquiring files. Veritas also mentioned access to high-speed broadband as a prime material factor. He soon returned to the question of

the respondents' perceived obstacle to the sustenance of the phenomenon: the decidedly human, legal intervention of the authorities. My conclusion was that he saw *the prime driving force as materially determined, but the obstacles as socio-politically determined.* Monopolies, filters and various impositions of control are here seen as typically human restrictions imposed on a material infrastructure allegedly devoid of human agency for its sustenance. In effect, this constitutes a form of "black-boxing" of the technology at the macro level (when talking about file-sharing as a whole), portraying its stabilized technical forms as "givens"; static boxes thought to be beyond human influence. However, Agge was keen to point out the benefits of some filters, for example those that block child pornography. Interestingly, this admission that some humanly imposed filters might be necessary partially contradicts the notion of a material architecture evading human attempts at blocking, controlling or monitoring.

Further, when shifting focus onto the micro level, Agge acknowledged significant levels of human influence. However, he continually held that he would not see any form of organisational/institutional force behind the shaping and administration of BitTorrent or other networks: He maintained that the construction of networks essentially is an aggregation of many different, disparate *individuals* – once again emphasising a high degree of heterogeneity, individual choice and voluntariness amid this socio-technical collaboration. Pringle maintained an even stronger conviction that most networks are well-organised (in other words *not* chaotic or rhizome-like) and held that the level of embodied organisational hierarchy is significant: **'the network admins write the rules** [...] **the operators follow the rules thoroughly** [...] **these on their part control the users; making sure rules are adhered to etc. And these rules can be quite important, regarding what should be exchanged'**. Vega also confirmed this:

> Vega: **'It's a bit of both but I would say that the fundamental organisation happens largely humanly. It is people who organise their**

media collections and choose what they will share, what "things" to be torrents and be added to different torrent listings.'

Some respondents (Veritas, Svenzzon) maintained the idealistic notion of virtually all p2p networks being organised according to a not-for-profit, free/libre/open source (FLOSS) model. Svenzzon described two 'layers' of organisation; (1) a primary layer where someone programs and develops the software, alongside systems of moderation and administration (of hubs in DC++, and of trackers and web listings of content in BitTorrent). (2) a secondary layer which he described as the rather 'self-organising' nature of content dispersal. Regarding this latter aspect, he held that DC++ would be systemically better due to its upload quota system. Although some networks are conceived of as ostensibly 'self-cleaning,' this is understood as a process which is not entirely attributable to the machine: 'self-cleaning' essentially involves human actors choosing not to spread certain files. The quota systems in for example DC++ and IRC make this human presence rather obvious (see Cooper & Harrison 2001 for an account of IRC). This counters the superficial, materially determinist notion that an all too brief observation of an application like LimeWire could lead to, that the network would comprise a form of agency of its own, offering a vast exposition of remote files that are merely being accessed, or "tapped in to". Instead, the respondent accounts stressed the reciprocal, interactive nature of the activity: you have to share in order to get, but the composition and design of the network determines how much emphasis a particular network puts on this interactivity. The network architecture does determine the output to a large extent, but this architecture does not consist of machines only. All these things have a role to play: the amount and composition of users, the range of content and especially how the network *works*, from an end-user point of view.

6.6. Is sharing really the same as caring? The myth of digital altruism

With digitized media content, one recognition needs to be made before moving on to the issue of intentionality behind p2p-based file-sharing. The amount of data

comprised by a file sets a limit to how effectively it can be up- and downloaded: the data of a DVD quality film is larger than the data of a video-CD/DivX quality film, which is in turn often larger than the datasets of software packages. This stratification is central due to the limitations imposed by connection bandwidth and by hard drive space and processing power. Thus, unavoidable constraints are involved in file-sharing, especially the larger the files get. A user's own deliberate placing of a file at the network's disposal can therefore be cumbersome and impede one's own bandwidth.

The previous sections have showed that the presence on these networks tends to be one of stealth-like semi-anonymity, either due to necessity (as most of the sharing is illegal) or to a self-imposed exclusivity. This section will show that 'sharing' itself is largely utilitarian, and implicitly expected on p2p networks, since this is what enables the acquisition of content for each node in the first place. It is therefore not altruistic in the strict sense of the word – although it is firmly embedded within an experience of a genuine ethico-moral good, 'contributing to a better Internet' and an intentional mutual harnessing of resources.

What is more, if the previous sections have additionally showed that the sheer mass-aggregation of peers makes one feel as if 'disappearing in the crowd,' this section will show that active sharing is ultimately optional – it is actually very common *not* to share, allowing for potential 'leeching' of content and for clandestine secrecy. Opting out of sharing is often out of necessity – one's bandwidth might restrict it – but users can also feel legally or morally compelled not to share.

As has been shown, there are notable distinctions between different network protocols in terms of public openness or ease of use: DC++ and FTP was considered harder to use than BitTorrent, which is in turn considered harder to use than KaZaA or LimeWire. Another stratification is made regarding the files that are downloaded or made available, especially with applications which involve quota/ratio systems. Noting how the more complicated network protocols involve and even rely on active inter-user

communication (like when users review the content, chat, and share information on decryption and access), a preliminary conclusion would be that such architectural designs would instinctively foster a social organisation which explicitly relies on collectivism rather than individualism. However, after completing the fieldwork, my argument confirms the conclusion in chapter 2, that 'network community' in this context extends more to a (sometimes vague) *ethos* of community than a tangible, real-world community in the *gemeinschaftlich* sense. Much of the intra-network communication in p2p networks takes place in a layer which is systemically separated from the actual file exchange – the real-term 'community' function thereby becomes external to the file-sharing function itself. With networks like DC++, the 'community' trope seems to appear mainly in its capacity of presenting a pragmatic solution to maximise the efficiency of bartering, more than anything else. If the ratio systems and the formalised exchange within 'the scene,' and among crackers and programmers, are adhering to hard-line (and sometimes intricate) rule systems, markedly utilitarian instead of than altruistic, what would be the underpinning driving force behind the more voluntary, imprecise "unwritten rule" of 'sharing is caring'?

Several respondents stressed the centrality of sharing. Pringle maintained that what makes the Internet special for him is primarily the social dimension inherent in the potentials for (global) comradeship/comity and pleasure/entertainment found online. He repeatedly pointed to the friendly, reciprocal nature of the networks; friends and acquaintances giving tips and advice. Vega also stressed the comradeship of file-sharing, favouring keywords like 'collaboration' and 'sharing'.

Sharing could be understood as a moral imperative, prescribed by utilitarian convenience, or even as an infrastructural necessity; something that one *should do*, because that is the system. This primacy of 'sharing' underpins Barbrook's version of the ideal of the 'gift economy' (1998) of which these p2p-based networks often are said to be the purest implementations. However, 'gift economies' are in fact often

manipulative (see chapter 2). This is made apparent on the ratio-based networks, where users must literally share in order to get, as well as in the common phenomenon of peers dropping out of sessions as soon as they have finished downloading the desired file.

Certain degrees of idealistic, "sincere" sharing were nevertheless present among the respondents – however, not necessarily out of conscience, but rather as a mutual agreement, underpinning the expected modes of behaviour online; in many cases a form of code of honour, applied to maximising overall network efficiency.

> Vega: **'It's simply about giving and taking and I think most p2p users completely know that. This also applies to pages like Flickr, f.ex.'**

Vega gave confirmation of a seemingly genuine feeling of having **'contributed to a better Internet'** – undoubtedly a form of altruism/collectivism, yet containing elements of personal gratification as well, both in the simplistic sense that since everyone would gain from this 'better Internet' approach, so would he, and in the more calculating sense that gratification can be gained, also in terms of fandom and connoisseur-related exclusivity, from seeing your own, hand-picked file being widely downloaded: **'it can ... be extremely satisfying to see your torrent** [...] **getting over 6000 downloads, or to see that someone downloads that obscure vinyl single that you ripped the other day'**.

While also mentioning the slogan 'sharing is caring', LB admitted fairly subjective and material motivations as to why she would share material: **'My personal file-sharing habits are to give more than I take, but that is probably more because I have such a good [broadband] connection, than due to being such a fantastic person'**. Similarly, Veritas saw material reasons (bandwidth) as the main reason for his own extent of sharing. He noted the radical difference in upload versus download speeds. His ideal, to upload as much as he downloads, was obstructed by his technical setup. The degree of how much material to assign for sharing is actively

monitored and measured pragmatically, and constantly weighed against material considerations. The moral ideal of sharing is thus negotiated by the material properties of the Internet connection itself.

Many respondents stressed the kindness, friendliness, and mutuality implicit to the concept of sharing. Pontus self-warily joked that this deliberate altruism smacks of communism – a trope which does not only relate to the collectivism of sharing, but to the rejection of cultural content as private property. In other words, a rejection of one of Yar's tropes (2008), *the myth of property as a natural right.*

There was a contradiction in this, however. Asked about the prime motivation for his file-sharing, Agge answered that when it comes to software, **'it is primarily about conveniently and quickly being able to acquire something which you need *right now*.'** When asked whether he saw the present file-sharing systems as democratic or not, he admitted that **'no, they're probably not entirely democratic. But do they have to be? I don't necessarily care that much about that, who caters for the distribution, as long as it works. It is the *content* that is what is important – at least for me.'** He refuses to pay for films and games if they turn out to be disappointments. Convenience and immediacy clearly appeared as his prime reasons for file-sharing, with the seemingly altruistic sharing of material with others as secondary to that. Also Pontus admitted that getting things for free is the prime motivation, at least for him. This confirms my overall sense that the collectivism implicit in the concept of p2p actually relies on significant degrees of individualism. Moreover, the opposition which many file-sharers express against the *myth of property as a natural right* (Yar 2008) can in part be attributed to a convenient invocation of the already existing, normative opposition to copyright rather than to individuals making a detached, purely analytical, justificatory assessment.

Still, one should not use this realisation to pass judgement. Motivational forces of convenience, immediacy and pragmatism are not necessarily synonymous with overt

egoism. However, the prime motivation for the activity here shifts to personal gratification, rather than the idealised notion of altruism that saturates a lot of the mass-media discourse around the phenomenon (especially in discourse that serves the pro-file-sharing end of the 'copyfight' dichotomy). Such discourse also seemed to have influenced many of the respondents' initial statements regarding their own rationales for use. It was as if when talking about file-sharing in general, they transposed the rationale of it to the collective, which duly appears to be highly altruistic because of the systemic structure of the phenomenon – whereas when asked about the individual motivation, the personal gratification was what became pertinent.

Lisa maintained that the concept of sharing actually is **'rather secondary'** for herself as a user: **'I would call it a** [collective] **mutual exploitation'**.

> Lisa: **'It might be that "taking" is active, whereas "giving" [sharing] is a passive act. [...] The giving [sharing] is for me a necessary evil in order to get something out of it, egoistically, basically. The ideology of giving doesn't appear so present on DC++, simply. You do it because you have to. The more you give, the more you get and that's the point of it.'**

Agge did not agree with this statement. Since he had been file-sharing since the 'early days', where quotas were essential, **'it is sort of in the life-blood to share'**, he argued. Hence, he would not experience anything as lost, and no-one suffering, nor being 'exploited'. His interpretation of 'exploitation' appeared to be fundamentally different from Lisa's. What she referred to (as I understand it) was that the sharing becomes a necessary means in order to acquire content – the 'exploitation' here being of a rather benevolent kind, not damaging anyone, merely utilising his/her resources. This was implicitly confirmed by Agge's account when he reminisced about the quotas involved in the old BBS sharing he once experienced (which is a historical predecessor to the hub/quota logic of DC++ which Lisa referred to), and in the following quote:

> Agge: **'I only share that which is transferred during the download – forced by the software I use, actually. This due to a combination of egoism, bad computer and a certain respect for the upload part of the**

law... Dispersion in itself isn't good. It has to serve some sort of cause as well... I've never said this issue is simple.'

This "harmlessly exploitative" dimension could refer to the 'making do' with all the factors that make file-sharing possible (network resources, hard drive space, aggregation of users, and so on) – something which happens without any of the involved agents getting harmed in the process (as the only potential expenses would essentially be on the side of 'content providers' and ISPs). File-sharers in this sense "go together" to 'exploit' the resources at hand. Pontus thus interpreted the 'mutual exploitation' of file-sharing as a way of allowing for your resources to be exploited whilst getting to exploit others in return: **'With "exploiting" I mean using something that the other person has paid for or found online'** (essentially utilizing the other person's effort). Agge pointed out that every user normally has plenty of paid-for bandwidth already allotted to them, which would otherwise not be utilized. Hence, it is hard to see the activity as damaging, or 'exploitative' in the more negative sense of the word, he implied.

6.7. Molar formations, 'strategic sovereigns'

The social dimension of the Internet can be interpreted as one of the main providers for the complex webs of meta-information encapsulating the entire phenomenon. The useful nature of the Internet as a gigantic "reference database" was mentioned above. Although one might lack direct knowledge of certain things, it is possible to look up the necessary information. Also this is largely facilitated by a presence of human users on forums and message boards etc; a form of social formation for directly utilitarian/pragmatic ends. Some respondents, especially Vega, seemed to imply that the actual phenomenon of (illegal) file-sharing itself constitutes a collective formation, a form of 'critical mass' which gets documented by way of textual, web-based activities (crucially so for BitTorrent, since its entire layer of communication and meta-information is web-distributed). By continuing to rip, share, derive and distribute, Vega

held that the file-sharers would continuously keep pinpointing the absurdity of current copyright laws, since these activities in themselves constitute actual live documentation of this absurdity. In this sense, the infrastructure which generates (and is generated by) sharing comes to constitute a strategic formation in and by itself. However, in the Swedish debate, some respondents implied that Piratbyrån and especially TPB have come to metonymically stand for all this by themselves (see chapter 5).

Pringle and Agge directly distanced themselves from Piratbyrån. Pringle was not affiliated to it at all, and he said he did not care much about what they stood for. This interview was, however, conducted before the widely published TPB crackdown. Pringle referred to one of the anti-piracy lawyers in his account, which indicates an awareness of some of the actors involved. Agge expressed a clear dissent against the organisation; he thought it **'hard to take such an "organisation" seriously.** [...] **extremely partial** [...] **mainly a notice board for those who wait for their download to finish'**. LB described Piratbyrån primarily as a gateway for users who are not especially aware of copyright issues, helping initiating them to such topics. Vega similarly expressed, **'I think people in general don't reflect much on copyright or are initiated to the problems.'** Piratbyrån here appears primarily as an opinion-making and educational entity, not 'representative' for file-sharers in the strict sense of the word. Further, Piratbyrån tend to balance the issue by providing more nuanced, well-read information, Vega noted. Piratbyrån moderator Veritas explained that for him, its most important function would not be the dissemination of pragmatic knowledge, but the mediating role it serves in-between copyright critics. He stressed its heterogeneous nature, its function as message board, news agency and forum rather than propaganda tool: **'Everyone has their own ideas about file-sharing and copyright, so there is no official line like "Piratbyrån thinks so and so".'**

Agge agreed with the description of Piratbyrån and TPB as 'strategic sovereigns'. However, he lamented the fact that the ubiquity of Piratbyrån's arguments has made

the debate rather one-sided. He thought that believing that TPB and Piratbyrån would represent over a million people is simply unrealistic. However, he held that compared to the industry-subsidised Antipiratbyrån these pro-file-sharing sites are **'informed and knowledgeable'**. Pontus believed them to **'represent file-sharers as a group quite well'** since many people can recognize and agree with their arguments. Once again, the perception seemed to be that there are different "modes" of positioning in relation to the often explicitly political role of Piratbyrån:

> LB: **'As with any group of people you find common denominators and keep together and wave flags when needed in dedicated file-sharing communities. But I guess there are more people who aren't "involved" but just download out of curiosity etc.'**

6.8. An explicitly political motivation?

By recognising that it thrives on pragmatism and convenience, some of the more non-political (or even anti-political) dimensions of file-sharing have now been established. In the following, some other observations will be explored and put in relation to the actual processes of politicisation and institutionalisation that the phenomenon is involved in.

> Vega: **'You could of course politicise the act if you want, but I don't believe anyone file-shares in order to take a stand. If people hadn't gained anything from it, either through downloading or sharing, they wouldn't have kept doing it.'**

Agge held that there is no explicit political motivation for him to file-share and Pringle similarly saw file-sharing essentially as a comparatively harmless, worldwide 'hobby', users in-between. Ironically, Pringle did not initially understand my question of whether file-sharing would be 'political' or not, yet he later implied that the authoritarianism and strict regulation advocated by anti-piracy groupings would be akin to communism (coupled with a possible subtext of attempting to "brainwash" political subjects). He repeatedly explained how angry the whole conundrum made

him, and he was infuriated by what he perceived as a legal framework being implemented far too late and based on misunderstandings of how the Internet works.

Many respondents saw, to varying degrees, how the issue could be seen as political – but mainly when discussing the motives of *other* users. Veritas's view, for example, was that **'most people on Piratbyrån file-share out of political motivation'**, while also noting that file-sharing transcends the traditional left-right spectrum. Personally, he maintained that **'I file-share in order to get a broader cultural choice'**. There seemed to be a tendency to externalise, or project, the political nature of the phenomenon – to assign its controversy to other actors than oneself.

Lisa's response can be seen as typical: It may be a **'non-political act to share files [...] I honestly think there is no major reflection regarding why you use it'**. The fact **'that it appears as a popular uproar is an unintended effect of it being so easily accessible'**. This is congruent with the idea that in the current ethical/political climate (dominated by large corporate, copyright industry interests outlawing uploading and sharing of copyrighted material), p2p file-sharing architectures become inadvertently political, practically regardless of whether the individual network users have an explicitly politically intentional stance or not. One of Lisa's main points was that file-sharing thus becomes politicised as if "by association," or by the consequences of a use which – seen in the individual realm – rarely becomes more politically explicit than a consumer disgruntlement, a general dissatisfaction with "value for money".

> Lisa: **'It would have been more controversial if it was a social revolt against the market and the powers that be, but I think that it the reason it appears as such a revolt is an unconscious effect of it being so easily accessible. To challenge the market in order to lower prices might have been an initial idea, but not a deliberate act for many users.'**

The act of sharing (or 'mutually exploiting') appears to become externalised; a part of the set "rules" for participation, embodied in the material infrastructure, coupled with the social "netiquette" or common "courtesy" of the network. Once this was clear, an understandable tendency appeared in the respondent discourse of locating responsibility primarily with the collective – that is, *with the machinic architecture or infrastructural institutions that this collective helps constituting, and is itself constituted by* – rather than with the individual. This especially appears to be the case with those forms of responsibility which pertain to potential *negative* side-effects (or externalities) of the phenomenon. Not that the individual choices made online would be unwitting, or innocent (as noted above, individual, self-determined and highly pragmatic *choice* is paramount here), but the moral justification for these choices is shifted over from the individual to the collective.

In the Swedish context, this dynamic between the individual and the collective makes good sense, as the archetypal Swedish social contract would value (apparent) operational neutrality for all peers (every peer systemically equal to the network), efficacy, and infrastructure. The p2p network here becomes a metaphor for *a structural totality allowing for each individual to maximise utility*. Further, the long history of organisational life and 'people's movements' in Sweden makes institutional efforts on behalf of the file-sharers themselves (like the Pirate Party, Piratbyrån and TPB) appear logical, if not even expected.

When asked whether file-sharing in Sweden could be said to constitute a "people's movement" on a national scale, many respondents initially found this a rather alien label. However, when describing how he sees file-sharing as a very mundane activity (as mundane as, for example, reading a book or watching TV), Veritas referred to an article that he had read which labelled it Sweden's biggest 'national sport' – at least in sheer numerical/ demographic terms: **'There is no** [other] **activity that has more users.'** Also Pontus found this label relevant, since **'everybody file-shares'**. Vega

understood it in a similar way: **'because "everyone" likes film, music and computer games'**. When presenting the term to LB, she assigned it not only to sheer demographic numbers, but primarily to the growing appearance of groups of **'conscious file-sharers – who are finding ideologies around the phenomenon'**. She maintained that file-sharing would never have been intended as a "national people's movement", but has come to look like it, primarily due to its massive popularity. Arguably, a central additional factor here is the highly textual, embodied nature of Internet-mediated discourse; the existence of sites like TPB acts to constitute the activity as a documented, somewhat "sanctioned" one.

Agge disagreed: the phenomenon is not homogeneous enough, and its participants do not express a coherent, unified opinion, he maintained. **'It would be like saying that buying goods, reading books, or watching musicals would constitute people's movements.'** Agge pointed out that the expression is a positively charged one, and that it therefore might be strategically employed by pro-file-sharing interests: **'The Pirate Party wants to call it a "national people's movement", but that's only because they want to gain from this rhetoric.'** However, Vega had an objection to this; file-sharing is in his view, qualitatively speaking, more than mere consumption, due to its highly organised character: **'file-sharing is, however loosely, organised! To shop for goods, read books and watch musicals is pure consumption. File-sharing is much more than that!'** He also emphasised the highly active nature of the phenomenon, and the crumbling distinctions between consumers and producers that would follow from this.

Despite several respondents being contributors to file-sharing communities like Piratbyrån, few of them professed any explicit political inclination. Virtually all respondents were taking on a wary, if not distanced stance towards the established media corporations. The general consensus was that the entertainment industry is making too much profit, and that prices of CDs and DVDs are too high. In some cases

this critique was coupled with a particular argument that Sweden is generally over-priced, and that goods are often cheaper to import from foreign-based online retailers.

In differentiating between users who can afford legal downloads and those who cannot, Anna stressed the economic status of users as a main determining factor, and argued that the moral dimension might arise primarily among those who prefer to download legally, as a way for these consumers to justify their own monetary sacrifice. In this way, she connected the economic with the political. Those with the abilities and knowledge to find unauthorised material online, who yet choose to spend money on the relative comfort of services like iTunes, might attach moral overtones to this deliberate decision (to pay for downloads and not to share), **'because otherwise they would appear stupid paying for something that actually is free'**, she argued. Conversely, the ones with less to spend – often younger people – would stress the solidarity and altruism of free distribution, possibly as a way to justify their own free consumption of what others traditionally pay for. There was some indication of this, as the younger respondents were more inclined to only file-sharing, while the older respondents emphasised that they *both* purchased DVDs and downloaded films and music.

6.9. "Information wants to be free" and the alleged 'right' to share

Svenzzon held that **'personally, I don't think that many people download as a means for a political struggle.'** His own opinion, *that one should not have to pay for culture* (a stance that he shared with most respondents in the main study) he did not label as explicitly political. However, he seemed to adhere to a left-wing stance, where **'file-sharing really is a utopia which has become real when it comes to culture. Anyone can have anything, without anyone losing anything.'** As with several of the other respondents, he implicitly and explicitly tied this utopian promise back to what I came to understand as an allegedly pre-historical, or even a-historical utopian, Edenic era, where culture is understood as essentially 'free' and

hobby-based. Several respondents expressed this utopian wish. **'Culture is a human right, not an economic right'** (Svenzzon).

As with Yar's observation of resonant tropes in the debate (2008), this is a framing of the issue in terms of alleged 'rights' – a mode of reasoning which is employed on both sides of the debate. Framing an issue in such terms risks polarising the debate, because any argument involving rights is in effect an appeal to fundamentalism. **'There should be no guaranteed right to live on one's hobby (culture)'**, Svenzzon maintained – a clear example of an opposition both to the Lockean *myth of property as a natural right*, and to the romantic *myth of an individual, sole author* (Yar 2008). This might be a very particular framing of the conflict typical to Sweden, and might essentially stem from an underlying disappointment with an extensive public sector that is seen to benefit large numbers of unemployed people and (smaller numbers of) state-subsidised artists, actors and musicians, which involves a degree of favouritism in terms of recipients. **'However, it is everyone's right to be able to participate and take part of all culture'**, he continued. This relies on the same utopian promise above, and slides into circular reasoning if also this Swedish realm of subsidised culture is framed as being based on a 'right' to participate.

However, some respondents made more subtle amendments to this 'rights' argument. LB pointed to how moral concerns are sometimes raised in the online file-sharing communities of which she has experience: **'If you hang out in a file-sharing community, pretty often the discussion "Should this be downloaded or not?" occurs. It can be due to slightly different reasons – f.ex. if it's a charity CD with famous artists.** [...] **A different reason can be if you think that a film, song or whatever is of Good Quality** [sic], **and therefore should be invested in.'** Different affinities and valuations (the ability to 'preview' material plays a role here) thus play a part in constituting this sense of

rightness and morality. Pontus also noted the problematic nature of the civic "right to take part in culture" argument, asserting that many musicians rely on reimbursement, as well as the fact that culture has never been totally 'free'. To this, he added the matter-of-fact remark that the Internet exists and that this would have to be universally considered. Like Yar (2008), Vega noted the corporate, constructed nature of these perceived 'rights': **'The music-, computer-, film- and entertainment industries create needs which capital can't satisfy!'** LB similarly noted that this perception of consumer 'rights' partially results from a strong discourse of creativity and opportunism, that I would associate with current post-Fordist capitalism;

> LB: **'The same creativity that production companies have been able to thrive on, that has been sold with massive PR campaigns, and reached a position in our lives as something we *must* have, but have been driven to pay dearly for. Paradoxically, we now see ourselves as having a god-given right to film, music etc. Very much so – I think – because it's exactly that attitude that the big companies have sold to us throughout the years. Does that mean you *have* to get it for free? No. But do you get to have the right to become filthy rich from your song because of that? I don't think so.'**

There exists a dynamic here, in the recognition that music and film are appreciated as natural elements of everyday culture, while a habit of getting these staples for free has taken hold. There is an expectation of a constant flow of new cultural material, yet there is no guarantee that the file-sharing individuals would take the initiative for new systems for reimbursement of artists and creators, as films and music are, after all, not seen as vital to the sustenance of life to the same extent as food, shelter or healthy labour markets. There is, at the time of writing, no sense of urgency among the everyday file-sharers. This is further complicated by the rhetorical tendency among file-sharers of equating the non-paid acquisition of cultural products with "taking part of culture" for free. Moreover, the 'free' acquisition in the latter notion appears to be ethically and cognitively defended by invoking the argument that the files, as cultural

products, are not of the same value and status as concrete, physical artefacts and would not therefore interfere with actual sales.

As with the tendency to counter the *myth of equivalence between tangibles and intangibles* (Yar 2008) and see shared content primarily as informational ether/flow (instead of artefactual, segmented items of information), the far-reaching digitization of media content appears to shift the appreciation of said content towards a mode that is more holistic in that it includes the potential 'attention value' and 'network effects' in free dispersion – but at the same time utilitarian and functionalist in that consumption becomes increasingly equalled to data management. Here, the rallying call is the overall benefit of 'free culture' for society, at the expense of the unionist/guild-like societies of professional cultural producers and distributors. However, the same rallying call – especially when invoking the 'right' to freely dispose of files – can appear very inconsiderate, at least when claimed by (seemingly) local, situated interest groups and not on behalf of entire populations. The first cultural form to undergo this treatment was music, with the now common assertion that mp3 brought a change to the outdated notion of seeing music as something one can own. If music is seen as immaterial or ethereal, it is easier also to claim the right for everyone to freely dispose of it.

6.10. Attitudes towards external regulation

I shall not too much on my respondents' attitudes towards the entertainment industry. There was, in brief, a tendency to emphasise the plurality of consumer activity and the diverse nature of artistic production, while the image of the 'content industry' was much more monolithic. In the file-sharer discourse, the terms 'music industry' and 'film industry' have almost become veritable curse-words, in Sweden and elsewhere. Many respondents admitted preferences for smaller, more independent artists and producers, and differentiated the term 'entertainment' as a general term from the more specific, loaded notion of 'content' as the abstracted, mediated "thing" over which the current struggle is fought. Regarding the corporate interests of this 'content' industry and its

legal counterparts, virtually all respondents displayed significant degrees of cynicism and disapproval, often using very strong metaphors.

Vega believed that what the industry would see as the main threat is the *pluralism* of p2p-based file-sharing, namely that more sources and more artefacts would be accessible. Agge and Pringle similarly emphasised the pernickety, discerning habits of contemporary consumers. Agge and LB noted the file-sharers' lack of respect towards the industry. Agge maintained that while the slogan 'downloading is theft' makes some sense in the current legal system (where works of art are made comparable to physical objects), it ostensibly aims at mystifying and demonizing the activity, further reinforcing the 'copyfight' dichotomy. A corporate discourse which so fundamentally clashes with the everyday understanding of the activity risks finding users actively distancing themselves even further from corporate interests, and instead sympathising with allegedly more hard-line 'pirate' subcultural formations, which at the time of my interviews only appeared to have a marginal influence among everyday file-sharers.

The respondents' discourse occasionally expressed a more libertarian stance than the more typically Swedish coupling of pragmatism and libertarianism. Pringle explained that he strongly opposes paying a TV license, since he hardly watches TV. Such arguments are common among those individuals who express more libertarian, pro-individual, anti-communal values; the "greater good" of the TV license is here ignored, while instead emphasising the perceived individual burden of it. Agge expressed a similar distrust of state-authoritarian approaches, mixed with a particular "disbelief" in Sweden as a country – interestingly, something that was noted among other respondents as well. Ironically, while the shared collective benefit of the p2p network appears to be both taken for granted and much appreciated, the collective benefits of the national economy was not as obvious. In fact, the state here seems to be mainly associated with regulation and repression, rather than with individual benefits.

It was observed, however, that in regard to highly valued content, there seemed to be a widespread aspiration to (as directly as possible) reimburse the author. Even experienced file-sharers sometimes deliberately choose to pay for content which they particularly value (via, for example, iTunes). This points to the *disjuncture between retaining authorial rights and retaining profit from these rights* observed by Yar (2008). However, as I later noted, this desire might in some cases end up as merely a prospective, arguably merely rhetorical declaration. Among some of the respondents it appeared to be more common to plan, or to talk about reimbursing the producer than actually doing it.

Pontus came to express the old cliché: Instead of buying albums, he initially claimed that he would **'download them and donate money to the artists'**. However, it soon transpired that he had not actually had any experience of paying any artists! This might have been due to his age and, as he noted, the fact that he had not yet got a PayPal account. I tried to provoke him by suggesting that downloading could be said to constitute a form of free usage of products in spite of the producers' original wish to receive money for this usage – in essence, a form of contractual disagreement. Even if he did not see sharing as 'theft,' did Pontus see any moral issues in breaking this 'agreement,' that one is expected to somehow pay for one's own consumption? No, he maintained. He had **'no bad conscience'**, once again holding up the above argument of the *possibility* of donating money to artists.

This was one of the instances prompting me to see the respondents' dismissal of the entire content industry as, in effect, a facilitator for justification of their own actions. To claim that the conventional system is not fair, or that it is flawed and does not work properly could in effect serve as a way to simultaneously dismiss the moral concerns that go with this system – regardless of how large a part of this system one would personally be. Subjective dismissal of a system need not mean that the system is objectively flawed.

Further, and more interestingly, Pontus implicitly made an extremely strong distinction in terms of how to value cultural production. On the one hand, he maintained that he sympathises strongly with the artists themselves (preferring if they would actually receive a larger part of the profit than they currently do; **'the artists should get much more!, today it's the record companies who take most of it'**), yet on the other hand he held that he blatantly has no sympathy whatsoever for the cultural producers who do not condone the free sharing of their work: **'Well, those authors aren't worth any solidarity. If you're that retarded, you're not worth it.'** He also contradicted himself, seemingly wanting to maximise two (conflicting?) ideals at the same time: **'Rights holders should be able to decide what happens to the work to the same extent as they do now. But, to copy the work should still be free for anyone.'** He did admit that this would be a tricky balance to strike and that he really did not have an answer. Another quote of his summarizes the problem: **'The rights person should simply realise himself that file-sharing is something positive, and use it in his own favour.'**

6.11. Conclusion

One key finding was that p2p is *not entirely altruistic.* Contrary to popular p2p-friendly discourse it not only comprises but thrives upon some highly individualised, even atomistic modes of consumption and acquisition of content. In an account where the initial focus lies on the individual user, the agency of sharing is thus located in the individual, since the techno-economic premise for p2p-based file-sharing is that some peers have to actively share in order for others to get. However, the agency can just as well be framed in an inverse way: that the technological infrastructure has to beget sharing in order for peers to access other peers' available material. This latter framing is, as the previous chapters have suggested, just as essential. This will be returned to below.

Moreover, the unavoidable reliance on *material infrastructures* – properly installed applications and working connections – in part serve to reinforce the inherent exclusivity of the phenomenon, requiring a certain knowledge and skill beyond the mere technical means in order to connect. P2p-based file-sharing is dependent on its human subjects possessing certain degrees of computer literacy. In a way, many users benefit from the covert ways in which current p2p systems of exchange operate, given the illegality of the phenomenon. Partly as a result of this current illegality, partly as a result of its character as a technology dependent on mass-aggregation, the technology is characterised as functioning through a user connectivity which is highly anonymous. From what has been gathered in this chapter, this partially appears as a liberating factor, allowing for virtually any possible use of the network – including uses that might be morally frowned upon: dispersal of morally questionable material; hacking or cracking of technical systems; the deliberate dispersal of malicious content (such as viruses or other variously corrupt files). While such behaviours might be of primary concern for network administrators, and serve as reasons for the vastly improved technical barriers to such abuse in for example BitTorrent, some modes of usage are of concern for everyone involved, like for example the sharing of morally ambiguous content, and the 'leeching' where a lot is downloaded, but very little is returned. The idea of such abusive uses is apparently so common that some respondents described the entire phenomenon of p2p-based file-sharing as one which in fact thrives on a form of 'mutual exploitation,' a kind of cunning maximisation of utility, of the resources available. This once again ties back to the initial, utilitarian and in many ways opportunist imperative: **'The Internet exists! Why not use it?'** (Pontus).

This also connects to how the respondents distinguished between a number of significant *modes of usage* – 'leeching' and 'data hoarding' being the most commonly invoked ones. Such modes of usage are in part connected to the hierarchical 'pyramid' image of the initial dispersal of content (as when, for example, a new blockbuster film

enters the network), in the sense that 'ripping' and 'seeding' clearly pertains to this early dispersal of files. However, as an image of overall user behaviour, this structural, hierarchical 'pyramid' model is misleading. These modes of activity are to be seen as ones that different users can shift between (that is, not to be characterised or identified by) and the formulation of *what these modes are* is co-constitutive of an account of file-sharing that is ontopolitical (Stengers 1997; Mol 1999) or material-semiotic (Haraway 2004). By formulating their ontology, one at the same time distinguishes some elements that are seen to constitute the phenomenon, and typifies the vast conglomerate of agency that make the whole phenomenon "work". Moreover, these modes are not to be understood as purely human, since they are so strongly co-constituted by machinic agencies. The principal modes of usage identified were thus 'ripping,' 'seeding,' 'leeching,' 'hoarding,' 'contributing,' 'profiting,' and 'activism'. These modes connect to the issue of potential internal conflict among file-sharers themselves, since many of them are incommensurate, not compatible.

The 'pirate' label was thus seen to constitute one such mode; a form of economic profiteering based on the existing open systems of exchange, with a dedicated criminal intent. The term however also involves a positive connotation largely coterminous with 'activism,' a meaning of the term 'piracy' which, together with its autonomist and counter-cultural implications, has gained significant rhetorical thrust, partially thanks to its successful appropriation by TPB and other pro-file-sharing institutions.

This positive implication of the 'pirate' label was contrasted with, and arguably seen as a reaction to the politicisation of the phenomenon of file-sharing as if "by association," mentioned by some respondents. Here, the controversial aspect of the phenomenon is seen to lie not primarily in user intent, but in the fact that the collective entities generated come to prescribe certain behaviours and in fact achieve the actual sharing, especially in the cases of those networks that require uploading in order to function, and thus beget further circulation of material. There is a Faustian dimension

to this: in order to listen to the artists you care about, you take part in a phenomenon which is framed as potentially ruinous for these very artists and producers. Regarding the notion whether file-sharing would be commercially 'ruinous,' it is however hard to prove that the recent decline in CD sales can be inferred to file-sharing alone (Pollock 2006; Andersson 2009). A central justificatory trope was in fact to dismiss this potentially ruinous effect, emphasising other parameters that are more visibly benefiting from the sharing instead; other regimes of justification.

What the fieldwork also showed was that part of the controversy lies in a shift in the *visibility of file-sharing*. The copying that has been central to the Internet since its very conception has in these recent incarnations entered spheres of 'old media' previously unthreatened. What is more, institutions like TPB are widening access and visibility compared to decidedly more clandestine protocols like FTP, or networks like Karagarga or SoulSeek; inventions that were thought of by the respondents as more old-fashioned, functioning more like file-sharing used to do (software 'swap-meets', tight-knit communities of floppy or tape exchange, BBSes and other 'sneakernets'). Nowadays, p2p-based file-sharing happens on a significantly larger scale, over globally agreed standards, and in relatively stabilized and publicly visible ways. It is, to a significant degree, *institutionalised.* Hence, it becomes politically provocative, taking on properties more typical of the sphere of the polity: public debate (propaganda, lobbying) and public imagination (branding). The role and actions of TPB confirms this; they engage in brand management and arrange press conferences. Ultimately, this recognition is what prompts the notion of file-sharing at large as a 'public movement' and of TPB and Piratbyrån as 'strategic sovereigns'. The analytical distinction between 'polity' and 'techno-economic sphere' (Bell 1976b) is useful, as the regulatory, anti-file-sharing invocation can be related to the sphere of polity, while the pro-file-sharing argumentation is found to more often relate to matters of technology, economy, and materiality.

The Swedish debate during the Pirate Bay trial partially confirmed this as well: pro-copyright argument repeatedly invokes the Lockean right to harness one's creative labour, both economically and morally (Fritzson 2009), while the file-sharers take a more pragmatic view, invoking the changed technological conditions for making copies and publicly performing them, and emphasising the actual plurality that would complicate any notion of idealist principles (Fleischer 2009).

A common trope was to see the prime driving force behind file-sharing as materially determined, but the obstacles as socio-politically determined. This is telling, not only in the way it relates the respondents' own understanding of the phenomenon, but in the way it in fact appears to be a historically and technologically valid argument, given the technical and historical conditions to p2p. File-sharing is native to the Internet, and regulation of it hard to impose by way of external policing. Regarding p2p-based file-sharing as being regulated by means of the polity, most of the respondents opposed this, due to the sheer technical impossibility and the potential authoritarianism they saw as inherent in such policing.

Having noted both this technological determinism and the abovementioned individual, autonomist imperative, yet one more unifying characteristic of the file-sharer discourse emerges in the face of the overarching 'copyfight'. This is the clearly opposite *approach towards cultural 'content'* that file-sharers take, compared to the copyright industry. The respondents' own valuation of content was primarily derived from the possibilities of autonomously controlling it, as a user; freely copying it, backing it up, disposing of it, without restrictions. Moreover, the *variability* of content enabled by file-sharing was clearly embraced.

All of the abovementioned affordances (individual utility, relative anonymity and autonomy) are nevertheless directly facilitated by these networks being collective, aggregated and emphatically *infrastructural entities*. As with Swedish sociality on a more general level, where individual utility is generated through a reciprocity between

the state apparatus and the individual, here the respondents' accounts testified that autonomy can only be facilitated through a certain dependence on larger, structural entities (be they largely technological or not). File-sharing is thus caught in a field riddled with material and human agencies "pulling" in certain directions, and intersected by fracturing, atomising tendencies as well as by unifying, centripetal ones. The concluding chapter will turn to a more syncretic analysis of these, in addition to outlining the potentially agonistic propensities in systems which demand user literacy and devotion.

The respondents did not see the phenomenon as an entirely collective effort. Especially so, if taking into account (1) the strong awareness among these respondents of the individual gratification involved, and (2) the fact that many everyday users seem to reveal typical traits of what used to be referred to as 'leeching' (that is, putting the individual acquisition of files before the benefit of the overall collective). This is also mirrored in the phrase 'sharing is caring'; a highly normative statement that urges online participants to share their newly acquired content, that is, not to 'leech.' Its popularity indicates that there is a need for such a plea: if the sharing was truly and unambiguously seen as beneficial to society, there would be no need for such a slogan. The information infrastructure presented by p2p lends itself to distribution patterns that become (seemingly) altruistic, even though the motivation of the individual peers might not always be. 'Horizontality is not altruism. But it makes effective information infrastructures. Information does not want to be anything' (Fleischer 2007a). What is central is the *expedient character of this infrastructure*, potentially lending itself to meaningful outcomes (truly open, accessible, decentralised, user-generated archives as a form of reachable utopia) as well as obvious abuses, such as the prevalence of deliberately corrupt and morally questionable files; of 'pirate copying' for monetary gain; and of deliberately abusive 'leeching' practices. Note, moreover, that some of these outcomes only appear to be deliberate if seen through the lens of an exclusively

individual agency or through the lens of a sociology exclusively 'of the social' – that is, a sociology which does not include also the nonhuman (Latour 2005). If including also the congealed, prescriptive, intended uses that are embedded in its infrastructures, this has to be considered alongside the widespread conviction that the side effects of file-sharing are not necessarily "bad". Moreover, its ubiquity and efficiency means that it has become a primary means of cultural acquisition. As such a means, it might be perceived as opportunist – and when this opportunism is thought *not* to have any clearly visible victims, it becomes seen as justified.

Chapter 7: Conclusion

7.1. Summary

The present infrastructures for unrestricted file-sharing allow for high degrees of comfortable acquisition and consumption, by way of downloading a product instead of potentially buying it. As the 'gift economies' of the Internet seem to involve significant degrees of individual calculation and egoism, the collective benevolence appears to be a consequence of planned and constantly managed infrastructures which are designed to harness this egoism. P2p is in this sense not entirely altruistic. This harnessing of the unrecognised labour of decentralised users (by a code- or protocol-based logic) makes new media institutions possible, and the main "work" that begets uploading, seeding and further sharing thus appears to be embedded in the protocols and architectures, rather than in deliberate, conscious human action. The accumulation is *non-obvious*, *'quasi-invisible'* and the *intention* behind it cannot be placed with one actor alone. Political force and expedience is in this sense built up "behind" the interfaces of these user-led applications, implying that users need not necessarily be expected to be individually motivated by deliberate *activist* intent.

Yet, when the norm is to file-share, the alternatives seem to be rarely considered. The respondent accounts contained a high degree of pragmatism and acknowledgement that society would have to adapt to this now irreversible, underlying material configuration. As the technical protocols that enable digital networking are so open and mutable, while the Internet at large is based on file-sharing and a p2p diagram, the file-sharers' own argument of the "naturalness" and "unstoppable" nature of the phenomenon does carry considerable weight. Since the overall agency is so highly distributed, no single agent can be said to have the entire responsibility. Regulation is a central issue, and there is a tension between regulation "from outside" and voluntary, discrete self-regulation. Moreover, as Lessig (1999) and Galloway (2004) have shown, the infrastructure itself comprises protocol-based control. The

notion that Internet functionality and materiality propels itself by a logic of emergent accumulation and aggregation appears to have prompted a *laissez-faire* approach to regulation among the respondents. They saw the idea of the whole phenomenon being externally regulated as a technical impossibility and warned of the potential authoritarianism inherent in such policing. The fact that no direct causal link between file-sharing and declining CD sales can be proved, and that the movie industry still appears to be in healthy shape despite widespread sharing was seized upon by the file-sharers as a further argument against regulation.

Have people stopped sharing, after having seen the various legal clampdowns as warnings? My account explores the file-sharer argumentation as it was formulated after 2005 (when the law was changed to make also downloading illegal) and before 2009, when further legislation was implemented in Sweden. There were some indications that the file-sharer argumentation turned upon the 2005 change in legal ramifications, as some respondents expressed caution. However, a migratory behaviour is commonplace, where users shift to newer protocols as the older ones get to be seen as no longer adequate, while the notion of being "hidden in the crowd" makes for a view among the file-sharers themselves that the activity is relatively risk-free. Moreover, virtually no cases were brought forward in Sweden during that period against private, file-sharing individuals, while overall p2p traffic remained strong; it even increased significantly. There were indications of a temporary drop in p2p traffic after the implementation of IPRED in April 2009, but the overall data levels have now rebounded and surpassed the previous year-on-year levels.

Nevertheless, the legal climate appears to have prompted a high degree of reflexivity among the file-sharers. It could be argued that contemporary secular, developed societies like Sweden foster such strong reflexivity to begin with. The fact that the file-sharing in question is, in most instances, illegal appears to force the individual actors to invoke principles of justification, either by way of outspoken

demands for justice or of underlying rationalisations for their habits, given the present controversy. This discursive invocation appears to be charged with attempts to objectify it, to bequeath it with validity, by way of referring to other factors: not only the ontological stability and prescriptive agency offered by the evident popularity and ubiquity of the infrastructures. By invoking the history and perceived 'nature' of the Internet, a generality is offered which lends weight, and provides stable and coherent coordinates for the justification, 'subject to general assessment' (Boltanski & Thévenot 2006: 12). But the prescriptive material framework alone does not fully justify the sharing. More universalising regimes of justification were invoked, like the idea of progressive adoption of the (functionally) most optimal technologies, and the primacy of individual latitude over authoritarian order. The respondents primarily justified their sharing by holding that it would have, on the whole, a positive impact on society. The impact of file-sharing was only seen as negative for certain industries, or even positive on the whole.

The notion that intangibles can be priced as tangibles was seen as a myth (Yar 2008), as the respondents valued data files rather differently than tangible artefacts. Digital files were appreciated primarily as 'previews' with operational qualities that are in some aspects better (not copy protected or embedded in menu systems, more flexible, no ads, not susceptible to be lost or destroyed) and in some aspects worse (lower technical quality/resolution, less tactile) than tangible artefacts.

It has been shown that the propensity for adventurous use of Internet technologies is not exclusive to youth or gender, but can be more effectively understood as a cultural stance dependent on personal inclination. This was seen in the respondents' preference for individualist explanation models, emphasising individual *ability* above any particular other demographic factor. In Sweden, this has been facilitated by high levels of computer literacy and access to broadband, which might hide or naturalise the barriers of entry involved (such as knowledge, skill, and material

ability). What is also required is a strong personal inclination to individually govern one's own media consumption, to discover new media texts and explore new technologies – in this sense, a highly autonomous media consumption.

There is a paradox here, in that this autonomy relies on aggregated, technical infrastructures which ultimately come to constitute collective formations or even institutions in their own right (albeit in novel forms). The aggregated character of such huge collectives seems to be instrumental for individual autonomy in that they become large enough to do away with personal (friendly or familial) bonds. The collectivity of these p2p networks thus becomes highly *gestellschaftlich*, and therefore both rational and effective, operating by a logic of stranger-to-stranger exchange, which is non-overseeable (at least beyond a set horizon) while governed by a protocol logic (which, to an extent, makes it predictable).

The required computer literacy, knowledge and skill were repeatedly linked to a dimension of anonymity. Many users benefit from the covert, anonymous nature of the current p2p systems. While this is partially liberating, allowing for a range of possible uses, it also allows morally questionable uses: hacking, cracking, dispersal of questionable material or of malicious content such as viruses or corrupt files. Some of this appears to be of concern for everyone involved, like the sharing of morally ambiguous content and the 'leeching' where a lot is downloaded, but very little is returned. While p2p was on the whole described as a form of 'mutual exploitation' – a kind of benevolent, collective maximisation of the resources available – these lamentable forms of behaviour would be examples of its occasional harmful dimensions.

This connects to some common *modes of usage* perceived by the respondents, such as 'leeching' and 'data hoarding'. The respondents tended not to entirely characterise themselves by such modes, but by the ability to shift between them. Simultaneously, any such mode can be understood as an 'actant'. In order to acquire,

one has to participate – that is to (literally) become a file-sharer. The formation of such actants, and how they are enabled *not by human agency alone*, is co-constitutive of an account of file-sharing as ontopolitical (Stengers 1997; Mol 1999) or material-semiotic (Haraway 2004). These modes of agency, that are thought to make the whole phenomenon "work," are invoked by proponents and opponents of the phenomenon alike.

The legislators seem to think that if only the initial dispersion that 'ripping' and 'seeding' gives rise to was stopped (in effect, "going after the network facilitators"), the phenomenon would be halted. What they risk missing, however, is that such modes of usage are not attributable to human agents alone, as if their entire identities would be defined by such character images. These functions are modes of usage that individual users fall into and out of, and they are as much a result of technical protocol and network architecture as they are of human, conscious behaviour – which makes the equation of such actants with actual human beings a naïve standpoint. The 'ripper', 'seeder', 'moderator' or indeed 'file-sharer' is not a human being (an "actor" in the traditional sense) but a functional operator, a systemic property, a role that human beings occasionally embody. The idea of Internet activism can be read in the same way. While "taking on" this role requires active choice, it is not necessarily a conscious effort, and as a computer user regularly occupies several different roles while using a networked computer, it is arguable whether all such 'actant' modes are even optional.

Similarly, file-sharing idealists seem to think that if 'leeching' and 'profiting' was stopped and 'hoarding' could be turned into 'contributing' and 'activism,' the networks would be more efficient and the world would be a better place. But similarly, these modes are not coterminous with entire user identities, and some modes are a result of network architecture where seemingly destructive, egoist individual user behaviour is actually harnessed into something that contributes to network efficacy and resilience, as in the case of the BitTorrent protocol. Consequently, 'leeching' behaviour (that is,

putting the individual acquisition of files before the benefit of the overall collective) was not entirely frowned upon by the respondents. Moreover, some actants, such as that signified by the 'pirate' label, are not one-dimensional; they contain both dedicated criminal intent, personal gain/profiteering, and hedonist exploration, transgression and activism. Hence the controversy and confusion of the term 'piracy' and the rhetorical thrust of those latter, autonomist and counter-cultural implications.

As file-sharing so clearly thrives on opportunism, individual utility maximisation and gratification, the alleged dichotomy between non-commercial and corporate interests that the 'copyfight' implies is in fact contested, as actors like TPB appears to be Internet entrepreneurs as well as subversives. While such services do ease access to technologies that were once at the behest of "geeks" only, this (semi)institutionalisation is not necessarily dependent on altruism or democratic agendas alone. Moreover, as "heavy" file-sharers tend to be similarly "heavy" media consumers or fans in general, file-sharing becomes a prime example of how customers rework core premises of the means of distribution in order to accommodate their own interests (Jenkins 2006). It also means that the opportunism and convenience which the phenomenon thrives upon is not necessarily antithetical to contemporary, mainstream capitalism, and can in fact be accommodated within it.

The respondent accounts occasionally associated this hedonism, exploration of the unknown, and subcultural experimentation with personal freedom – but only so in the safe, couched environment of the home, where no public taboos are broken and few outward risks are taken. The mythical 'pirate' ethos has some core propensities that are explorative, transgressive and thus extra-ordinary. Although partially confirming this, the respondents tended to distance themselves from this 'pirate' ethos to a significant extent. Although 'piracy' in their view connoted an ideal of exploration, transgression, adventure, and risk, it was primarily associated with exploitation for direct commercial gain, criminality and societal harm.

The ubiquitous nature of unrestricted file-sharing has become more apparent in Swedish society during the time period of the conception of this thesis (2005—2009). By the time the question of its illegality and the notion of a 'copyfight' reached the traditional news media, it was already such a widely established phenomenon that it was never framed in the way the early American debate framed it (where it was likened to terrorism and an alien assault on existing commercial structures). In Sweden, the question of how to rid society of file-sharing appears to have been quickly replaced by the more progressive question of how to accommodate it within contemporary capitalism.

This has also been due to the strong national presence of formations like Piratbyrån, TPB and similarly influential bloggers and commentators, forming a publicly visible presence as inevitable referents in the discursive 'copyfight'. In their pragmatic and actively supportive role, they can be regarded as strategic sovereigns, helping to formulate the phenomenon of p2p-based file-sharing as one of condition/ norm rather than reaction/deviation, merely by ontologically affirming it, pointing to it as an ongoing *social fact*. But they also perform deliberate campaign work. The Pirate Bay representatives especially have been forced into direct engagement with the sphere of the polity, due to the lawsuit against them. The ways in which these activists tend to speak for the total population of users are, however, problematic – as was confirmed by the respondents, in so far as they might give the impression that activism is more crucial to the phenomenon than it actually is.

Although user agency can be conceived of as co-option or unpaid employment in the service of an expanding circulation of content, the discursive defence of the phenomenon that the 'pirate' activists are positioned into cloaks it in a language that might make it look like "resistance" to an alleged enemy. To tie back to the activist bias of the 'copyleft,' the question arises whether this discourse is wholly representative of the user population at large.

7.2. Evaluation

The purpose of the thesis was to make a discourse analysis of the justificatory arguments used by Swedish file-sharers, and the outcome of this provides a multifaceted way of conceptualising the users' own justifications for their action, as the discourses invoke numerous heterogeneous entities, drawing on several ontopolitically unsettled sites of engagement, striking alliances that each need to be assessed for validity and veracity. An overall aim was to identify equitable ways to conceptualise the phenomenon, by heeding the specificity of a locally situated account. The outcomes – the identified file-sharer tropes and justifications, and the way these invoke grander structures and concepts – should have wide usefulness for further exploration in subsequent research. The notions formulated here can for example be tested statistically, or in various other geographical settings.

The conception of the thesis spanned from my initial work on the subject in 2003 (documented in my MA dissertation), leading to 2005 when work began on this thesis. My main fieldwork took place in 2006, around the time of crackdown on the Pirate Bay servers by Swedish police. The subsequent trial which followed, in the spring of 2009, was useful as it helped generate a lot of debate, both before and after the Stockholm district court's verdict – which has been appealed, most likely leading to further debate and a growing insight that 'piracy' is a cultural condition, rather than a passing novelty. At the same time, many of the activists under the 'pirate' banner had begun shifting their attention to wider issues of supervision, liberty and privacy.

The Pirate Bay trial is useful as it constitutes a public 'affair' in the sense of Boltanski & Thévenot (2006): a case where a group of people are constituted as the object of an accusation and subject to legal charges. A public affair tends to designate the actors involved as representatives or potential spokespersons for the collective which they are thought to represent . Here, in order to act appropriately, the actors can be present only in the capacity of belonging to collectivities, or as actors fitting the idealised role as actants. Several leads that have been taken up in this thesis were

observed in the debate after this trial, which will be used here as a way to connect my own findings with a possible further debate, in the academy and outside of it.

As for the overarching question, *How do Swedish file-sharers justify their practice?* they do so by way of striking alliances with various collective entities;

I. **the existing Internet infrastructure** (communication protocols like TCP/IP, open standards and formats) ensuring that high degrees of freedom, heterogeneity, and low universal oversight cannot be suppressed without severe curtailments of civil liberties;
II. **the seemingly undiminished audience interest in cultural products**, where consumption (except for CD sales) has remained high throughout the surveyed period and little indicates that other sectors than the music one suffer in artistic output;
III. **the veritable 'body politick' of the p2p network**, which is unique in that it is simultaneously an aggregate of topographic machine nodes and of vaguely corresponding human beings, forming something which in some respondents' eyes resembles a 'people's movement,' a nebulous mass, that has occasional spokespersons and 'strategic sovereigns' in the form of hubs like TPB.

This latter invocation (III) is casually summarised in forums or on message boards, in captions like 'one million file-sharers can't be wrong,' in effect constituting a nationalist mode of discourse. Sweden is a unique example in that its political culture arguably exacerbates the dialectic between individual (molecular) agency and the scope of action, and legitimacy provided by the overall (molar) totality in which the individual is located. The contemporary Swedish approach to sociality outlined in chapter 5 has two core premises: (a) that individual freedom is made possible by a strong, efficient overall universal collectivity, and (b) that individuals are determined to maximise personal gratification/convenience as well as (societal and personal) efficiency. Interestingly,

these tendencies are not only found in Swedish sociality and political organisation, but are technically mediated by p2p.

As all three totalities above are regenerated by the aggregation of individual p2p nodes, one could claim that these grander totalities are of behest of the individual sharers. But as the nodes are so numerous, the networks so vast and impossible for sole individuals to effectively alter, I conclude that individual responsibility is very marginal in relation to the overall aggregate. Hence, all three entities come to act as pre-existing, conditional, to some degree prescriptive "backdrops" to everyday life.

The respondents did not formulate their behaviour in terms of 'resistance,' but they indicated that the activity bequeaths them with an increased scope for action and discernment, and hence self-affirmation. Whether potentially negative bi-effects of aggregated file-sharing might lead to a deterioration of professionalised cultural production – effectively lessening this apparent empowerment of the audience – is too early to say.

Here follows an outline of further achievements in relation to aims, and an indication of future research directions.

7.2.1. Technological agency

> The more connected an actant is, the more real; the less connected, the less real. (Harman 2009: 19)

The notion of 'universalising agency' was, among the respondents, shown to be synonymous with the notion that the Internet would *have* a form of agency – a statement which is probably stems from the colloquial meaning of the term 'agency' (as in singular subjects 'having agency') and thus should be questioned. If there is a technological agency pertaining to unrestricted file-sharing over the Internet, this agency does not reside in one locus only, or as a dormant property of any one actor, but *arises in discrete instances of human-machine interaction*. Yet, the fieldwork showed that local users still tend to say that there "are" agencies that arise on the macro level.

As the individual interactions are so numerous, probably the aggregated *appearance* of them gains a certain normative weight, as when individual users witness traces of aggregated actions (such as the numeric count of number of downloads for certain films or albums) and take that as evidence for other users acting in a certain way, and/or being made to act in a certain way.

Nevertheless, this aggregated entity should not be referred to as a form of agency. It is more like a trace or an indication of a massive multitude of agency "out there". The Internet, as an aggregate or collective entity, does not *force* people to act in a one-to-one fashion. Rather, one of its bi-effects is that makes for traceable evidence of collectives of other people acting in certain ways, something which would, in turn, inspire users to act and legitimise certain actions. This legitimising role works by elision and perspective: the subject chooses to see certain aspects of the phenomenon, which can be invoked in the overall legitimisation of one's own actions. This applies to both sides of the alleged 'copyfight'. But it is more than mere discourse: the file-sharers' rhetoric constitutes an *alliance* with the TCP/IP protocol and the p2p protocols layered on top of it. For example, those who defend unregulated file-sharing use arguments which invoke the implausibility of a total regulation of the Internet; an invocation which is, to a large extent, valid and equitable given the current actual configurations of hardware and software.

My perspective in this thesis could thus be summarised as one that pays attention to the conscious uses, habits, opinions and intentions of the human while noting, nevertheless, that the process of justification always takes place in an embedded setting. In the case of file-sharing, I would argue that the most vital of these conditions are technical, economical, and – in the case of Sweden – national (as that is the arguably most determining linguistic and geographic condition here). As for demographic factors of gender, education and income, the evidence so far leads me to believe that these are not as determining, in terms of the justification of the

phenomenon as a whole. In Antoni (2007), for example, where age and access to technology were found to be more determining for attitudes to file-sharing than education and income *per se*. Regarding age, my fieldwork gave me reason to believe that this factor should be read more as *exposure to technology* – that is, as an indicator of knowledgeability, access and familiarity – than as a predetermining factor *per se*.

7.2.2. The file-sharer subject: knowledge, skill and reflexivity reigning supreme

> The spectator made way for the actor, *who sought himself in others.*
>
> (Solanas & Getino 1969: 54)

My thesis has investigated how the file-sharer discourses at hand (locally and in the public debate) invoke larger entities such as economic and technical functions, and how individual morality and justification turns on this invocation. I have established two modes of epistemology that should not be confused: (1) the *empirical making of truth claims* that the respondents do, which in itself entails an act of translation, and (2) the *epistemology involved in assessing these truth claims* that not only I as a researcher engage with, but also the respondents themselves, when they reflexively assess their own initial truth claims. This also entails an act of translation. Following Latour, the respondents in (1) invoke the nonhuman elements and forces enabling them to do what they do. The respondents formulate an ontology. The second mode of epistemology (2) is more complex. It entails not only that first-degree translation but a second-degree one, comprising a meta-account of what the respondents say in (1) while continuing to account for the (largely nonhuman) forces, systems, assemblages, and material factors, in order to assess the veracity and validity of (1). It is an assessment of the formulated ontology, made by the researcher – but also by the respondents, every time they reflexively question their own arguments. Although the assessment in (2) is also a situated one, subject to translation, it has to draw on a more stringent definition of what counts as valid and true. The invocation to nonhuman factors in (2) would thus

rely on a higher degree of reliability than (1); this is what lends the academic account more weight, as would the more self-reflexive considerations among the respondents.

It has been shown that the p2p systems facilitate great user emancipation, which however comes at an expense: those who are more skilled and computer literate not only benefit from being able to make better use of their Internet connection, they also reflexively see themselves as better placed to understand the technology in question – and by extension, the direction and scope of societal development. This might be primarily attributable to pre-existing differences in knowledge, skill and material accessibility in society which might however, be reinforced by current technology. This is arguably less obvious in Sweden, where levels of Internet and computer literacy are relatively high and evenly distributed in society.

At the same time, the latent openness of these systems gives the users the ability to open up 'black boxes' and make the technology serve their own interests, leading to 'disaggregation' of the Internet, breaking with the outside view of it as a monolithic, unambiguous medium. There was a notion among the respondents of an individual responsibility to actively learn and explore, in order to gain from new technology, giving great credence to individual, active media use, presupposing a subject which is both opportunist and highly reflexive.

This reflexivity extends also to the increased public knowledge about issues of copyright and, more importantly, a seemingly increased awareness also of the conditions for cultural production, distribution and consumption. The public debate has entailed not only copyright critique, but the etymology of terms like 'pirate', the history of copyright, and the ontological properties of computer files. Among the respondents, these topics were not always taken as analytical statements, but just as often as questions and aspirations to learn more. The public debate has also touched upon the disjuncture that file-sharing has created between retaining authorial rights

and retaining profit from these rights. To an increased extent, this appears to be a current societal problem in Sweden and elsewhere.

While file-sharing is linked with an awareness of conditions of distribution and production, a further degree of self-reflexivity was apparent, namely that the individual actors were prompted to think of themselves as exactly that: as actors, playing a part in this vast concoction of agency. This might not be wholly enlightening or liberating, as seeing oneself as an actor can also entail a de-personalisation or a lessening of one's own self-importance: according to ANT, actors are defined by how they act and are acted upon in a network of practices and are thus defined relationally, even functionally, as arguments or operators. This form of self-reflection might also beget anonymity, as one realises one is merely one of those numerical entries on a list of current 'seeders,' 'leechers' or 'active peers'.

My thesis has shown how users act and make appropriations that differ from those prescribed and/or sanctioned by the polity, but that are in accordance with the prescription effected by the sphere of file-sharing itself. In the absence of outright conflict, this does not predispose a dedicated activist stance among these individuals – but once conflict is outlined, the agencies involved and the (believed) preconditions for these agencies are laid bare. A public 'affair' arises (according to Boltanski & Thévenot, a controversy or discrepancy about agency) when citizens become affected, or appointed as either victims or as perpetrators, and they are forced to defend their action and motivation.

In that sense, my fieldwork was intended as an intervention. There were several stipulations to the fieldwork that had to be considered, namely the already-established notion of a 'copyfight' and how both researcher and interviewees had to consider that as a starting point for discussion. But as chapter 2 debunked much of the over-emphasis on 'activism' inherent in this dichotomy, I was able to mirror this in the recognition that potential partiality had to be probed, and that subjective political engagement

among file-sharers is less significant than the weight of their material alliance with infrastructure. The effective harnessing of efficacy makes traditional notions of politicisation outmoded, as occasional, discrete bursts of activism are enough to build systems and, once they are in place, users need not be altruistic but can act out of self-interest, while still benefiting the overall system.

There is an intended use in these networks, premised on an image of the individual as active and opportunistic. The individual uses do not just accumulate to literally *become* the system itself, but their rhetorical invocation of this accumulated use is a form of acceptance of it, as a condition inherent in the current Internet infrastructure. Thus it is interpreted as a norm. "We" who file-share know that "we" have the technology on our side and that the sensible thing is not to curtail "our" freedom from outside. The respondents did not even appear to see this as political, until they were further questioned about it. Following Feenberg (1999), a technocratic system masks its political dimension by assigning roles and functions out of apparent technical rationality. By the second degree of reflexivity, outlined above, users would be thought to be aware of this (semi-institutional) weight, the latent normativity that the mass of aggregated individual uses entails, and how potential societal side-effects might arise that are not intended by any one user alone. Thus, users would be aware of how they might get "blinded" by their own efficacy and success; they become aware of the latent technocracy in their midst, so to speak. Arguably, this becomes a central constituent in a potential bottom-up morality of file-sharing, necessary for any form of self-regulation.

7.2.4. The deferral of liability: Who is responsible?

If the BitTorrent protocol is taken as a hybrid, or 'quasi-object' (Latour 1993) – never truly-machinic or truly-human – the invocations of this technology can be seen to pull in different directions, depending on the purpose of the invocation. One can emphasise

(1) *human agency*, or (2) *machinic*; and, similarly, (a) *the nodes where action is channelled*, or (b) *the overall aggregation of agency*. In pragmatic terms, it appears as if this choice of focus is more due to the practical possibility of assigning human intent than anything else. The legal authorities clamp down on hubs like TPB, as these are the only accessible and visible targets where human action can be clamped down on. The individual users cannot, in practice, be reached by the arm of the law, and tend to only be invoked rhetorically as a collective, as in the invocation of "those file-sharers". Despite the fact that the anti-file-sharing agents would place the agency solely with the file-sharers themselves – as ontologically separate and thus morally accountable human agents – they cannot practically penalise all these individuals, and the only way of being sure to reach them all is rhetorically. Following the 'actant' reasoning above, when invoked as actants, individual users do not necessarily risk being literally disentagled as separate actors.

The legal wrangle over TPB came to confirm this; the spontaneous, aggregated agency propelling file-sharing here clashed with the proponents of the view that everything that happens has to be commanded by someone. The lawyers were either mystified or unfazed by the lack of hierarchical chain of command within the participatory 'pirate' culture, and showed little understanding of how such forms of organisation actually work (Falkvinge 2009; Kullenberg 2009). My respondents shared a standpoint with the Pirate Bay defendants, where the technicist reasoning of whether things *work* or not takes primacy over contractual rights. As with Piratbyrån, this indicates a realist, non-metaphysical orientation, based on observations of material reality instead of idealist duty/morality.

As several respondents invoked the 'pyramid of piracy,' an uncritical reflection would be to take that as an indication of its existence. But following the epistemology outlined in the thesis, it would be more reasonable to conclude that this perceived hierarchy exists not by virtue of preconfigured roles, but rather as a re-enacted

pyramid-like structure where certain actants *occasionally* occupy positions which enable them to more quickly acquire new material and re-distribute it to the wider network. It appears to be more of an *ad hoc* consequence of differing temporal access than a durable, spatial structure that can be easily contained.

As "dubious" activities do appear in some of these networks, I initially thought that the users would have objections towards such aspects of the system, despite still using it. This was countered by several respondents, as they felt that all systems contain such negative aspects and that those aspects would not taint the system as a whole. Despite the copyright industry's sweeping dismissal of the entire phenomenon, the user discourse wholly ignores the alleged negative externalities claimed by this industry (*"CD sales are going down!"*) and the potential accusations against various p2p networks. (*"The Pirate Bay supports the porn industry!"*; *"Gnutella spreads terrorist propaganda!"*) Instead, the respondent discourse made reference to a holistic perspective where "the good of society" as a whole is invoked. There is a growing argument that artists would profit more from gigs, merchandise, and by contracting their music for commercials and films, than from record sales. This argument gained ground in Britain around 2008 (appearing in national newspapers such as The Guardian). In Sweden, it is linked to the welfare model where benefits and grants boost cultural productivity regardless of its potential commercial success. Referring to this could work as an assertion of 'positive externalities' to file-sharing which is (a) hard to prove by conventional econometric research (which tends to look at particular sectors or markets), and (b) can be accused as a discursive "easy way out," where all file-sharing is legitimised and where cultural producers who do not adapt to this new world order would have no economic justification.

7.2.5. Different forms of determinism, different (incommensurable?) regimes of justification

The respondents approached technology with relative confidence. They seemed to view technology and its potentials as inherently neutral in moral terms, almost as a "mute force". I would interpreted this as a form of relativism, or historical determinism, in that this alleged built-in "force" of technology would be assumed to have primacy over any prior or subsequent world order, regardless of the specific problems particular to the new technology. When some respondents likened the Internet to a speeding train, which the polity would have to "catch up" with, I realised that they were not really talking about future developments or digital technology in general, but were referring to the 'brittleness,' the 'lock-in' effects of the already-built Internet (Lanier 2006; 2010); a high degree of individual freedom and anonymity already inherent in the TCP/IP protocol, which p2p applications make use of. Meanwhile, the 'content industry' position would also have a determinist charge, in that it posits the rules and regulations of the established polity as neutral, and thus ideally transferable to the techno-economic realm of the Internet. The question, once again, becomes one of agreeing on which mode of circulation and technological agency would be the dominant one, the strategically superior one to which the other regime would have to adapt.

The conclusion would seem to be that parts of the respondents' devout *laissez-faire* argumentation are attributable to (1) a deliberate distancing from the industry's mode of determinism, (2) a revelatory and neophiliac embrace of the perceived possibilities of a new technology, and (3) an opportunist reasoning where the current benefits to the media consumer are clearer and easier to prove than the benefits to the producer. The seemingly pragmatic arguments of the file-sharers might only be so from the viewpoint of citizens and consumers, as a regime that entirely allows the free exchange of cultural content directly benefits their interests, while the benefits to the rest of society would be harder to prove. The novel potential for circulation, marketing and reimbursement in these new technologies might fall short if it is discovered – as Enzensberger argued (2003) – that the means for marketing and attention-

procurement are lacking. This would be the case in some instances, if the economic muscle that the record companies used to give artists is not there anymore. The notion of empowerment for cultural consumers, seen in file-sharing, might turn out to be a misleading construct when extended to cultural producers, who currently are facing the risk of being trapped in an amateur mode of production, distribution and marketing when the copyright industry is lacking the ability and/or interest to invest in new talent. The respondents emphasised alternative values like 'attention value', 'respect' and 'authenticity' – but whether these can be transformed into real monetary gain on behalf of cultural producers remains to be seen, especially in regard to cultural producers who are not already professionally established.

Unrestricted sharing has the potential to beget increased commercial plurality, as the files appear to often act as *previews* to potential purchases. The effect on sales need not be negative by any "iron law," and it need not entail a unilinear future development of media distribution. By that token, the *myth of harm* (Yar 2008), familiar to the entire copyright industry, is as teleological – and so far verifiable only with respect to one media form, namely the compact disc.

The issue, for those concerned with the potential harmful effects of widespread, unregulated sharing, would be to encourage norms and habits which take this potential benevolence into consideration, and to actively work against the current nihilism that seems to be a common reaction to the draconian measures of the copyright industry and legal polity. The phrase 'sharing is caring' thus takes on a deeper meaning than sheer sloganeering.

Acts of justification primarily serve as *ex post facto* explanations of what has already happened or what one has already done. In utilising Boltanski & Thévenot's notion of 'regimes of justification,' one can note how this explanation falls into different categories. The invocation of *technological unstoppability* could, for example, be described as belonging to an "engineer style" of reasoning, while the invocation of

privacy and *freedom of speech* would be a "journalist" or "civil liberties" style. However, as with the idealised 'modes of usage' above, no one respondent could be entirely "summarised" by any one of these styles, which is also in concordance with Boltanski & Thévenot's findings (2006) that any account would incorporate several such partially overlapping styles.

Further, each regime invokes different kinds of entitites. They belong to different categories and modes of thinking, each with their internal normative rationale, seemingly incommensurable. Several strands can be elicited, corresponding to the alliances above:

i. **The utilitarian/pragmatic appropriation** of impossibility of stopping the phenomenon — relating to *alliance I, the existing Internet infrastructure.*
ii. **The civil rights appropriation** that totalitarian measures are required to effectively stop the phenomenon — also relating to *alliance I, the existing Internet infrastructure.*
iii. **The unionist appropriation** that professional cultural producers need not be harmed by the phenomenon — relating to *alliance II, the seemingly undiminished audiences of cultural products* and arguably the weakest regime, among file-sharers but also in terms of probability and validity (as this is hard to prove, given the clear problems in the area of CD sales, the first sector to be exposed to file-sharing).
iv. **The collectivist appropriation** that culture should be accessible to everyone (seeing communication as a 'commons' or shared resource rather than as discrete units of transmissive 'content') — relating to *alliance III, the 'body politick'/ 'people's movement'.*
v. **The macro-economic appropriation** of the alleged "overall good" for society underpins each of these regimes; a value that is arguably extremely strong in Sweden, given the country's particular social order (chapter 5).

7.2.6. Similarities, shared notions, utopias and possible further studies

Yar's notion that the copyright industry would strive to maintain a *myth of equivalence between tangibles and intangibles* was found to be largely outmoded, as even representatives of the record industry now admit to seeing the promotional potentials (at least when it comes to already-established artists) as well as the disposable nature of digital files (see chapter 4). This myth thus appears to have been replaced by a notion of *disparity* between tangibles and intangibles, shared by proponents and opponents of unregulated file-sharing alike.

Moreover, both file-sharers and copyright industry representatives seem to presume that there is a *reliance on individual gratification* and *ease of access* behind user rationales. Chapter 5 established the society-wide recognition, shared by most Western countries, of an opportunist individual benefiting from the aggregated collective labour of the overall system. As with 'Web 2.0,' much of the operability of p2p is made possible by aggregating collective, "invisible" labour. It seems that different sectors of the economy have learned to appropriate this form of labour to different extents, and that the entertainment sector is rapidly learning from the IT and communications sectors in inviting much larger degrees of participatory user behaviour, as has been argued by for example Jenkins (2006).

Jenkins advocates a differentiation between *interactivity* and *participation* – the former being a technological property, pre-structured by the designer, and the latter being largely socio-cultural. This conceptualisation might be one that reaffirms the problematic gap between (allegedly nonhuman) technology and (human) use, but gives a clue to that brief historiography of p2p that was discussed in chapter 4: how a technology with high degrees of interactivity (the Internet) came to exert its logic (digitisation) also on older media technologies (films and music) and thus remediate both the old and the new. However, he notes that participation is not an innate property of the media technology itself, but more a product of the surrounding socio-cultural context (133). This can be related to the recognition that people tend to share,

largely as part of a socio-cultural protocol (habit, custom, ideology) rather than as a direct causal outcome of the technical protocols that facilitate copying and file-sharing. This conclusion would owe more to Williams than to McLuhan.

Still, the latter, technologically determinist stance is actually the one seemingly more common among the file-sharers themselves. This could be attributed to a technicist mindset, common among computer devotees, but appears to be related also to the mode of justification that file-sharers are caught in, due to the illegality of their custom. Since sharing would otherwise appear frivolous (and perhaps merely a means for young people to consume culture for free), they rather emphasise how it is the "natural order" of the Internet, and thus an unavoidable technological condition. It is also a pedagogical trope, as if respondents were trying to explain how common and easy – in other words natural – file-sharing is for the average Internet user. Tying back to the conditional status of file-sharing to the Internet (above), it appears as if the respondents were struggling to envisage any other order, any other use of the Internet – thus formulating the issue in ways that appear technologically determinist, while not necessarily being intently so.

There is a risk that the file-sharers' embrace of the existing, relatively unregulated Internet is nothing more than a reactive, pragmatic opposition to potential closure or regulation of the Net. Paradoxically, the notion of *positive liberty* (Berlin 1969) – building autonomous, self-functioning institutions – here only becomes a means to achieve a goal more attributable to *negative liberty*; avoiding coercion and persecution and being left in peace. But underneath this, a more monumental utopianism can be traced: the dream of a universal library, a wealth of knowledge that is collectively upheld in a distributed way, by linking up our hard drives with each other. This ethos is found in an exclamation that has become common on various torrent sites: *'If we all seed just 1:1, give at least what we take, this torrent will NEVER DIE!'*. As in Ray Bradbury's *Fahrenheit 451* (2001), where each character memorises one piece of

literature as all books have been banned, the p2p network provides the ability for each citizen to keep their favourite movie or book in potential circulation. If everyone would do this, in orchestration, this would form a kind of library exceeding any other.

This idea of "culture as a human right" did appear numerous times in the fieldwork, both among respondents and in online forums and message boards. The utopian promise inherent in this notion of "free culture" is however problematised by the fact that the actual file-sharing involves large amounts of morally ambiguous material such as pornography and what might be considered 'low brow' culture (even if 'high brow' products circulate too). Hence, all the more worrying would be the insight that file-sharing is not the product of altruism alone, and that the above utopianism might actually be merely an invocation to 'political privatism' or libertarianism, in the sense that the users assert the "right" to take part in whatever media they want, whenever they want. Still, even that argument might entail a deeper, less obvious utopianism: the utopia of ultimate freedom of information, regarding both sending and receiving. Once again, these utopian promises can all be attributed to the different regimes of justification listed above. Ultimately, further work exploring the notions of morality, norm and justification is needed. As has been shown in this thesis, such work should have the further aim of exploring the utopian dimensions of the file-sharers' beliefs.

One last observation regarding utopianism is that it too needs to be historicised. I noted that some respondents seemed to have an awareness of previous utopian eras in history, and how some of these went wrong. To investigate this further was, however, outside of the scope of this thesis. Another question that could be further explored, at least as a philosophical or hypothetical undertaking, would be to ask the question of what would happen if unregulated, p2p-based file-sharing as it appears today would become allowed, as the technology has been developed almost entirely as a non-sanctioned distribution technology.

Moreover, it is a fairly non-controversial observation that heavy file-sharers are heavy consumers of culture in general. However, given the greater ability of previewing material and of acquiring more obscure content thanks to file-sharing, how have the habits and consumption patterns changed among those media consumers who routinely file-share? More detailed studies of this aspect are needed, as well as on how individual users come to question their own role, and the impact of their own actions – and what the level of awareness actually is, in different geographical/demographic settings, of the conditions for cultural production, distribution and consumption.

Further, what are the measurable economic externalities, and how large are they? As the media landscape characterised by unregulated file-sharing stabilises, what forms of comprehensive reimbursement models for the authors and cultural producers will be seen? Will there be an atrophy of tangible products or a renaissance of non-digital, non-duplicable products? It is easy to overestimate the role of digital technologies in daily life, if we for example note the resurgence of coffee houses, live events and various urban milieus in recent decades.

Also, more studies that take a localised, situated view of the Internet are needed, in order to talk about different national histories of the Internet, defined primarily by linguistic boundaries. Theses with similar focus and methodology as this one could, for example, usefully be replicated in various geographical settings, for comparative purposes.

Finally, the philosophical ramifications of 'embedded' uses, habits, intentions, and justifications is an area of investigation which is theoretically ripe but where few actual case studies are found, especially those which implement posthumanist theories in practical methodology. ANT is currently broadly connected with STS, but has the potential of being used more comprehensively, and in more interesting ways, in sociology at large and in cultural studies. The re-evaluation of both agency and subjectivity by ANT, as well as the body of feminist theory pioneered by Donna

Haraway, Karen Barad, Lucy Suchman and N. Katherine Hayles should be of direct interest for those areas of inquiry which aim to explore human uses, habits, intentions, and justifications, be it in studies of everyday consumption, new media or any form of sociology dealing with technology (in the broadest sense of this word).

Bibliography

Adar, Eytan and Huberman, Bernando (2000) "Free riding on Gnutella", technical report, Xerox PARC, August 2000 [http://www.hpl.hp.com/research/idl/papers/gnutella/gnutella.pdf, accessed 23/4 2005; alternatively also in First Monday, vol. 5 (10). http://www.firstmonday.dk/issues/issue5_10/adar/index.html, accessed 23/4 2005]

Alasuutari, Pertti (1995) *Researching Culture: Qualitative Method and Cultural Studies*. London, Thousand Oaks, CA, and New Delhi: Sage Publications

Anderson, Chris (2006) *The Long Tail: Why the Future of Business is Selling Less of More*. New York, NY: Hyperion

Andersson, Jonas (2003) "mp3: Free-for-all or members-only? Online file-sharing after Napster, an ethnographic account", MA Dissertation, London: Goldsmiths College

Andersson, Jonas (2009) "The supposed link between unrestricted file-sharing and declining CD sales" , blog posting, The Liquidculture Notebook, 24/4 2009 [http://liquidculture.wordpress.com/2009/03/04/to-speak-for-ones-own-network/]

Antoni, Rudolf (2007) "Morgondagens publik: Attityder och vanor kring film och bio på 2000-talet", research report, SOM Institute, Gothenburg University, April 2007

Appadurai, Arjun (1990) "Disjuncture and difference in the global cultural economy" in Mike Featherstone (ed.) *Global Cultures*. London, Thousand Oaks, CA, and New Delhi: Sage Publications

Apple (2007) "Apple Unveils Higher Quality DRM-Free Music on the iTunes Store: DRM-Free Songs from EMI Available on iTunes for $1.29 in May" press release, Apple Corporation, 2/4 2007 [http://www.apple.com/pr/library/2007/04/02itunes.html]

Arrington, Michael (2006) "Replacing DRM With A Music Tax Is Incredibly Stupid", TechCrunch, 19/11 2006 [http://www.techcrunch.com/2006/11/19/replacing-drm-with-a-music-tax-is-incredibly-stupid/, accessed 27/3 2007]

Atton, Chris (2004) *Alternative Internet*. Edinburgh: University Press

Barad, Karen (1996) "Meeting the Universe Halfway: Realism and Social Constructivism Without Contradiction", in Lynn Hankinson Nelson and Jack Nelson (eds.) *Feminism, Science and the Philosophy of Science*. Dordrecht: Klüwer, pp. 161—94

Barad, Karen (2007) *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham and London: Duke University Press

Barbrook, Richard (1998) "The Hi-Tech Gift Economy", First Monday, vol. 3 (12), 7 December 1998 [http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/631/552, accessed 4/4 2010]

Barbrook, Richard and Cameron, Andy (1995) "The Californian Ideology", August 1995 [http://www.alamut.com/subj/ideologies/pessimism/californideo_I.html, accessed 29/11 2007. Alternatively, see http://www.hrc.wmin.ac.uk/theory-californianideology-main.html for a range of comments and rebuttals]

Barlow, John Perry (1996) "A Declaration of the Independence of Cyberspace", 8/2 1996 [http://homes.eff.org/~barlow/Declaration-Final.html, accessed 25/1 2008]

Barthes, Roland (1977) *Image, Music, Text*. London: Fontana.

Bauwens, Michel (2002) "Peer to peer: from technology to politics to a new civilisation?", July 2002 [http://docs.google.com/View?docid=ajkpjkn5qh5j_427ftwgvh, accessed 29/1 2008]

Bazancir, Star and Carnö, Tim (2004) "Fildelning bortom rätt och fel: En studie om fildelning och filbytare", Institutionen för kommunikation, Teknik & Design, Södertörns högskola
BBC (2005) "File-sharers move from BitTorrent", BBC News 30/8 2005 [http://news.bbc.co.uk/1/hi/technology/4196642.stm, accessed 11/3 2007]
BBC (2006a) "Raids close file-sharing server", BBC News 23/2 2006 [http://news.bbc.co.uk/1/hi/technology/4743052.stm, accessed 7/3 2007]
BBC (2006b) "File-sharers face legal onslaught", BBC News 4/4 2006 [http://news.bbc.co.uk/1/hi/technology/4875142.stm, accessed 9/7 2007]
BBC (2006c) "Police act on German file-sharing", BBC News 23/5 2006 [http://news.bbc.co.uk/1/hi/entertainment/5009224.stm, accessed 7/3 2007]
Beck, Ulrich (1992 [1986], translated by Mark Ritter) *Risk Society – Towards a New Modernity*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Beck, Ulrich (1994; ed.) *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order*. Cambridge: Polity Press
Beck, Ulrich and Beck-Gernsheim, Elisabeth (2002) *Individualization: Institutionalized Individualism and its Social and Political Consequences*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Bell, Daniel (1976a) *The Coming of Post-Industrial Society: A Venture in Social Forecasting*. New York, NY: Basic Books
Bell, Daniel (1976b) *The Cultural Contradictions of Capitalism*. London: Heinemann
Benkler, Yochai (2006) *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven and London: Yale University Press [available as pdf from http://www.benkler.org/]
Berggren, Henrik and Trägårdh, Lars (2006) *Är svensken människa? Gemenskap och oberoende i det moderna Sverige*. Stockholm: Norstedts
Berlin, Isaiah (1969) "Two Concepts of Liberty" in *Four Essays on Liberty*. Oxford: Oxford University Press [the initial presentation of this essay was in 1958]
Bettig, Ronald V. (1996) *Copyrighting Culture: The Political Economy of Intellectual Property*. Boulder, CO and Oxford: Westview Press
Bey, Hakim (pseudonym for Peter Lamborn Wilson) (1991) *TAZ – The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism*. New York, NY: Autonomedia [circulating as e-book in various forms and on various networks]
Blomqvist, Ulf; Eriksson, Lars-Erik; Findahl, Olle; Selg, Håkan; and Wallis, Roger (2005a) "MusicLessons – Deliverable 4: File sharing in peer-to-peer networks – actors, motives and effects", 31/10 2005 [http://w1.nada.kth.se/media/Research/MusicLessons/Reports/MusicLessons-DL4.pdf, accessed 3/3 2006]
Blomqvist, Ulf; Eriksson, Lars-Erik; Findahl, Olle; Selg, Håkan; and Wallis, Roger (2005b) "MusicLessons – Deliverable 5: Trends in downloading and filesharing of music", 30/11 2005 [http://w1.nada.kth.se/media/Research/MusicLessons/Reports/MusicLessons-DL5.pdf, accessed 3/3 2006]
BMR (2008) "Music Experience and Behaviour in Young People, Spring 2008, Main Findings and Conclusions", survey report, British Music Rights and University of Hertfordshire, April 2008 [http://www.ukmusic.org/cms/uploads/files/UoH%20Reseach%202008.pdf]
Bode, Karl (2009) "113,000 Have Signed Up For Pirate Bay VPN", DSLReports.com, 9/4 2009 [http://www.dslreports.com/shownews/113000-Have-Signed-Up-For-Pirate-Bay-VPN-101820, accessed 24/4 2009]
Bohn, Roger (2004) "Piracy or Progress: Is Music Downloading Immoral?", Information Storage Industry Center editorial, University of California at San Diego [available at http://isic.ucsd.edu/music.html, accessed 22/11 2007]

Bolin, Göran (2000) "Film Swapping in the Public Sphere: Youth Audiences and Alternative Cultural Publicities", Javnost – The Public, vol. 7 (2), pp. 57–74
Bollier, David (2001) "The Cornucopia of the Commons", Yes! Magazine, summer 2001 issue [http://www.yesmagazine.org/article.asp?ID=431, accessed 9/3 2008]
Boltanski, Luc and Thévenot, Laurent (2006, trans. by Catherine Porter) *On Justification: Economies of Worth*. Princeton, NJ and Oxford: Princeton University Press
Bolter, Jay David and Grusin, Richard (1999) *Remediation: Understanding New Media*. London and Cambridge, MA: MIT Press
Bonefeld, Werner; Gunn, Richard; and Psychopedis, Kosmas (eds.) (1992) *Open Marxism, vol. 2: Theory and Practice*. London and Boulder, CO: Pluto Press
Borland, John (2005) "Consumer groups challenge Hollywood, labels", CNet News, 22/3 2005 [http://news.cnet.com/Consumer-groups-challenge-Hollywood,-labels/2100-1027_3-5630579.html]
Bourdieu, Pierre (1984 [1979], trans. by Richard Nice) *Distinction: A Social Critique of the Judgement of Taste*. London: Routledge
Boverket (2005) "Housing Statistics in the European Union 2004", statistical report published by National Board of Housing, Building and Planning, Sweden and Ministry for Regional Development of the Czech Republic [http://www.iut.nu/EU/HousingStatistics2004.pdf, accessed 27/3 2007. Also accessible at http://www.boverket.se]
Boyle, James (1996) *Shamans, Software and Spleens: Law and the Construction of the Information Society*. Cambridge, MA and London: Harvard University Press
Boyle, James (2003) "The second enclosure movement and the construction of the public domain", Duke University of Law Journals: Law and contemporary problems, vol. 66, pp. 33–74. [http://www.law.duke.edu/pd/papers/boyle.pdf, accessed 9/3 2008]
Bradbury, Ray (2001 [1953]) *Fahrenheit 451*. New York, NY: Harper Collins
Brandel, Tobias (2005) "Fildelare oberörda av förbudsdebatten" ("File-sharers unmoved by prohibition debate"), Svenska Dagbladet, 22/4 2005 [http://www.svd.se/dynamiskt/kultur/did_9589484.asp, accessed 22/4 2005]
Brandel, Tobias (2007) "Laglig nedladdning sågas av ungdomar", Svenska Dagbladet, 25/4 2007 [http://www.svd.se/nyheter/inrikes/fildelning/artikel_221547.svd]
Brown, Wendy (1995) *States of Injury: Power and Freedom in Late Modernity*. Princeton, NJ: Princeton University Press
Bryman, Alan (1988) *Quantity and Quality in Social Research*. London: Unwin Hyman
Buchanan, Ian (2000) *Michel de Certeau: Cultural Theorist*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
von Busch, Otto and Palmås, Karl (2006) *Abstract Hacktivism: The making of a hacker culture*. London and Istanbul: Openmute.org [available as pdf at http://www.isk-gbg.org/abstracthacktivism/]
Canales Olguin, Rodrigo; Deumic, Almedina; and Tran, Tuyet-Tu (2006) "Upphovsrättslagen – Hur effektiv är den nya lagen och har den lyckats påverka attityderna hos fildelare?", dissertation, Jönköping International Business School, Jönköping University
Callon, Michel (1998) "Introduction: The Embeddedness of Economic Markets in Economics" in Michel Callon (ed.) *The Laws of the Market*. Oxford: Blackwell
Carey, James (1989) *Communication as Culture: Essays on Media and Society*. London and Boston, MA: Unwin Hyman
Castells, Manuel (1996) *The Rise of the Network Society – The Information Age: Economy, Society and Culture, Vol. 1*. Cambridge, MA and Oxford: Blackwell

Castells, Manuel (2001) *The Internet Galaxy*. Oxford: Oxford University Press
de Certeau, Michel (1984; trans. by Steven Rendall) *The Practice of Everyday Life*. Berkeley, CA, Los Angeles, CA, and London: University of California Press
Chesterman & Lipman (1988) *The Electronic Pirates: DIY Crime of the Century*. London: Comedia/Routledge
Claude, Gregor (2007) "The Technopolitics of Owning Culture" in Coyer, Dowmunt and Fountain (eds.) *The Alternative Media Handbook*. London and New York, NY: Routledge
Cohen, Bram (2003) "Incentives Build Robustness in BitTorrent", technical paper, 22/5 2003 [http://www.bittorrent.com/bittorrentecon.pdf, accessed 20/3 2005]
Cohen, Stanley (1972) *Folk Devils and Moral Panics*. London: MacGibb and Kee
Condry, Ian (2004) "Cultures of music piracy: An ethnographic comparison of the U.S. and Japan", International Journal of Cultural Studies, vol. 7 (3), pp. 343—363
Coombe, Rosemary J. (1998) *The Cultural Life of Intellectual Properties: Authorship, Appropriation and the Law*. Durham, NC and London: Duke University Press
Cooper, Robert (2001) "Interpreting mass: collection/dispersion" in Nick Lee and Rolland Munro (eds.) *The Consumption of Mass*, a Sociological Review monograph. Oxford and Malden, MA: Blackwell Publishers
Cooper, Jon and Harrison, Daniel M. (2001) "The social organization of audio piracy on the Internet", Media, Culture & Society, vol. 23 (1), pp. 71—89
Corante (2005) "What Does 'Copyfight' Mean?", 30/7 2005 (http://copyfight.corante.com/archives/2005/07/30/what_does_copyfight_mean.php, accessed 26/10 2007)
Couldry, Nick (2003) "Beyond the Hall of Mirrors? Some Theoretical Reflections on the Global Contestation of Media Power", in Nick Couldry and James Curran (eds.), *Contesting Media Power: Alternative Media in a Networked World*. Lanham, MD: Rowman & Littlefield
Covert, Catherine L. (1984) "'We May Hear Too Much': American Sensibility and the Response to Radio, 1919—1924" in Catherine L. Covert and John D. Stevens (eds.) *Mass Media Between the Wars: Perceptions of Cultural Tension, 1918—1941*. Syracuse, NY: Syracuse University Press
Cringely, Robert X. (pseudonym for Mark Stephens) (2007) "WYSIWYB: Honesty (and a little TCP Mustang) is the solution to tomorrow's Internet video problem", 2/2 2007 [http://www.pbs.org/cringely/pulpit/2007/pulpit_20070202_001566.html, accessed 5/3 2007]
Critical Arts Ensemble (1996) *The Electronic Disobedience*. New York, NY: Autonomedia
Dahlgren, Peter (2001) "Identity Formation and EU Citizens: democratic dilemmas and media conditions", paper presented at the 15th Nordic Conference on Media and Communication Research, Reykjavik, Iceland, 10—14/8 2001 [http://www.nordicom.gu.se/eng_mr/iceland/papers/one/PDahlgren.doc, accessed 9/1 2008]
Daly, Steven (2007) "Pirates of the Multiplex", Vanity Fair, March 2007 [http://www.vanityfair.com/ontheweb/features/2007/03/piratebay200703?printable=true&currentPage=all, accessed 25/4 2007]
Danto, Arthur C. (1964) "The Artworld", Journal of Philosophy, vol. 61 (19), pp. 571—584 [http://www.georgetown.edu/faculty/irvinem/visualarts/Danto-Artworld.pdf, accessed 2/3 2006]
Dean, Mitchell (1994) *Critical and Effective Histories: Foucault's Methods and Historical Sociology*. New York, NY and London: Routledge
Demunter, Christophe (2005) "The digital divide in Europe", Eurostat: Statistics in Focus, vol. 38/2005, published 10/11 2005

[http://epp.eurostat.cec.eu.int/cache/ITY_OFFPUB/KS-NP-05-038/EN/KS-NP-05-038-EN.PDF, accessed 3/3 2006]
Dewey, John (1927) *The Public and Its Problems*. New York, NY: Holt
Dickie, George (1974) *Art and the Aesthetic: An Institutional Analysis*. Ithaca, NY: Cornell University Press
Dickie, George (1997) *Art Circle: A Theory of Art*. Chicago, IL: Spectrum Press
Dinsmore-Tuli, Una (2000) "The pleasures of 'home cinema,' or watching movies on telly: an audience study of cinephiliac VCR use", Screen, vol. 41 (3)
Dyer-Witheford, Nick (1999) *Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism*. Urbana, IL: University of Illinois Press
Ebadi, Solmaz and Johansson, Mirja (2009) "Music File Sharing: Genius Technology or Copyright Infringement?", MA dissertation, Jönköping International Business School, Jönköping University, January 2009
Economist (2000) "Free music, free ride?", 24/8 2000 [http://economist.com/displaystory.cfm?story_id=342345, accessed 12/4 2005]
Economist (2007) "The state of Britain", editorial, 1/2 2007 [http://www.economist.com/opinion/displayStory.cfm?story_id=8629539&fsrc=nwlehfree, accessed 26/3 2007]
Economist (2009) "The Future of Entertainment: Middle Class struggle", 26/11 2009 [http://www.economist.com/displayStory.cfm?story_id=E1_TQJGGNTJ, accessed 8/12 2009]
Elmer-Dewitt, Philip (1993) "First Nation in Cyberspace: Twenty million strong and adding a million new users a month, the Internet is suddenly the place to be", TIME International, no. 49, 6/12 1993 [available at http://www.chemie.fu-berlin.de/outerspace/internet-article.html, accessed 23/7 2009]
Emretsson, Anders (2005) "Husrannsakan hos ett tiotal svenska fildelare" ("Domiciliary visits to a dozen Swedish file-sharers"), IDG.se, 24/2 2005 [http://www.idg.se/ArticlePages/200502/24/20050224122746_IDG.se549/20050224122746_IDG.se549.dbp.asp, accessed 22/4 2005]
Engström, Anna-Katarina (2005) "En studie av normerna kring fildelning och piratkopiering", dissertation, Sociology of Law, Lund University
Enzensberger, Hans-Magnus (2003 [1970]) "Constituents of a Theory of the Media", in Noah Wardrip-Fruin and Nick Montfort (eds.) *The New Media Reader*. London and Cambridge, MA: MIT Press [originally published 1970 in *New Left Review*; also trans. by Stuart Hood in 1974 in *The Consciousness Industry: On Literature, Politics and the Media*. New York, NY: The Seabury Press]
Eriksson, Magnus (2009) "Om teknikdeterminism", blog posting, blay.se, 7/2 2009. [http://www.blay.se/2009/02/07/om-teknikdeterminism/, accessed 8/12 2009]
Ernst, Tony (2009) *6 miljoner sätt att skjuta en älg på – En berättelse om musikindustrins uppgång och eventuella fall*. Göteborg: Reverb
Erway, Chris (2003) "Congress: File-sharing and piracy linked to terrorism?", Kuro5hin – technology and culture, from the trenches, 15/3 2003 [http://www.kuro5hin.org/story/2003/3/14/234939/956]
Etzioni, Amitai (1968) *The Active Society: A Theory of Societal and Political Processes*. New York, NY: Free Press
Eubanks, Virginia (1999) "The Mythography of the 'New' Frontier", MIT Communications Forum, posted 19/12 1999 [http://web.mit.edu/comm-forum/papers/eubanks.html, accessed 27/9 2006]
EUROPA (2007) "Commission proposes a single European Telecoms Market for 500 million consumers", European Union press release, 13/11 2007 [http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/1677&format=HTML&aged=0&language=EN&guiLanguage=en, accessed 24/4 2009]

Evans, William A. (1990) "The interpretive turn in media research", Critical Studies in Mass Communication, vol. 7 (2)
Eytan, Adar and Huberman, Bernardo A. (2000) "Free Riding on Gnutella", First Monday, vol. 5 (10), 2 October 2000 [http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/792/701, accessed 4/4 2010]
Falkvinge, Rick (2009) "Reflektion: VM i generationskrockar", Rick Falkvinge (Swedish Pirate Party) blog, 19/2 2009, [http://rickfalkvinge.se/2009/02/19/reflektion-vm-i-generationskrockar/, accessed 8/12 2009]
Faultline/Rethink Research (2004) "Blank media levies: record once, pay thrice", The Register, 4/5 2004 [http://www.theregister.co.uk/2004/05/04/blank_media_levies/, accessed 26/3 2007]
Feenberg, Andrew (1999) *Questioning Technology*. London: Routledge
Ferguson, Marjorie and Golding, Peter (eds.) (1997) *Cultural Studies In Question*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Findahl, Olle (2006). "Thieves or Customers? File-sharing in the Digital World." in P. Cunningham & M. Cunningham (eds.), *Exploiting the Knowledge Economy: Issues, Applications, Case Studies*. Amsterdam: IOS Press [available at: http://xml.nada.kth.se/media/Research/MusicLessons/Reports/Thieves_or_customers.pdf]
Findahl, Olle and Selg, Håkan (2005) "The Downloaders – Who They Are and What They Are Doing?", eChallenges Conference Paper / MusicLessons, October 2005 [http://w1.nada.kth.se/media/Research/MusicLessons/Reports/eChallenges2005.pdf, accessed 3/3 2006]
Fish, Stanley (1989) "Commentary: The Young and the Restless", in Veeser, H. Aram (ed.) *The New Historicism*. New York, NY and London: Routledge
Fiske, John (1989) *Understanding Popular Culture*. Boston, MA: Unwin Hyman
Fleischer, Rasmus (2004a) "'Content Flatrate' and the Social Democrats", *InterActivist Info Exchange*, 16/7 2004 [http://info.interactivist.net/node/3348]
Fleischer, Rasmus (2004b) "Downhill Battle om strategi och BitTorrent", blog posting, Copyriot, 30/8 2004 [http://copyriot.blogspot.com/2004/08/downhill-battle-om-strategi-och.html, accessed 22/11 2007]
Fleischer, Rasmus (2005) "Kassettband och kassettersättning", dissertation, Stockholm University, Department of Economic History [http://www.kopimi.com/copyriot/Kassettbandet.pdf, accessed 26/3 2007]
Fleischer, Rasmus (2006a) "Mer forskning kring fildelning av musik – men hur?" ("More research on file-sharing of music – but how?"), blog posting, Copyriot, 7/2 2006 [http://copyriot.blogspot.com/2006/02/mer-forskning-kring-fildelning-av.html#comments, accessed 10/2 2006]
Fleischer, Rasmus (2006b) "Pyramidteorin", blog posting, Copyriot, 25/9 2006 [http://copyriot.blogspot.com/2006/09/pyramidteorin.html, accessed 27/9 2006]
Fleischer, Rasmus (2006c) "Between artworks and networks: Navigating through the crisis of copyright", 12/12 2006 [http://copyriot.blogspot.com/2006/12/between-artworks-and-networks.html, accessed 11/3 2007]
Fleischer, Rasmus (2007a) "Why we're still not content with 'content'", blog posting, Copyriot, 27/1 2007 [http://copyriot.blogspot.com/2007/01/why-were-still-not-content-with.html, accessed 2/2 2007]
Fleischer, Rasmus (2007b) "Some notes on General Rights Management", 26/11 2007, paper originally presented at The Oil of the 21st Century conference, Berlin, 26–27/10 2007 [http://copyriot.se/2007/11/26/some-notes-on-general-rights-management/]
Fleischer, Rasmus (2008a) ""Indexing the Grey Zone": a talk at Transmediale08", presentation at Transmediale 08, Berlin, 1/2 2008 [http://copyriot.se/2008/02/04/indexing-the-grey-zone-a-talk-at-transmediale08/]

Fleischer, Rasmus (2008b) comment to the blog posting "Homo Sacer-direktivet: Att behandla "pirater" som terrorister", 99 our 68, 28/10 2008 [http://www.isk-gbg.org/99our68/?p=273#comment-9658]
Fleischer, Rasmus (2008c) "Stoppa privatpolislagen innan den stöper om dig", blog posting, Copyriot, 23/10 2008 [http://copyriot.se/2008/10/23/stoppa-privatpolislagen-innan-den-stoper-om-dig/]
Fleischer, Rasmus (2008d) "The nonlinear history of copyright", presentation at FSCONS, Gothenburg 26/10 2008 [http://copyriot.se/2008/10/26/slides-the-nonlinear-history-of-copyright/]
Fleischer, Rasmus (2009) "Attacktalet", Sydsvenskan, 6/2 2009. [http://sydsvenskan.se/kultur-och-nojen/article411390/Attacktalet.html, accessed 4/4 2009]
Fleischer, Rasmus and Torsson, Palle (2005) "The Grey Commons – strategic considerations in the copyfight", transcript of lecture held at 22C3 in Berlin, December 2005 [http://publication.nodel.org/The-Grey-Commons, accessed 4/5 2007]
Flick, Uwe (1998) *An Introduction to Qualitative Research*. London, Thousand Oaks, CA, and New Delhi: SAGE Publications
Foddy, William (1993) *Constructing Questions for Interviews and Questionnaires: Theory and Practice in Social Research*. Cambridge: Cambridge University Press
Foucault, Michel (1984) "What Is an Author?", in P. Rabinow (ed.) *The Foucault Reader*, pp. 101–20. New York, NY: Pantheon
Foucault, Michel (2006, trans. by Jonathan Murphy, Jean Khalfa) *History of Madness*. London and New York, NY: Routledge
Freedman, Des (2002) "A 'technological idiot'? Raymond Williams and communications technology", Information, Communication & Society, vol. 5 (3), September 2002, pp. 425–442
Freedman, Des (2006) "'Old' media resilience in the 'new media' revolution" in J. Curran and D. Morley (eds.), *Media and Cultural Theory*. London and New York, NY: Routledge
Frith, Simon (1992) "Industrialization of pop music" in Lull (ed.) *Popular Music and Communication*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Fritzson, Fritz-Anton (2009) "Försvarstalet", Sydsvenskan, 6/2 2009. [http://sydsvenskan.se/kultur-och-nojen/article411388/Forsvarstalet.html, accessed 4/4 2009]
Galloway, Alexander (2004) *Protocol: How Control Exists After Decentralization*. London and Cambridge, MA: MIT Press
Gandy, Oscar (2001) "Dividing practices: segmentation and targeting in the emerging public sphere" in Lance Bennett and Robert Entman (eds.) *Mediated Politics: Communication in the Future of Democracy*. Cambridge and New York, NY: Cambridge University Press
Garnham, Nicholas (1997) "Political Economy and the Practice of Cultural Studies" in Ferguson & Golding (eds.) *Cultural Studies In Question*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Geertz, Clifford (1993 [1973]) *The Interpretation of Cultures*. London: Fontana Press [originally, New York, NY: Basic Books]
Ghostnet (2006) "DC Spirit?", web-based user guide published at WhyRAR.omfg.se [http://whyrar.omfg.se/spirit_eng.php, accessed 26/4 2007]
Gibson, Owen (2003) "Legitimate Napster to go live this year", The Guardian, 28/7 2003 [http://www.guardian.co.uk/arts/netmusic/story/0,13368,1007635,00.html, accessed 26/8 2003]
Gibson, Owen (2005) "Online file sharers 'buy more music'", The Guardian, 27/7 2005 [http://www.guardian.co.uk/technology/2005/jul/27/media.business]

Gibson, Owen (2008b) "File sharing 'may be good', says EMI executive", The Guardian, 3/4 2008 [http://www.guardian.co.uk/technology/2008/apr/03/internet.intellectualproperty]
Gibson, Owen (2008c) "Silicon Valley's hippy values 'killing music industry'", The Guardian, 29/1 2008 [http://www.guardian.co.uk/uk/2008/jan/29/musicnews.music]
Giese, Mark (2004) "Community Property: Digital Music and the Economic Modalities of Transmission and Ritual Modes of Communication", Journal of Communication Inquiry, vol. 28 (4), pp. 342—362
Giesler, Markus (2006) "Consumer Gift Systems", Journal Of Consumer Research, vol. 33, September 2006, pp. 283—290
Giesler, Markus and Pohlmann, Mali (2003) "The Anthropology Of File Sharing: Consuming Napster As A Gift" in Punam Anand Keller and Dennis W. Rook (eds.) *Advances in Consumer Research*, vol. 30, 2003. Provo, UT: Association for Consumer Research
Gilder, George (1994) *Life After Television: The Coming Transformation of Media and American Life*. New York, NY: W. W. Norton
Glaser, Barney G. and Strauss, Anselm (1968) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. London: Wiedenfeld & Nicholson
Goldsmith, Jack L. and Wu, Tim (2006) *Who Controls the Internet? Illusions of a Borderless World*. Oxford: Oxford University Press
Gray, Jonathan; Sandvoss, Cornel; and Harrington, C. Lee (eds.) *Fandom: Identities and Communities in a Mediated World*. New York, NY: New York University Press
Griffith, David and McKinney, Bryan (2006) "Marketing and the Law: Supreme Court Finds Marketing Activity Creates Liability in Peer-to-Peer (P2P) File-Sharing Case", Journal of the Academy of Marketing Science, vol. 34 (2), pp. 269—270
Grossberg, Lawrence (1995) "Cultural Studies vs. Political Economy: Is Anybody Else Bored with This Debate?", Critical Studies in Mass Communication, vol. 12 (1), pp. 72—81
Gurnsey, John (1995) *Copyright Theft*. Aldershot: Aslib Gower
Gustafsdotter, Jeanette and Ilshammar, Lars (2006) "Lägg skatt på bredband", Svenska Dagbladet, 8/6 2006 [http://www.svd.se/opinion/brannpunkt/artikel_325504.svd]
Habermas, Jürgen (1979) *Communication and the Evolution of Society*. Toronto: Beacon Press
Habermas, Jürgen (1984) *The Theory of Communicative Action, vol. 1: Reason and the Rationalisation of Society*. Cambridge: Polity Press
Habermas, Jürgen (1996 [1992]) *Between Facts and Norms*. Oxford and Cambridge: Polity Press [originally published by Suhrkamp Verlag, Frankfurt am Main, Germany]
Hammersley, Martyn and Atkinson, Paul (1995) *Ethnography: Principles in Practice*. London and New York, NY: Routledge
Hand, Martin and Sandywell, Barry (2002) "E-topia as Cosmopolis or Citadel On the Democratizing and De-democratizing Logics of the Internet, or, Toward a Critique of the New Technological Fetishism", Theory, Culture & Society, vol. 19 (1—2), pp. 197—225
Hannerz, Ulf (1996) *Transnational Connections*. London and New York, NY: Routledge
Haraway, Donna J. (1997) *Modest_Witness@Second_Millennium .FemaleMan©_Meets_OncoMouse™*. London and New York, NY: Routledge
Haraway, Donna J. (2004 [1991]) "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" in Harding, Sandra (ed.) *The Feminist Standpoint Theory Reader*. London and New York, NY: Routledge

[originally in *Simians, Cyborgs, and Women: The Reinvention of Nature*, London and New York, NY: Routledge]
Hardin, Garrett (1968) "The Tragedy of the Commons", Science, 13/12 1968, vol. 162 (3859), pp. 1243—1248 [http://www.sciencemag.org/cgi/content/full/162/3859/1243, accessed 25/2 2008]
Harding, Sandra (1991) *Whose Science? Whose Knowledge? Thinking from Women's Lives*. Milton Keynes: Open University Press
Harding, Sandra (2004 [1993]) "Rethinking Standpoint Epistemology: What is 'Strong Objectivity'?" in Harding, Sandra (ed.) *The Feminist Standpoint Theory Reader*. London and New York, NY: Routledge [originally in Alcoff, Linda and Potter, Elizabeth (eds.) *Feminist Epistemologies*. London and New York, NY: Routledge]
Hardt, Michael (2002) "Porto Alegre: Today's Bandung?", New Left Review, vol. 14, March/April 2002 [http://newleftreview.org/A2381, accessed 29/1 2008]
Hargittai, Eszter, and Walejko, Gina (2008) "The Participation Divide: Content Creation and Sharing in the Digital Age", Information, Communication and Society, vol. 11 (2), 239—256
Harman, Graham (2009) *Prince of Networks: Bruno Latour and Metaphysics*. Melbourne: re.press
Hart, Keith (2004) "From Bell Curve to Power Law: Distributional Models between National and World Society", International Journal of Cultural and Social Practice, vol. 48 (3)
Hasselbladh, Hans; Bejerot, Eva; and Gustafsson, Rolf Å. (2008) *Bortom New Public Management: Institutionell transformation i svensk sjukvård* [trans.: *Beyond New Public Management: Institutional transformation in Swedish healthcare*]. Lund: Academia Adacta
Hawkes, Terence (1977) *Structuralism and Semiotics*. Berkeley, CA: University of California Press
von Hayek, Friedrich A. (2006 [1960]) *The Constitution of Liberty*. London: Routledge
Hayles, N. Katherine (1999) *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. Chicago, MI, and London: University of Chicago Press
Hellweg, Eric (2004) "Digital Movie Forecast: BitTorrential Downpour", TechnologyReview.com, 19/10 2004 [http://www.technologyreview.com/articles/04/10/wo_hellweg101904.asp?p=0, accessed 26/2 2005]
Himanen, Pekka (with foreword by Linus Torvalds and postscript by Manuel Castells) (2001) *The Hacker Ethic and the Spirit of the Information Age*. London: Vintage
Hine, Christine (2000) *Virtual Ethnography*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Hirsch, Eric (1998) "New Technologies and Domestic Consumption" in Geraghty, Christine and Lusted, David (eds.) *The Television Studies Book*. London and New York, NY: Arnold
Hobson, Andrew (2004) "No hiding place for pirates", MediaGuardian, 11/10 2004
Hosein, Ian; Tsiavos, Prodromos; and Whitley, Edgar A. (2003) "Regulating Architecture and Architectures of Regulation: Contributions from Information Systems", International Review of Law, Computers & Technology, vol. 17 (1), pp. 85—97
Huntford, Roland (1971) *The New Totalitarians*. London: Allen Lane
Hydén, Håkan; Larsson, Stefan; and Svensson, Måns (2009) "Tre av fyra struntar i lagen mot fildelning" ["Three out of four ignore the law against file-sharing"], Dagens Nyheter, 23/2 2009 [http://www.dn.se/opinion/debatt/tre-av-fyra-struntar-i-lagen-mot-fildelning-1.804882]

Independent (2007) "How to Master Your PC in Seven Days: Music", 16-page booklet supplied with The Independent in collaboration with Tesco InternetPhone, 10/9 2007, [http://www.independent.co.uk/news/science/how-to-master-your-pc-in-seven-days-463733.html]
IFPI (2005a) "Music file-sharers face biggest round of legal actions yet; many are already counting the cost", press release, 12/4 2005 [http://www.ifpi.org/site-content/press/20050412.html, accessed 22/4 2005]
IFPI (2005b) "51-jähriger Mann zahlt 15.000 Euro Schadensersatz wegen illegaler Musikangebote in ‚Tauschbörse' und ist vorbestraft", IFPI Germany press release, 9/3 2005 [http://www.ifpi.de/news/news-578.htm, accessed 25/4 2005]
IFPI (2005c) "Global music retail sales, including digital, flat in 2004", press release, 22/3 2005 [http://www.ifpi.org/site-content/press/20050322.html, accessed 22/3 2005]
IFPI (2006) "New IFPI research into consumer behaviour: IFPI European Digital Music Survey – Summary", press release, 19/1 2006 [http://www.ifpi.com/site-content/press/20060119c.html, accessed 3/3 2006]
IFPI (2008) "IFPI Digital Music Report", January 2008 [http://www.ifpi.org/content/library/DMR2008.pdf]
Inglehart, Ronald and Welzel, Christian (2005) *Modernization, Cultural Change and Democracy: The Human Development Sequence.* New York, NY and Cambridge: Cambridge University Press
iPoque (2007) ""Internet Study 2007", research paper, December 2007 [http://www.ipoque.com/resources/internet-studies/internet-study-2007]
Jenkins, Henry (2006) *Convergence Culture: Where Old and New Media Collide.* New York, NY: NYU Press
Jenkins, Henry (2007) "Afterword: The Future of Fandom" in Jonathan Alan Gray, C. Lee Harrington and Cornel Sandvoss (eds) *Fandom: Identities and Communities in a Mediated World.* New York, NY: NYU Press
Jenks, Chris (2003) *Transgression.* London: Routledge
Jenner, Peter (2006) "Big labels are f*cked, and DRM is dead", The Register, 3/11 2006 [http://www.theregister.co.uk/2006/11/03/peter_jenner/, accessed 27/3 2007]
Jeppelin (2009) "Motorcykelåkning enligt fildelningsmodellen" ["Motorcycle-riding according to the file-sharing model"], blog posting, 16/2 2009 [http://jeppelin.se/?p=124, accessed 23/2 2009]
Jones, Steve (1990) "The cassette underground", Popular Music and Society, vol. 14 (1): 75—84 [originally submitted for presentation at the International Communication Association Popular Communication Interest Group 1988 Convention. Also published in Robin James (ed.) (1992) *Cassette Mythos.* New York, NY: Autonomedia; http://members.ai5.net/indexer@ai5.net/cassettemythos/aaaa.html#TOC, accessed 26/3 2007]
Jonsson, Ing-Marie and Thyrfing, Anne (2008) "The Information Society Villain – a discourse analysis of the copyright debate in Swedish and American daily newspapers 2001—2006", MA dissertation in Library science, Högskolan i Borås
Jordan, Tim and Taylor, Paul A. (2004) *Hacktivism and Cyberwars: Rebels with a Cause?* London and New York, NY: Routledge
Joseph, Branden W. (2005, trans. Alessia Ricciardi) "Interview with Paolo Virno", Grey Room, no. 21, fall 2005, pp. 26—37. London and Cambridge, MA: MIT Press
Jönsson, Martin (2007) "Nedladdningsångest" ["The grief of downloading"] Svenska Dagbladet E24/Näringsliv, 25/3 2007 [http://www.e24.se/dynamiskt/reklam_media/did_14882407.asp, accessed 26/3 2007]
Kaarto, Marcus and Fleischer, Rasmus (eds.) (2005) *Copy Me: Samlade texter från Piratbyrån.* Stockholm: Roh-Nin Förlag

Kan, Gene (2001) "Gnutella" in Andy Oram (ed.) *Peer-to-Peer: Harnessing the Benefits of a Disruptive Technology*. Sebastopol, CA: O'Reilly & Associates
Karagiannis, Thomas; Broido, Andre; Brownlee, Nevil; claffy, kc; and Faloutsos, Michalis (2004) "Is P2P dying or just hiding?", paper presented at Globecom 2004, November/December 2004 [http://www.caida.org/outreach/papers/2004/p2p-dying/p2p-dying.pdf, accessed 20/3 2005]
Karlsson, Maria and Rider, Sharon (eds.) (2006) *Den Moderna Ensamheten* [trans: *Modern Loneliness*]. Stockholm and Stehag: Brutus Östlings Bokförlag Symposion
Karlung, Jon (2005) "Bahnhof Internet, Intern utredningsrapport. Ärende: KFMs intrångsundersökning den 10 mars 2005" ("Bahnhof Internet, Internal investigative report. Subject: the investigative encroachment of the Swedish Enforcement Service the 10th of March 2005"), investigative report, 22/3 2005, Bahnhof Internet AB, Sweden [http://isp.bahnhof.se/nyheter/Utredningsrapport.pdf, accessed 24/3 2005]
KaZaA (2005), "Supernodes", anonymous article [http://www.kazaa.com/us/help/faq/supernodes.htm, accessed 16/4 2005]
Keegan, Victor (2008) "The sound of (free) music", The Guardian, 12/2 2008, [http://www.guardian.co.uk/commentisfree/2008/feb/12/thesoundoffreemusic, accessed 4/4 2009]
Keen, Ben (1987) "Play it again, Sony: The double life of home video technology", Science as Culture, vol. 1 (1) , pp. 7—42. London: Free Association Books
Keen, Andrew (2006) "Nuggets of dialectical materialism", blog posting, 1/7 2006 [http://andrewkeen.typepad.com/the_great_seduction/2006/07/remember_those_.html, accessed 7/4 2010]
Keen, Andrew (2007) *The Cult of the Amateur: How Today's Internet is Killing Our Culture*. New York, NY: Doubleday
Kittel, Christoffer (2004) "Första mötet mellan piraten och skivindustrin" ("First meeting between the pirate and the recording industry"), Internetworld Sweden, 10/9 2004 [http://internetworld.idg.se/ArticlePages/200409/08/20040908235022_IW/20040908235022_IW.dbp.asp, accessed 26/2 2005]
Kleinz, Torsten (2006) "Ermittler hatten Zugriff auf eDonkey-Server", Heise Online, 23/5 2006 [http://www.heise.de/newsticker/meldung/73446, accessed 6/3 2007]
Knapton, Sarah (2008) "Internet users could face disconnection for illegal downloads", The Guardian, 12/2 2008 [http://www.guardian.co.uk/technology/2008/feb/12/piracy.politics]
Krim, Jonathan (2005) "Court Weighs File Sharing: Technology Advances vs. Copyrights in Grokster Case", Washington Post, 30/3 2005 [http://www.washingtonpost.com/ac2/wp-dyn/A8684-2005Mar29?language=printer, accessed 31/3 2005]
Krugman, Paul (2008) "Bits, Bands and Books", New York Times, 6/6 2008 [http://www.nytimes.com/2008/06/06/opinion/06krugman.html?_r=1]
Kullenberg, Christopher (2009) "On clustered organization and legalist overcodings", panspectrocism.org, 20/2 2009 [http://www.panspectrocism.org/?p=33, accessed 4/4 2009]
Kuprijanko, Alexander (2006) "Svårt för Sverige att göra fildelning laglig", Sydsvenskan, 9/6 2006 [http://sydsvenskan.se/nojen/article164561.ece]
Lally, Elaine (2002) "Consuming home technology: Consuming home computers" in Steven Miles, Alison Anderson and Kevin Meethan (eds.) *The Changing Consumer*. London and New York, NY: Routledge
de Landa, Manuel (2006) *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London and New York, NY: Continuum

Lanier, Jaron (2006) "The Gory Antigora: Illusions of Capitalism and Computers", Cato Unbound, 9/1 2006. Washington D.C.: Cato Institute [http://www.cato-unbound.org/2006/01/09/jaron-lanier/the-gory-antigora/, accessed 4/5 2006]
Lanier, Jaron (2010) *You Are Not a Gadget – A Manifesto*. London: Allen Lane
Larsmo, Ola (2005) "Vad ska få flöda fritt?" ["What should be allowed to flow freely?"], Dagens Nyheter, 21/3 2005 [http://www.dn.se/DNet/road/Classic/article/0/jsp/print.jsp?&a=393540, accessed 21/3 2005]
Larsmo, Ola (2007) "The temptations of the dinosaur theory", Eurozine, 3/8 2007 [http://www.eurozine.com/articles/2007-08-03-larsmo-en.html, accessed 20/5 2009]
Lash, Scott (2002) *Critique of Information*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Lash, Scott (2007) "Power after Hegemony: Cultural Studies in Mutation?", Theory, Culture, and Society, vol. 24 (3), pp. 55—78
Latour, Bruno (1991) "Technology is society made durable" in John Law (ed.) *A Sociology of Monsters: Essays on Power, Technology and Domination*. London and New York, NY: Routledge
Latour, Bruno (1993) *We Have Never Been Modern*. Cambridge, MA: Harvard University Press
Latour, Bruno (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Clarendon
Latour, Bruno (2007) "Beware, your imagination leaves digital traces", Times Higher Literary Supplement, 6/4 2007 [http://www.bruno-latour.fr/poparticles/poparticle/P-129-THES-GB.doc, accessed 12/2 2008]
Latour, Bruno and Woolgar, Steve (1986) *Laboratory Life: The Social Construction of Scientific Facts* (2nd edition). Princeton, NJ: Princeton University Press
Law, John and Mol, Annemarie (eds.) (2002) *Complexities: Social Studies of Knowledge Practices*,. Durham: Duke University Press
Leadbeater, Charles (2000) *Living on Thin Air: The New Economy*. London: Penguin
Leading Question (2005) "The Leading Question – Essential Music Research", website, [http://www.musically.com/theleadingquestion/]
Lee, Raymond M. (1993) *Doing Research on Sensitive Topics*. London, Thousand Oaks, CA, and New Delhi: Sage
Lehtonen, Mikko (2007) "The Politics of the Popular", paper presented at Goldsmiths College 21/2 2007 [http://homepages.gold.ac.uk/j-andersson/Lehtonen_Goldsmiths.doc, accessed 7/5 2007]
Lessig, Lawrence (1999) *Code and Other Laws of Cyberspace*. New York, NY: Basic Books
Lessig, Lawrence (2002) *The Future of Ideas: The Fate of the Commons in a Connected World*. New York, NY: Vintage Books
Lessig, Lawrence (2004) *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture and Control Creativity*. New York, NY: Penguin Press. [e-book: http://www.free-culture.cc/freeculture.pdf, accessed 7/4 2004]
Levitt, Steven D. and Dubner, Stephen J. (2006) *Freakonomics: A Rouge Economist Explores the Hidden Side of Everything*. London: Penguin Books
Lévy, Pierre (1997, trans. by Robert Bononno) *Collective Intelligence: Mankind's Emerging World in Cyberspace*. Cambridge, MA: Perseus Books
Levy, Steven (2001 [1984]) *Hackers: Heroes of the Computer Revolution*. London: Penguin Books
Liang, Lawrence (2004) *A Guide to Open Content Licenses*. Rotterdam: Piet Zwart Institute [available as e-book at http://pzwart.wdka.hro.nl/mdr/research/lliang/open_content_guide, accessed 7/5 2007]

Liang, Jian; Kumar, Rakesh; Xi, Yongjian; and Ross, Keith (2005) "Pollution in P2P file sharing systems", IEEE Infocom, Miami, FL, March 2005 [http://cis.poly.edu/~ross/papers/pollution.pdf, accessed 12/4 2005]
Liebowitz, Nathaniel; Ripeanu, Matei; and Wierzbicki, Adam (2003) "Deconstructing the Kazaa Network", paper presented at 3rd IEEE Workshop on Internet Applications, Santa Clara, CA [http://www.globus.org/research/papers/kazaa.pdf, accessed 7/4 2005]
Liebowitz, Stan J. (2005) "Economists Examine File-Sharing and Music Sales" in Illing och Waelbroeck (eds.) *The Industrial Organization of Digital Goods and Electronic Markets*. London and Cambridge, MA: MIT Press
Linde, Jessica (2005) "'Sharing is caring' – Om Piratbyrån och kognitiv praxis i en ny social rörelse" ["'Sharing is caring' – On Piratbyrån and cognitive praxis in a new social movement"], Sociology dissertation, Växjö universitet, Samhällsvetenskapliga institutionen
Lister, Martin; Dovey, Jon; Giddings, Seth; Grant, Iain; and Kelly, Kieran (eds.) (2003) *New Media: A Critical Introduction*. London and New York, NY: Routledge
Litman, Jessica (2001) *Digital Copyright*. Amherst, NY: Prometheus Books
Litman, Jessica (2002) "War Stories", Cardozo Arts & Entertainment Law Journal, vol. 20
Logie, John (2006) *Peers, Pirates and Persuasion: Rhetoric in the Peer-to-peer Debates*. West Lafayette, IN: Parlor Press
Lorentzon, Sten (2002) "IT:s roll som lokaliseringsfaktor i perifera regioner: Förändringar under 1990-talet belysta med exempel från de 'IT-aktiva' kommunerna Arvidsjaur, Åre, Sotenäs och Ronneby", Choros 2002:4, Kulturgeografiska institutionen, Handelshögskolan, Göteborgs universitet (Department of Human and Economic Geography, School of Economics and Commercial Law, University of Gothenburg) [http://www.handels.gu.se/epc/archive/00002887/01/choros_2002-4_sten_lorentzon.pdf, accessed 3/3 2006]
Lovink, Geert (2003) *My First Recession: Critical Internet Culture in Transition*. Rotterdam: V2_/NAi publishers
Ludlow, Peter (ed.) (2001) *Crypto Anarchy, Cyberstates, and Pirate Utopias*. London and Cambridge, MA: MIT Press
Lundblad, Nicklas (2006) "Nationalstaten bygger murar i cyberrymden", Svenska Dagbladet, 22/5 2006 ["The national state builds walls in cyberspace" http://www.svd.se/kulturnoje/understrecket/nationalstaten-bygger-murar-i-cyberrymden_321038.svd, accessed 4/4 2010]
Lury, Celia (1993) *Cultural Rights: Technology, Legality, and Personality*. London, New York, NY: Routledge
Löwenfeldt, Jörgen (2006) "Brumark: Vi sänkte The Pirate Bay", Realtid.se, 5/6 2006 [http://www.realtid.se/ArticlePages/200606/05/20060605125943_Realtid540/20060605125943_Realtid540.dbp.asp]
Mackay, Hughie & Gillespie, Gareth (1992) "Extending the Social Shaping of Technology Approach: Ideology and Appropriation", Social Studies of Science, vol. 22 (4), pp. 685—716
MacKenzie, Donald and Wajcman, Judy (1999) *The Social Shaping of Technology* (2nd edition). Buckingham and Philadelphia, PA: Open University Press
MacPherson, Stewart (1985) "Eight London Households", book review, British Journal of Sociology, vol. 36 (4), pp. 635—636
Manjoo, Farhad (2004) "Is the war on file sharing over?", Salon, 15/1 2004 [http://www.salon.com/tech/feature/2004/01/15/filesharing_tide_turned/, accessed 22/4 2005]

Marvin, Caroline (1988) *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century*. New York, NY: Oxford University Press
Massa, Paolo (2003) "Trust-aware Decentralized Recommender Systems", PhD research proposal, Department of Information and Communication Technology, University of Trento, Italy
[http://sra.itc.it/people/massa/publications/PhDResearchProposal_PaoloMassa.pdf, accessed 15/2 2005]
Mattelart, Armand (2003 [2001]; trans. by Susan Taponier & James Cohen) *The Information Society: An Introduction*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Mauss, Marcel (2002 [1954]) *The Gift*. London: Routledge
May, Christopher (2002) *The Information Society: A Sceptical View*. Cambridge: Polity Press
McCracken, Grant (1988) *The Long Interview*. London, Newbury Park, CA, and New Delhi: Sage Publications
McLuhan, Marshall (1964) *Understanding Media: The Extensions of Man*. New York, NY: McGraw-Hill
McRobbie, Angela (1989; ed.) *Zoot Suits and Second-hand Dresses: an Anthology of Fashion and Music*. Basingstoke: Macmillan
Medosch, Armin (2003) "Piratology" in Dive (ed.) *Kingdom of Piracy*. Liverpool: Fact
Medosch, Armin (2008) "Paid in Full: Copyright, piracy and the real currency of cultural production" in Adnan Hadzi (ed.) *Deptford.TV Diaries II: Pirate Strategies*. London: OpenMute
Mennecke, Thomas (2004) "eDonkey/Overnet Rapidly Approaching FastTrack", slyck.com, 13/5 2004 [http://www.slyck.com/news.php?story=477, accessed 22/4 2005]
Meuser, M. and Nagel, U. (1991) "ExpertInneninterviews: Vielfach erprobt, wenig bedacht: Ein Beitrag zur qualitativen Methodendiskussion" in D. Garz and K. Kraimer (eds.) *Qualitativ-empirische Sozialforschung*. Opladen: Westdeutscher Verlag
Miller, Daniel and Slater, Don (2000) *The Internet: An Ethnographic Approach*. Oxford and New York, NY: Berg
Miller, Michael (2001) *Discovering P2P: Everything You Need to Know about P2P—to Understand It, to Use It, and to Benefit from It*. San Francisco, CA and London: Sybex
Milojicic, Dejan; Kalogeraki, Vana; Lukose, Rajan; Nagaraja, Kiran; Pruyne, Jim; Richard, Bruno; Rollins, Sami; and Xu, Zhichen (2002) "Peer-to-Peer Computing", Technical Report 2002-57, 8/3 2002, HP Laboratories, Palo Alto, CA [http://www.hpl.hp.com/techreports/2002/HPL-2002-57.pdf, accessed 7/4 2005]
Mlcakova, Adela and Whitley, Edgar A. (2004) "Configuring Peer–to–Peer Software: An Empirical Study of How Users React to the Regulatory Features of Software", European Journal of Information Systems, vol. 13 (2), pp. 95—102
Mol, Annemarie (1999), "Ontological Politics: a Word and Some Questions" in John Law and John Hassard (eds.), *Actor Network Theory and After*. Oxford and Keele: Blackwell
Moore, Thurston (2004) *Mix Tape: The Art of Cassette Culture*. New York, NY: Universe Publishing
Moores, Shaun (1993) *Interpreting Audiences: The Ethnography of Media Consumption*. London, Thousand Oaks, CA, and New Delhi: Sage Publications
Morley, David (2006) *Media, Modernity and Technology: The Geography of the New*. London and New York, NY: Routledge

Mosco, Vincent (1989) *The pay-per society: Computers and communication in the age of information*. Toronto: Garamond
Mouffe, Chantal (2000) *The Democratic Paradox*. New York, NY: Verso
Mumford, Lewis (1963) *Technics and Civilization*. San Diego, CA and London: Harcourt Brace
Mumford, Lewis (1967) *The Myth of the Machine: Technics and Human Development*. London: Secker & Warburg
Murdock, Graham, Hartmann, Paul and Gray, Peggy (1992) "Contextualising home computing: resources and practices" in Roger Silverstone and Eric Hirsch (eds.) *Consuming Technologies*. London and New York, NY: Routledge
Negroponte, Nicholas (1995) *Being Digital*. London: Hodder and Stoughton
Nelson R. and Winter S. (1982) *An Evolutionary Theory of Economic Change*. Cambridge, MA and London: Harvard University Press
Nettime (2004) "the anarchist in the libary – an interview", posted by text warez, 6/5 2004 [http://www.nettime.org/Lists-Archives/nettime-l-0405/msg00016.html, accessed 29/11 2007]
Nettleingham, Maria; Ngo, Bobo; and Olsson, Karin (2005) "Nedladdning avmusik: En studie av vilka faktorer som påverkar nedladdning av musik via fildelningsapplikationer", dissertation, Institutionen för Informatik, Ekonomihögskolan, Lunds Universitet
Nielsen, Jakob (2006) "Participation Inequality: Encouraging More Users to Contribute", Alertbox, 9/10 2006 [http://www.useit.com/alertbox/participation_inequality.html, accessed 7/5 2007]
Nilsson, Kerstin (2006) "-Folket är på vår sida" ["-The people are on our side"], Aftonbladet, 3/6 2006 [http://www.aftonbladet.se/vss/nyheter/story/0,2789,835819,00.html, accessed 25/4 2007]
Nilsson, Sandra and Blom, Malin (2005) "Piratkopiering av musik på Internet – finns det åtgärder som kan stoppa detta?" ["Pirate copying of music on the Internet – are there measures for stopping it?"], Computer Science dissertation, Blekinge Tekniska Högskola, report no BCS-2005:05
Oberholzer-Gee, Felix and Strumpf, Koleman (2004) "The Effect of File Sharing on Record Sales: An Empirical Analysis", University of North Carolina, 29/3 2004 [http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf, accessed 27/4 2004; see http://www.hbs.edu/about/news/032904_file_sharing.html for abstract]
OECD (2003) "Working Party on Telecommunication and Information Services Policies: Broadband and Telephony Services over Cable Television Networks", Organisation for Economic Co-operation and Development (OECD) report, 7/11 2003 [http://www.oecd.org/dataoecd/24/59/18807949.pdf, accessed 3/3 2006]
Oppenheim, A. N. (1966) *Questionnaire Design and Attitude Measurement*. London: Heinemann
Oram, Andy (2000) "Peer-to-Peer Makes the Internet Interesting Again", O'Reilly Linux DevCenter, 22/9 2000 [http://www.linuxdevcenter.com/lpt/a/401, accessed 26/2 2005]
Oram, Andy (ed.) (2001) *Peer-to-Peer: Harnessing the Benefits of a Disruptive Technology*. Sebastopol, CA: O'Reilly & Associates
O'Reilly, Tim (2001) "Remaking the Peer-to-Peer Meme" in Andy Oram (ed.) *Peer-to-Peer: Harnessing the Benefits of a Disruptive Technology*. Sebastopol, CA: O'Reilly & Associates
O'Reilly, Tim (2005) "What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software", blog posting, 30/9 2005 [http://www.oreilly.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html, accessed 29/11 2007]

Orlikowski, W J (2000) "Using technology and constituting structures: a practice lens for studying technology in organizations", Organizational Science, vol. 11 (4), pp. 404—428
Ou, George (2008) "Fixing the unfairness of TCP congestion control", Real World IT, ZDNet, 24/3 2008 [http://blogs.zdnet.com/Ou/?p=1078, accessed 4/4 2010]
P2Pnet.net (2004) "Cdn file swap case continues", 13/3 2004 [http://www.p2pnet.net/story/971, accessed 22/4 2005]
Pang, Laikwan (2006) *Cultural Control and Globalisation in Asia: Copyright, Piracy, and Cinema.* London and New York, NY: Routledge.
Parker, Andrew (2004) "The True Picture of Peer-to-Peer Filesharing", CacheLogic report, July 2004 [http://www.cachelogic.com/research/slide1.php, accessed 28/2 2005; see also http://www.cachelogic.com/news/pr040715.php]
Pearson, Geoffrey (1983) *Hooligan: A History of Respectable Fears.* London: Macmillan
Peck, Janice (2006) "Why We Shouldn't Be Bored With the Political Economy versus Cultural Studies Debate", Cultural Critique, vol. 64 (fall 2006), University of Minnesota, pp 92—126
Peralta, Stacy (dir.) (2001) *Dogtown and Z-Boys.* AOP Productions/Vans off the Wall (Sony Pictures DVD)
Perkins-Svensson, Sandra (2006) "Är det en anka eller en kanin? Fildelning som brott eller uppror, rätt eller fel" ["Is it a duck or a rabbit? File-sharing as crime or rebellion, right or wrong"], MA dissertation, Lund University [http://theses.lub.lu.se/archive/2006/09/25/1159192266-10521-206/Sandra_Perkins-Svensson.pdf, accessed 26/4 2007]
Piratbyrån (2007) "Piratbyrån Valborg 2007" website [http://piratbyran.org/valborg/, accessed 6/5 2007]
Pirate Bay, The (2009) *Powr, Broccoli and Kopimi* e-book [available as a torrent link at http://thepiratebay.org/torrent/4741944/powr.broccoli-kopimi]
Piratpartiet (2006) "Pirate Party Launches World's First Commercial Darknet", press release [http://www2.piratpartiet.se/nyheter/press_release_pirate_party_launches_worlds_first_commercial_darknet, accessed 1/3 2007]
Pogue, David (2007) "The Generational Divide in Copyright Morality", New York Times, 20/12 2007 [http://www.nytimes.com/indexes/2007/12/20/technology/circuitsemail/index.html, accessed 25/1 2008]
Polanyi, Karl (1944) *The Great Transformation: The Political and Economic Origins of Our Time.* Boston, MA: Beacon Press
Pollock, Rufus (2006) "P2P, Online File-Sharing, and the Music Industry", blog posting, updated 31/3 2006 [http://www.rufuspollock.org/economics/p2p_summary.html, accessed 1/3 2009]
Popenoe, David (1988) *Disturbing the Nest: Family Change and Decline in Modern Societies.* New York, NY: Aldine de Gruyter
Post, David G. (2000) "What Larry Doesn't Get: Code, Law, and Liberty in Cyberspace", Stanford Law Review, vol. 52, pp. 1439
Pouwelse, Johan (2004) "The BitTorrent file-sharing system", The Register, 18/12 2004 [http://www.theregister.co.uk/2004/12/18/bittorrent_measurements_analysis/print.html, accessed 28/2 2005]
PTS (2004) "Bredband i Sverige 2004: Utbyggnaden av IT-infrastruktur med hög överföringskapacitet", Post & Telestyrelsen report PTS-ER-2004:28, 11/8 2004 [http://www.pts.se/Archive/Documents/SE/Bredband_i_Sverige_2004.pdf, accessed 3/3 2006]

Pålsson, Marcus (2008) "Scenen: En subkultur som inte vill synas", MA dissertation, Linköping university, Institutionen för studier av samhällsutveckling och kultur (ISAK), LiU Norrköping
Quinn, Norton (2006a) "Secrets of the Pirate Bay", Wired magazine, 16/8 2006 [http://www.wired.com/news/technology/0,71543-0.html, accessed 25/4 2007]
Quinn, Norton (2006b) "A Nation Divided Over Piracy", Wired magazine, 17/8 2006 [http://www.wired.com/news/technology/0,71544-0.html?tw=wn_index_4, accessed 25/4 2007]
Rajagopal, Indhu and Bojin, Nis (2004) "Cons in the panopticon: Anti-globalization and cyber-piracy", First Monday, vol. 9 (9), 6/9 2004 [http://www.firstmonday.org/issues/issue9_9/rajagopal/, accessed 28/2 2005]
Raymond, Eric S. (1999) *The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary*. Sebastopol, CA: O'Reilly
Rheingold, Howard (2000) *The Virtual Community: Homesteading on the Electronic Frontier*. London and Cambridge, MA: MIT Press
Rheingold, Howard (2003) *Smart Mobs: The Next Social Revolution*. Cambridge, MA: Perseus
Ripeanu, Matei; Foster, Ian; and Iamnitchi, Adriana (2002) "Mapping the Gnutella network: Properties of large scale peer-to-peer systems and implications for system design", IEEE Internet Computing Journal, vol. 6 (1), 2002 [http://people.cs.uchicago.edu/~matei/PAPERS/ic.pdf, accessed 7/4 2005]
Robins, Kevin (1996) *Into the Image*. London and New York, NY: Routledge
Robins, Kevin and Webster, Frank (1999) *Times of the Technoculture: From the Information Society to the Virtual Life*. London and New York, NY: Routledge
Roberts, Johnnie (2003) "Out of Tune", Newsweek, 22/9 2003 [http://www.msnbc.com/news/966392.asp?cp1=1, accessed 22/9 2003]
Rorty, Richard (1991) *Objectivity, Relativism, and Truth: Philosophical Papers, Volume I*. New York, NY: Cambridge
Rose, Nikolas (1999 [1989]) *Governing the Soul: The Shaping of the Private Self*. London: Free Association Books
Ross, Andrew (1998) *Real Love: In Pursuit of Cultural Justice*. London: Routledge
Roszak, Theodore (1970) *The Making of a Counter Culture: Reflections on the Technocratic Society and Its Youthful Opposition*. London: Faber and Faber
Runquist, Jannike (2009) "Fel om försäljningsras för dvd-filmer", Second Opinion, 2/5 2009. [http://www.second-opinion.se/so/view/398, accessed 6/5 2009]
Rydell, Anders and Sundberg, Sam (2009) *Piraterna: de svenska fildelarna som plundrade Hollywood*. Stockholm: Ordfront
Röttgers, Janko (2003) "P2P: power to the people" in Armin Medosch (ed.) *Dive CD-ROM and Text Collection: An Introduction into the World of Free Software and Copyleft Culture*, compiled by Kingdom of Piracy, commissioned by virtualcentre-media.net. Liverpool: Fact [http://kop.fact.co.uk/DIVE/cd/text/p2p.html, accessed 20/4 2005; also available as http://www.sarai.net/journal/04_pdf/49janko.pdf]
Samuelson, Paul (1954) "The Pure Theory of Public Expenditure", Review of Economics and Statistics, vol. 36 (4), pp. 387–389
Sandemose, Aksel (2005 [1933]) *En flyktning krysser sitt spor*. Oslo: Aschehoug
Saroiu, Stefan; Gummadi, P. Krishna; and Gribble, Steven (2002) "A Measurement Study of Peer-to-Peer File Sharing Systems", Department of Computer Science and Engineering, University of Washington, Seattle, WA [http://www.cs.washington.edu/homes/gribble/papers/mmcn.pdf, accessed 12/4 2005]
Scannell, Paddy (1988) "Radio Times: The Temporal Arrangements of Broadcasting in the Modern World" in Phillip Drummond and Richard Paterson (eds.) *Television and its Audience: International Research Perspectives*. London: BFI Publishing

SCB (2005) "Privatpersoners användning av datorer och Internet 2005" ("Use of computers and the Internet by private persons in 2005"), Statistiska Centralbyrån (SCB) / Statistics Sweden report, 20/12 2005 [http://www.scb.se/statistik/_publikationer/IT0102_2005A01_BR_TKFT0504.pdf, accessed 7/1 2006]

SCB (2006a) "Privatpersoners användning av datorer och Internet 2006", Statistiska Centralbyrån (SCB) / Statistics Sweden report [http://www.scb.se/templates/pressinfo____187176.asp, accessed 26/3 2007]

SCB (2006b) "Befolkningens utbildning: Utbildningsnivå 2005 efter kön och ålder (årsklasser)", Statistiska Centralbyrån (SCB) / Statistics Sweden report [www.scb.se/UF0506, accessed 26/3 2007]

Schlosser, Eric (2004) *Reefer Madness and Other Tales from the American Underground.* London: Penguin

Schofeld, Jack (2008a) "Comcast and BitTorrent are working to avoid the death of the net", The Guardian, 28/3 2008 [http://www.guardian.co.uk/technology/blog/2008/mar/28/comcastandbittorrentarewor]

Schofeld, Jack (2008b) "'It's every man for himself'", The Guardian, 2/10 2008 [http://www.guardian.co.uk/technology/2008/oct/02/interviews.internet]

Searls, Doc and Weinberger, David (2003) "World of Ends: What the Internet Is and How to Stop Mistaking It for Something Else", web-published manifesto [http://worldofends.com/, accessed 25/1 2008]

Sen, Shubho and Wang, Jia (2004) "Analyzing peer-to-peer traffic across large networks", ACM/IEEE Transactions on Networking, vol. 12 (2), April 2004, pp. 219—232 [http://www.research.att.com/~jiawang/peernet-ton03.ps, accessed 3/5 2005]

Sennett, Richard (1996 [1976]) *The Fall of Public Man.* London and New York, NY: W.W. Norton

Shiga, John (2006) "Translations: Artifacts from an Actor-Network Perspective", Artifact, vol. 1 (1), 40—55

Shirky, Clay (2001) "Listening to Napster" in Andy Oram (ed.) *Peer-to-Peer: Harnessing the Benefits of a Disruptive Technology.* Sebastopol, CA: O'Reilly & Associates [alternatively, http://www.openp2p.com/pub/a/p2p/2000/11/24/shirky1-whatisp2p.html]

Shirky, Clay (2003) "The RIAA Succeeds Where the Cypherpunks Failed", blog posting, 17/12 2003 [http://www.shirky.com/writings/riaa_encryption.html, accessed 12/10 2004]

Silberman, Marc (2001) *Brecht on Film.* London: Methuen

Silver, David (2000) "Looking backwards, looking forwards: Cybercultural studies 1990—2000" in D. Gauntlett (ed.) *Web.Studies: Rewiring Media Studies for the Digital Age.* London: Arnold

Silverman, David (2001) *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction.* London, Thousand Oaks, CA, and New Delhi: Sage Publications

Simmel, Georg (1971) *On Individuality and Social Forms.* Chicago, IL: University of Chicago Press

Singel, Ryan (2006) "They Saved the Internet's Soul", Wired magazine, 2/8 2006 [http://www.wired.com/science/discoveries/news/2006/02/70185, accessed 25/1 2008]

Sklair, Leslie (1995) *Sociology of the Global System* (2nd edition). Hemel Hempstead: Harvester Wheatsheaf/Prentice Hall

Skågeby, Jörgen (2006) "Public and Non-Public Gifting on the Internet", Licentiate thesis, Department of Computer and Information Science, Linköping Studies in Science and Technology, Thesis no. 1244, April 2006 [http://www.diva-portal.org/diva/getDocument?urn_nbn_se_liu_diva-7370-1__fulltext.pdf, accessed 9/3 2008]

Slack, Jennifer Daryl and Wise, J. Macgregor (2002) "Cultural Studies and Technology" in Leah Lievrouw and Sonia Livingstone (eds.) *The Handbook of New Media.* London, Thousand Oaks, CA, and New Delhi: Sage Publications
Slater, Don (2002) "Making Things Real: Ethics and Order on the Internet", Theory, Culture & Society, vol. 19 (5/6), pp. 227–245
de Sola Pool, Ithiel (1983) *Technologies of Freedom: On Free Speech in an Electronic Age.* Cambridge, MA: Harvard University Press
Solanas, Fernando and Getino, Octavio (1969/1997) "Towards a Third Cinema" in Michael T. Martin (ed.) *New Latin American Cinema Volume One.* Detroit, MI: Wayne State University Press
Solheim, Eirik (2008) "Thoughts on BitTorrent distribution for a public broadcaster", NRK Beta, 2/3 2008 [http://nrkbeta.no/2008/03/02/thoughts-on-bittorrent-distribution-for-a-public-broadcaster/, accessed 23/7 2009]
Spigel, Lynn (1990) "Television in the Family Circle: The Popular Reception of a New Medium" in P. Mellencamp (ed.) *The Logics of Television.* Bloomington, IN: Indiana University Press
Springhall, John (1998) *Youth, Culture and Moral Panics: Penny Gaffs to Gangsta Rap, 1830–1996.* London: Macmillan
Standage, Tom (1999) *The Victorian Internet.* London: Phoenix
Stanley, Liz and Wise, Sue (1990) "Method, methodology and epistemology in feminist research processes" in Liz Stanley (ed.) *Feminist Praxis.* London and New York, NY: Routledge
Star, Susan Leigh and Geoffrey C. Browker (2002) "How to Infrastructure" in Leah Lievrouw and Sonia Livingstone (eds.) *The Handbook of New Media.* London, Thousand Oaks, CA, and New Delhi: Sage Publications
Steffen, Alex (2005) "Cory Doctorow: The WorldChanging Interview", WorldChanging.com, 30/7 2005 [http://www.worldchanging.com/archives/003214.html, accessed 26/10 2007]
Steiner, Philippe (2003) "Gifts of Blood and Organs: the Market and 'Fictitious' Commodities", Revue Française de Sociologie, vol. 44, Supplement: An Annual English Selection, pp. 147–162
Stiernstedt, Jenny (2009) "Antipiratbyrån jagar globalt piratnätverk", Dagens Nyheter, 27/4 2009 [http://www.dn.se/kultur-noje/film-tv/antipiratbyran-jagar-globalt-piratnatverk-1.853037, accessed 23/7 2009]
Stengers, Isabelle (1997; trans. Paul Bains) *Power and Invention: Situating Science.* Minneapolis, MN: University of Minnesota Press
STIM (2008) "Nytt förslag från Stim om laglig fildelning", press release, STIM, 8/2 2008 [http://www.stim.se/stim/prod/stimv4.nsf/AllDocuments/CAD6B46E231D98C5C12573D10042D52C]
Strand, Carl (2005) "The Instant Generation – hur ser ungdomars attityder till fildelning ut?", dissertation, Division of Media and Communication, Department of Information Science, Uppsala University
Strandh, Niclas (2009) "Därför uppstod Pirate Bay just i Sverige" ["Why The Pirate Bay appeared in Sweden of all places"], Newsmill, 20/2 2009 [http://www.newsmill.se/artikel/2009/02/20/nagra-teser-om-varfor-pirate-bay-blev-sa-stort, accessed 27/4 2009]
Strangelove, Michael (2005) *The Empire of Mind: Digital Piracy and the Anti-Capitalist Movement.* Toronto, Buffalo, NY and London: University of Toronto Press

Ström, Karin (2009) "Jämlikheten gjorde slut på vår tro" ["Egalitarianism ended our religious belief"], book review of Phil Zuckerman's *Society Without God* (2009), Svenska Dagbladet, 2/3 2009
Suchman, Lucy (2007) *Human-Machine Reconfigurations*. New York, NY and Cambridge: Cambridge University Press
Sundberg, Sam (2009) "The Pirate Bay-bloggen", ongoing commentary of the Pirate Bay trial, Svenska Dagbladet, 13/2 2009—3/3 2009 [http://blogg.svd.se/thepiratebay]
Sundsted, Todd (2001) "The practice of peer-to-peer computing: Introduction and history", IBM developerWorks, 1/3 2001 [http://www-106.ibm.com/developerworks/java/library/j-p2p/, accessed 26/2 2005]
SvD (2005) "Kommentarer på artikeln 'Fildelare oberörda av förbudsdebatten'" ("Comments on the article 'File-sharers unmoved by prohibition debate'"), Svenska Dagbladet, 22/4 2005 [http://www.svd.se/dynamiskt/kultur/did_9583919.asp#kommentera, accessed 22/4 2005]
Swartz, Oscar (2008) "Striden om den sanna versionen kan börja", IDG.se, 1/2 2008 [http://www.idg.se/2.1085/1.143327]
Söderberg, Johan (2004) "Reluctant revolutionaries – the false modesty of reformist critics of copyright", Journal of Hyperdrome.Manifestation, vol. 1 (1), September 2004 [http://journal.hyperdrome.net/issues/issue1/soderberg.html, accessed 7/5 2007]
Söderberg, Johan (2008) *Allt mitt är ditt: Fildelning, upphovsrätt och försörjning*. Stockholm: Atlas
Tanesini, Alessandra (1999) *An Introduction to Feminist Epistemologies*. Malden, MA and Oxford: Blackwell Publishers
Teather, David (2003) "Music firms on pirates' trail", The Guardian, 23/7 2003 [http://www.guardian.co.uk/arts/netmusic/story/0,13368,1004276,00.html, accessed 26/8 2003]
Tegnér, Marcus and Poturovic, Darja (2008) "'Det är så lätt, det är bara att gå in och trycka på ett par knappar.' – En rättssociologisk utvärderingsstudie av lagen om upphovsrätt (Lag 2005:359) och de viktigaste orsaksmekanismerna bakom fildelning", dissertation, Rättssociologiska enheten, Lunds Universitet
Terranova, Tiziana (2000) "Free Labor: Producing Culture for the Digital Economy", Social Text, vol. 18 (2; summer 2000), pp. 33—57 [also accessible at http://www.uoc.edu/in3/hermeneia/sala_de_lectura/t_terranova_free_labor.htm, accessed 7/5 2007]
Thierer, Adam and Crews, Wayne (eds.) (2002) *Copy Fights: The Future of Intellectual Property in the Information Age*. Washington, D.C.: Cato Institute
Thompson, John B. (1995) *The Media and Modernity – A Social Theory of the Media*. Cambridge and Oxford: Polity Press
Thornton, Sarah (1996) *Club Cultures – Music, Media and Subcultural Capital*. Hanover and London: Wesleyan University Press
Thullberg, Per and Östberg, Kjell (1994, eds.) *Den svenska modellen*. Lund: Studentlitteratur
Titmuss, Richard M. (1970) *The Gift Relationship: From Human Blood to Social Policy*. London: London School of Economics Books
Turkle, Sherry (1995) *Life On the Screen: Identity in the Age of the Internet*. New York, NY: Simon & Schuster Paperbacks
Urrichio, William (2004) "Cultural Citizenship in the Age of P2P Networks" in Ib Bondebjerg & Peter Golding (eds.) *European Culture and the Media*. Bristol: Intellect
Urry, John (2002) *Global Complexity*. Cambridge: Polity Press
Vaidhyanathan, Siva (2001) *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*. New York, NY: New York University Press

Vaidhyanathan, Siva (2004) *The Anarchist in the Library: How the Clash Between Freedom and Control is Hacking the Real World and Crashing the System.* New York, NY: Basic Books
Vaidhyanathan, Siva (2006) "Afterword: Critical Information Studies" in Cultural Studies, vol. 20 (2), pp. 292—315
Vikingsson, Karolina (2006) "Nedladdning påverkar inte konsumtionen", Göteborgs-posten, 26/6 2006 [http://www.gp.se/gp/road/Classic/shared/printArticle.jsp?d=286&a=283243, accessed 6/5 2009]
Västerbro, Magnus (2009) "Översättarkriget" ["The War of Translators"], Filter magazine, April/May 2009
Walleij, Linus (1999) *Copyright finns inte V3.0* [*Copyright doesn't exist V3.0*], e-book [http://www.df.lth.se/~triad/book/, accessed 25/4 2007]
Wallis, Roger (2008) "Mer konsumentmakt hotar inte mångfalden", Svenska Dagbladet, 31/1 2008 [http://www.svd.se/kulturnoje/mer/kulturdebatt/artikel_825453.svd]
Wallman, Sandra (1984) *Eight London Households.* London: Tavistock
Wang, Wallace (2004) *Steal This File Sharing Book: What They Won't Tell You About File Sharing.* San Francisco, CA: No Starch Press [chapter 2 freely available as extract: http://www.nostarch.com/download/STFB_Chapter_2.pdf, accessed 28/2 2005]
Wark, McKenzie (1997a) "The Virtual Republic", a paper for the Research Institute for the Humanities and Social Sciences University of Sydney. Also published on the Nettime mailing list, 3/11 1997 [http://www.nettime.org/Lists-Archives/nettime-l-9711/msg00003.html, accessed 1/11 2007]
Wark, McKenzie (1997b) "Rethinking Social Democracy", Nettime mailing list thread (email header "Deleuze Contra Barbrook"), 30/12 1997 [http://www.nettime.org/Lists-Archives/nettime-l-9712/msg00045.html, accessed 1/11 2007]
Wark, McKenzie (2004) *A Hacker Manifesto.* Cambridge, MA and London: Harvard University Press
Wearden, Graeme (2003) "eDonkey pulls ahead in European P2P race", news.com, 14/10 2003 [http://news.com.com/2102-1025_3-5091230.html?tag=st.util.print, accessed 26/2 2005]
Whittle, Andrea and Spicer, André (2005) "Why Organization Studies Should Resist Translation by Actor Network Theory", paper presented at the 21st European Group on Organization Studies Colloquium, Berlin, 30/6—2/7 2005
Williams, Raymond (1961) *The Long Revolution.* Harmondsworth: Pelican/Penguin Books
Williams, Raymond (1981) *Culture.* London: Fontana
Wimsatt, William Upski (1994) *Bomb the Suburbs.* Chicago, IL: Subway and Elevated Press
Winner, Langdon (1977) *Autonomous Technology: Technics-out-of-Control as a Theme in Political Thought.* London and Cambridge, MA: MIT Press
Wistreich, Nicol (2006) "Disney Co-Chair recognises 'piracy is a business model'", Netribution, 10/10 2006, [http://www.netribution.co.uk/content/view/972/182]
Wittel, Andreas (2004) "Culture, labour and subjectivity: For a political economy from below", Capital & Class, issue 84, winter 2004, pp. 11—30
Wolfe, Alan (1989) "The day-care dilemma: A Scandinavian perspective", The Public Interest, vol. 95
Wu, Tim (2003) "Network Neutrality, Broadband Discrimination", Journal of Telecommunications and High Technology Law, vol. 2, pp. 141—179 [http://www.freepress.net/docs/timwu.pdf, accessed 3/3 2007; alternatively see http://timwu.org/network_neutrality.html]

Wylie, Alison (2004) "Why Standpoint Matters" in Sandra Harding (ed.) *The Feminist Standpoint Theory Reader*. London and New York, NY: Routledge

Yar, Majid (2008) "The rhetorics and myths of anti-piracy campaigns: criminalization, moral pedagogy and capitalist property relations in the classroom", New Media & Society, vol. 10 (4), pp. 605—623

Zamanov, Drake (2006) "Authorities Take Down Razorback", p2pcore.com, 21/2 2006 [http://www.p2pcore.com/stories/321.php, accessed 7/3 2007]

Zeropaid (2007) "Internet video now a bigger piece of network traffic than P2P?", 31/1 2007 [http://www.zeropaid.com/news/8312/Internet+video+now+a+bigger+piece+of+network+traffic+than+P2P, accessed 23/2 2007]

Zerva, Konstantina (2008) "File-Sharing versus Gift-Giving: a Theoretical Approach", Autonomous University of Barcelona

Zuckerman, Phil (2009) *Society Without God: What The Least Religious Nations Can Tell Us About Contentment*. New York, NY: New York University Press

Appendix 1: Illustrations

Fig. 1

Fig. 2

See overleaf.

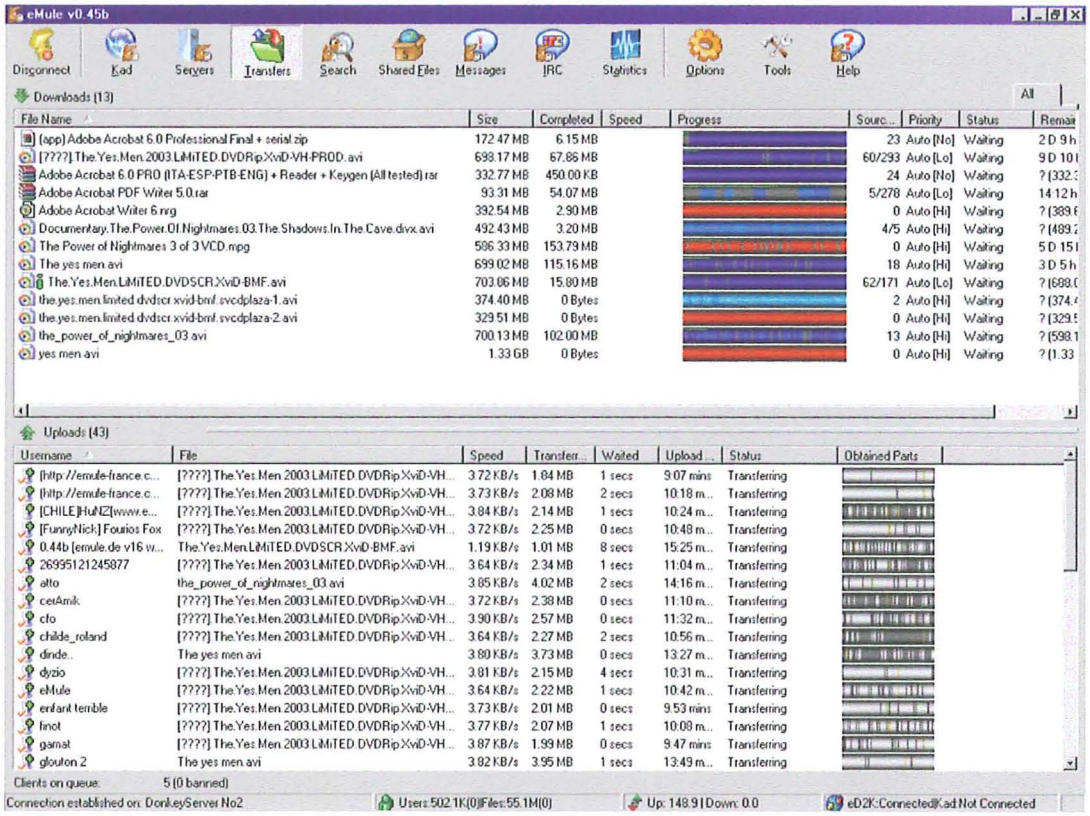
Napster (discontinued) (relied on central server)	**Napster** (http://www.napster.com) – re-launched in 2003 as commercial service; does no longer provide unregulated file-sharing in-between peers
Gnutella (completely decentralised; open source)	**Morpheus** (http://www.morpheus.com) (connects to newer **Gnutella2**, or **G2**) **BearShare** (http://www.bearshare.com) **Acquisition** (http://www.acquisitionx.com) **LimeWire** (http://www.limewire.com) **FreeWire** (http://www.freewirep2p.com) **Deepnet Explorer** (http://www.deepnetexplorer.com) **XoloX** (http://www.xolox.nl) **Kiwi Alpha** (http://www.kiwialpha.com) (connects to newer **Gnutella2**, or **G2**) **Gnucleus** (http://www.gnucleus.com) (connects to newer **Gnutella2**, or **G2**)
FastTrack (decentralised, but with 'supernodes' to enhance search; proprietary)	**KaZaA** (http://www.kazaa.com), **Morpheus** (http://www.morpheus.com) **Grokster** (http://www.grokster.com) **iMesh** (http://www.imesh.com) or, unauthorized, ad-free **KaZaA Lite** **Mammoth** (http://mammoth.sourceforge.net) **iMesh Light** (http://www.imesh-light.com)
OpenFT (separate, non-proprietary, open source version of FastTrack) eDonkey and Overnet	**giFT** (http://sourceforge.net/projects/gift)
eDonkey2000 and **Overnet** (the former relying on central server, the latter not)	**OneMX** (http://www.onemx.com) **eMule** (http://www.emule-project.net) **eDonkey** (http://www.edonkey2000.com) **Overnet client program** (http://www.overnet.com)
Direct Connect (loose connection of central servers enabling direct connection between every peer logged on to the same server)	**Direct Connect** (http://www.neo-modus.com) **DC++** (http://dcplusplus.sourceforge.net) **DCGui** (http://dcgui.berlios.de)
Manolito P2P (MP2P) (specialising in mp3 music)	**Blubster** (http://www.blubster.com) **Piolet** (http://www.piolet.com) **Rockitnet** (http://www.rockitnet.com)
SoulSeek (specialising in mp3 music)	**SoulSeek** (http://www.slsknet.org)
WinMX	**WinMX** (http://www.winmx.com)
Ares	**Ares** (http://www.aresgalaxy.org)
BitTorrent	http://www.bittorrent.com/
MUTE	http://mute-net.sourceforge.net/
Weed	http://www.weedshare.com/

Some multinetwork client programs:

MLdonkey (http://www.nongnu.org/mldonkey) accesses Gnutella, Gnutella2, FastTrack, Overnet, Direct Connect
giFT (http://sourceforge.net/projects/gift) accesses FastTrack, OpenFT, Gnutella
iSwipe (http://www.hillmanminx.net/iswipe) accesses Gnutella, FastTrack, OpenFT
Shareaza (http://www.shareaza.com) accesses Gnutella, Gnutella2, eDonkey, BitTorrent

source: Wang (2004)

Fig. 3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childe_roland [????].The.Yes.Men.2003.LiMiTED.DVDRip.XviD-VH... 3.64 KB/s 2.27 MB 2 secs 10:56 m... Transferring
dinde.. The yes men.avi 3.80 KB/s 3.73 MB 0 secs 13:27 m... Transferring
dyzio [????].The.Yes.Men.2003.LiMiTED.DVDRip.XviD-VH... 3.81 KB/s 2.15 MB 4 secs 10:31 m... Transferring
eMule [????].The.Yes.Men.2003.LiMiTED.DVDRip.XviD-VH... 3.64 KB/s 2.22 MB 1 secs 10:42 m... Transferring
enfant terrible [????].The.Yes.Men.2003.LiMiTED.DVDRip.XviD-VH... 3.73 KB/s 2.01 MB 0 secs 9:53 mins Transferring
finot [????].The.Yes.Men.2003.LiMiTED.DVDRip.XviD-VH... 3.77 KB/s 2.07 MB 1 secs 10:08 m... Transferring
gamst [????].The.Yes.Men.2003.LiMiTED.DVDRip.XviD-VH... 3.87 KB/s 1.99 MB 0 secs 9:47 mins Transferring
glouton 2 The yes men.avi 3.82 KB/s 3.95 MB 1 secs 13:49 m... Transferring
Clients on queue: 5 (0 banned)
Connection established on: DonkeyServer No2
Users:502.1K(0) Files:55.1M(0)
Up: 148.9 | Down: 0.0
eD2K:Connected | Kad:Not Connected

Fig. 4

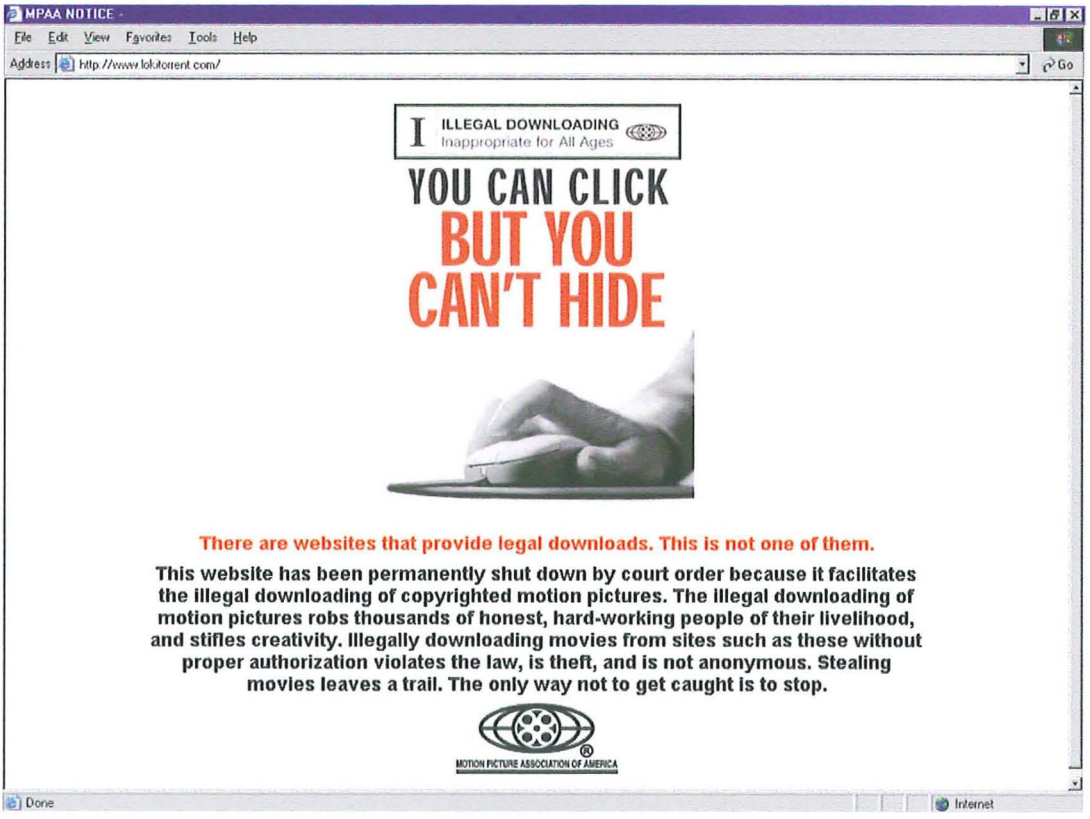
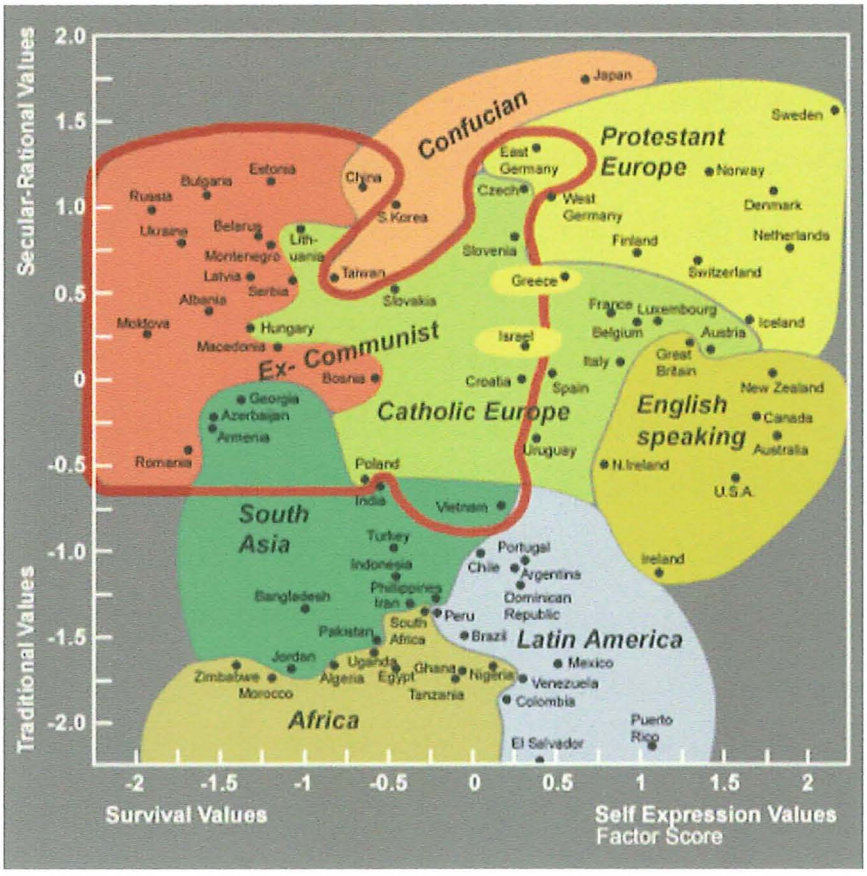

MPAA NOTICE
File Edit View Favorites Tools Help
Address http://www.lokitorrent.com/
Go
ILLEGAL DOWNLOADING
Inappropriate for All Ages
YOU CAN CLICK
BUT YOU
CAN'T HIDE
There are websites that provide legal downloads. This is not one of them.
This website has been permanently shut down by court order because it facilitates the illegal downloading of copyrighted motion pictures. The illegal downloading of motion pictures robs thousands of honest, hard-working people of their livelihood, and stifles creativity. Illegally downloading movies from sites such as these without proper authorization violates the law, is theft, and is not anonymous. Stealing movies leaves a trail. The only way not to get caught is to stop.
MOTION PICTURE ASSOCIATION OF AMERICA
Done
Internet

Fig. 5

This is a Pirate.
This is Not.
It's Time the Content Industry Learned the Difference.
The Big Content Companies are at it Again.
New technologies let us enjoy lawfully acquired music when and where we want. But some real pirates at the record labels want to stop Americans from using new products for noncommercial purposes in the privacy of their own homes or on the go.
Under proposed legislation, the most basic and well-established consumer practices such as creating a "my favorites" play list from your satellite radio program or recording free over-the-air radio could be outlawed.
Stop this unprecedented government intrusion into your private, noncommercial and legitimate home entertainment practices.
Tell the record labels to start cracking down on real pirates, not consumers.
CEA

Fig. 6


Secular-Rational Values
Traditional Values
Survival Values
Self Expression Values
Factor Score
Confucian
Protestant Europe
Ex- Communist
Catholic Europe
English speaking
South Asia
Latin America
Africa
Japan
Sweden
Norway
Denmark
Netherlands
Finland
Switzerland
Iceland
Luxembourg
Belgium
Austria
France
Great Britain
New Zealand
Canada
Australia
Ireland
U.S.A.
N.Ireland
East Germany
West Germany
Czech
Slovenia
Greece
Israel
Italy
Spain
Portugal
Uruguay
Argentina
Chile
Mexico
Venezuela
Colombia
Puerto Rico
El Salvador
Brazil
Peru
Dominican Republic
China
S.Korea
Taiwan
Estonia
Bulgaria
Russia
Belarus
Ukraine
Lithuania
Latvia
Serbia
Montenegro
Albania
Moldova
Hungary
Macedonia
Slovakia
Bosnia
Croatia
Georgia
Azerbaijan
Armenia
Romania
Poland
India
Vietnam
Turkey
Indonesia
Philippines
Iran
Bangladesh
Pakistan
South Africa
Jordan
Uganda
Ghana
Nigeria
Zimbabwe
Morocco
Algeria
Egypt
Tanzania

Appendix 2: Glossary

adware *(alt.* ***pop-up****)* – a piece of software designated to without warning open up intermittent advertisements on its hosting computer.

audioblog *(alt.* ***mp3 blog****)* – a blog which specialises in posting adjoining music files alongside its conventional, text-based posts (which are often informative, newspaper-article-like recommendations of the song or artist, which remain on the site even after the link to the actual mp3 file is removed). Often the music file is only available for a week or two, a temporal convention which partly stems from a material precondition in that free file-hosting services such as *YouSendIt.com* only host files for such limited time periods – it is furthermore generally very probable that IP legislation plays a role for such temporal restrictions. See for example *The MP3 Blogs Aggregator*, http://www.mp3blogs.org.

Audiogalaxy – an early p2p application (2001—2002) which was known for its web search interface and formidable caching of file-listings; it was not restricted to display only those files which were immediately available, but also those (often rarer) files which were only latently available.

avi file – one of the most wide-spread formats for video files; such video files always require the right decoders (codecs) to be played back.

BBS – Bulletin Board System; a prototypical version of the www, facilitated by telephone-based Bulletin Boards, which users dialled and directly connected to via modems.

bitrate – the number of bits that are conveyed or processed per unit of time in telecommunications and computing, and, effectively, the "resolution" by which an audiovisual file is encoded and plays back in real time. For music, 128 kpbs (kilobits per second) is generally regarded as acceptable quality; for DVD quality video, 5 Mbps is standard.

BitTorrent – the currently most widely adopted p2p-based file-sharing protocol, especially suited for large datasets such as software packages, films and discographies. It is fully decentralised, where any client is capable of preparing, requesting, and transmitting any data file. The BitTorrent protocol however relies on so-called ***trackers*** which are specifically configured pieces of software on servers that direct the network traffic (the actual "torrent") of data. Some Internet traffic monitoring services estimate that around a third of all traffic on the Internet consists of such torrents.

codec – a decoder which is installed on a PC to enable playback of highly compressed audio and video files.

cracker – a programmer who specialises in cracking the copy-protection of software.

darknet – fully encrypted p2p networks are commonly referred to as 'darknets;' impossible to oversee as totalities, with user identities and file origins similarly impossible to trace.

DC++ – the currently most popular client (particularly in Sweden) implementing the ***Direct Connect*** file-sharing protocol. The decentralised nature of p2p is here somewhat modulated through assigning specific servers to facilitate ***hubs***, which the clients connect to. These hubs feature lists of clients connected to them. Users can search for files and download them from other clients, as well as chat with other users.

DRM – Digital Rights Management. An umbrella term referring to technologies used by publishers or copyright holders in order to control access to or usage of digital data, software, and/or hardware, and to restrictions associated with a specific instance of a digital work or device. Common components of DRM can be copy protection, or other technical protection measures.

FLOSS – Free/Libre/Open Source Software. The term ***free software*** was introduced by Richard Stallman in 1983 for software which the user can use for any purpose, study the source code of, adapt to their needs, and redistribute (modified or

unmodified). The ambiguity of the English word "free" in the term means that, if not explained, 'free software' can be misunderstood to mean software that is available without charge. To address this, and to avoid talking about the impact on freedom of non-free software, many people have suggested alternative names, like 'open-source software'.

Freenet– a p2p-based file-sharing protocol designed by Ian Clarke (2000), primarily intended for disseminating censored material into and out of politically censored countries. Its quality as a fully encrypted, anonymous network makes it qualify as a *de facto* "darknet", but it is still under development, and considered by many to be fundamentally different from other peer-to-peer networks; it is somewhat more difficult to use and significantly slower.

FTP – File Transfer Protocol; a protocol devised for transferring and hosting files on the Internet. An FTP ***server*** can be set up by anyone with the necessary skills and equipment, and can serve as a private, instantly and globally accessible vault of gigabytes of files. This technology was thus used as a prototypical file-sharing system, although it lacks the decentralised characteristics of p2p.

GB – gigabyte = 1.000 megabytes. A terabyte (***TB***) = 1.000 gigabytes.

hacker – someone who creates and modifies computer software or computer hardware. In computer mainstream discourse, the term has come to signify a programmer who specialises in breaking and entering non-public databases, or in exploiting or extending existing code or resources. The term did not originally mean have this connotation; its origins relate partially to radio amateurs in 1920s (in the context of phreaking; exploring and expoiting telephone networks) but mainly to a technical hobbyist/tinkerer subculture primarily developed in the 1960s.

IP – Intellectual Property. This term is in this thesis deliberately put within quotation marks, due to its debatable character: although it is convenient for the beneficiaries of IP to regard exclusive rights as akin to 'property' items covered by exclusive rights are arguably not physical objects 'ownable' in the traditional sense. The inclusion of the word 'property' in IP can be seen as favouring the position of proponents of the expansion of exclusive rights in intellectual products thus:

> by helping them draw on concepts associated with those older forms of property in support of their argument for removing limitations on rights when those limitations would [in fact] be generally seen as inappropriate if applied to physical goods. For example, most nations grant copyrights for only limited terms; all limit the terms of patents. Additionally, the term is sometimes misunderstood to imply ownership of the copies themselves, or even the information contained in those copies. By contrast, physical property laws rarely restrict the sale or modification of physical copies of a work (something that many copyright laws do restrict). (Wikipedia: "Intellectual Property")

While intellectual property laws and enforcement may vary from jurisdiction to jurisdiction, there are some significant inter-governmental efforts to harmonise them through international treaties such as the 1994 World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). The controversial *Directive 2001/29/EC* on the harmonisation of certain aspects of IP (primarily in the field of copyright), commonly known as the EU Copyright Directive (EUCD) or the Information Society Directive (Infosoc), was passed by the European Parliament and Council on the 22/5 2001. This directive is widely regarded as a victory for copyright-owning interests (publishing, film, music and major software companies) over the interests of consumers, since it includes only very narrow exceptions to IP rights. On the 1/7 2005 Sweden amended its copyright laws to be harmonised with this EU directive.
An even more draconian IP directive, on the 'criminal measures aimed at ensuring the enforcement of intellectual property rights' (or IPRED2 for Second Intellectual Property Rights Enforcement Directive) was proposed on 12/7 2005 by the Commission of the European Communities. This directive incriminates infringements of intellectual property rights, and anti-file-sharing interest groups have lobbied to include file-sharing as one such infringement. On 25/4 2007 The

European Parliament voted to pass IPRED2 without substantive amendment, despite growing public opposition from across the European Union. The proposition has thus moved to the table of the EU Council, where it will be considered by representatives of the national governments of all EU Member States.

IP address – a number that represents a single unique computer on the Internet: every computer on the Internet must have one. IP (Internet Protocol) addresses are similar to telephone numbers in that each computer must have its own unique IP address (in the way that each telephone must have its own telephone number.) Like with telephones, there is a directory system, called the Domain Name System (DNS), which can convert a URL, such as www.microsoft.com, into a corresponding numeric IP address. IP Addresses are written as a sequence of four numbers, like this: 208.123.246.35. Static IP numbers are permanently assigned to a computer. Dynamic IP numbers are used to maximize the use of the numbers available to an ISP, and are temporarily assigned to a computer during the time it is connected with the Internet (p2pnet.net 2005).

IP registration – through registering IP addresses (information which can only be acquired through each user's respective Internet Service Provider), authorities or companies can monitor certain aspects of an individual's Internet use, including which packets were sent through which protocols.

IRC – Internet Relay Chat; mainly designed for group (many-to-many) communication in discussion forums called ***channels***, but also allows one-to-one communication and data transfers via private message. Technically, IRC provides no file transfer mechanisms itself; file sharing is implemented by IRC clients, typically using the Direct Client-to-Client (DCC) protocol, in which file transfers are negotiated through the exchange of private messages between clients.

ISP – Internet Service Provider; a business or organisation which provides consumer access to the Internet and related services. Traditionally, most ISPs have been run by telecommunications companies. The technologies facilitating the end-user Internet connections are generally dial-up and DSL (Digital Subscriber Line).

LimeWire – a file-sharing application used to access the ***Gnutella*** p2p network.

metadata – the data adjoining digitized 'content,' describing it; for example, the tag listing song title, album and artist name in of mp3 file. Note that with digital files, the physical separation between 'content' and metadata is entirely arbitrary; the address and message are part of the same informational unit, or packet.

mp3 file – a sound file compressed with the MPEG-1 Audio Layer 3 encoding algorithm; a vastly popular format since its gradual inception during the 1990s. Mp3 is a lossy format, providing a number of different options for technical resolution, or bitrate.

moderator – a user granted special authorisation to enforce the rules of an Internet forum (such as a message board or an electronic mailing list).

Napster – an online music service which was originally a file-sharing service created by Shawn Fanning in 1999. Napster was the first widely-used p2p music sharing service, and as it became widely adopted, it was arguably one of the most well-known and influential Internet applications ever.

packet – a formatted block of information carried by a computer network, facilitating transmission of longer messages more efficiently and reliably. A packet consists of three elements: a *header* marking the beginning of the packet; the *payload*, which contains the information to be carried in the packet; and a *trailer*, which marks the end of the packet. Different communications protocols use different conventions for distinguishing between these elements and for formatting the data. Note also (see ***metadata***) that with digital files, the physical separation between these three is only determined by convention, not by physical separation (as in a traditional paper letter). This is why monitoring only 'sender' or 'receiver' information is impossible without also encroaching on the information carried in the packet – something which has significant consequences for privacy, encryption and IP registration.

protocol – a convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints; he rules governing the syntax, semantics, and synchronization of communication. One very common protocol is TCP/IP, which implements communication over the Internet as we know it; some other ones are HTTP, which facilitates hypertext documents on the World Wide Web, and FTP, which is directly designated for file transfer.

ratio – many file-sharing networks let node administrators employ a ratio system, where users have to share a certain amount of content before they can download; for example, a user might be allowed to download 20 MB of files for every 1 MB uploaded. Often these systems have a qualitative requirement too: not any file can be uploaded to generate a good ratio, but a file which is deemed by administrators to have qualitative value for the network as a whole.

SoulSeek – a p2p application which was originally designated by former Napster programmer Nir Arbel to cater primarily for underground electronic music, but nowadays serves as a network for dedicated music fans of vastly differing (however, mainly "alternative") genres.

spyware – software that collects personal information about users without their informed consent. The term (coined in 1995 but only widely used since around 2000), is often used interchangeably with adware and malware (software designed to infiltrate and damage a computer respectively).

URL – Uniform Resource Locator. A web address (the plaintext identifier of what is in fact a numerical IP address) is commonly called a URL; to be more technically precise this term should however be replaced by the term ***Uniform Resource Identifier*** (***URI***). Nevertheless, by the time the term URI was standardised as the best one suited to the concept, the term URL had gained widespread popularity, and still remains in popular usage.

warez – generally referring to copyrighted material traded in violation of copyright law, when being distributed in the (primary) mode of circulation among organized release groups (often referred to as 'the scene'), before the material is dispersed further onto p2p-based file-sharing networks. Due to the temporal dimension inherent in this distinction, warez tends to stress those pieces of software or content that are still commercially unreleased, or only recently put in circulation (cf. the term '0-day warez').

Primary source and recommended reference for further information: Wikipedia.