

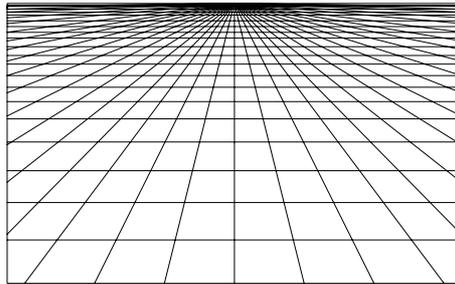


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A Tale of Two Machines?-an Actor-Network Approach to the Napster Case

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Abstract

The aim of this study is to tell the story of how one artefact, Napster, entered a network of music production and distribution and challenged the 'status quo' as well as opening up new opportunities for actors involved in this area.

To account for the challenges and opportunities arising from the interaction of this artefact with said environment I see a 'social paradox' as instrumental in escalating innovative incentives. This paradox addresses the reciprocal relationship between a 'corporate' and a 'counter culture'. To explore the co-dependency as well as the 'tensions' between these cultures I have relied on earlier studies of this field (mainly Toynbee and Negus) as well as the writings of Deleuze and Guattari. To track the development of the Napster 'story' I have searched for 'clues' in newspaper and magazine articles and interviews as well as web-sites as regards to the 'inscription' and 'translation' activities concerning the artefact.

These concepts from 'Actor-Network Theory' were utilized to gain insight into the nature of the interaction between actors and the forces involved in the expansion and transmogrification of the network 'geography.' The sum total of statements made as well as data showing that while download activities services, on the net were, and are still escalating without a verified connection to a drop in CD sales this case does well exemplify the constructive nature of the 'social paradox' exemplified further by the escalation of developing 'control' software and subscription services. This, in addition to illuminating the importance of the inscription process for negotiating, through translations, a successful outcome for a 'project.' The paradox facing Napster as of today is that the 'deal' they struck with users through the inscription was rejected by the Recording Industry Association of America which through the courts, forced Napster to 're-inscribe' -change 'the deal' with the users. So, now the company faces another negotiation, translation process with the users.

KEYWORDS: Napster, Actor-Network Theory, inscription, translation, Deleuze and Guattari.

PART 1

INTRODUCTION:

The objective of this study is to track how one actor-network('Napster') intrudes on a network(the industry producing and distributing music) while simultaneously creating a new network, and how the tension between two "poles" /"cultures" is vital for the equilibrium within as well as to the expansion of the network. It might be the case that a balanced distribution of 'oppression' and 'opposition' in such a network is vital for innovative incentives.

I see a 'paradox of social action' as central to this analysis:

The music industry, as representatives of 'corporate culture', is relying on sub-cultures (independent musicians, artists and, now also 'technophiles') to supply new input to continue a path of expansion. These 'outside actors' do, however, have the potential of generating 'new lines of flight' (Deleuze, Guattari), and 'the industry' will, inevitably, employ the strategy of appropriation(of the different actors) to marginalize or even obliterate these 'structures'. Consequently if this 'strategy' is too successful they risk simultaneously destroying their own momentum and inertia will set in.

On the other hand, the continuous 'repressive' nature and activities of 'corporate culture' is a presupposition for any budding 'sub-' or 'counter culture'. If there is no existing 'repressive' force to counter, 'counter culture' will cease to exist within this realm. I plan to account for this dynamic by relying on some historical' as well as contemporary examples from the music world with the guidance of studies(Negus, Toynbee, Firth) on the industry, and, furthermore draw a comparison between the works of Deleuze and Guattari with the focus on what they call 'Reterritorialization and deterritorialization' which involves how structures operate and transform through *tensions* .

I feel this story illustrates how one *assemblage*(Napster)creates a 'line of flight' from an 'organized' territory(the Corporate music industry).

And , I will rely on 'Actor-Network Theory' to describe the network trajectory of the object(Napster) encased by this dynamic.

The emphasis of the analysis will be on the central, within 'ANT', notions of *inscription* and *translation*. And, furthermore, to show how technology (in this case, 'Napster') operates as the 'text' in which the discourses are played out, and therefore acts as an integral part in 'staking out' (new) territories. I hope this study could make some contribution to the debate concerning the practice of ANT by following the 'writing' of this particular 'text.' And, following events as they unfold is perhaps a method that, despite limitations, offers a type of unique insight into the dynamics of a case and merits study because it offers the opportunity to regard the case from a personal angle, not influenced by more or less 'identical' studies. This case having the implications it has for a wide variety of practices within a wide range of fields (legal, artistic, Information technologies, music distribution, market analysis etc. etc.) might offer a unique contribution to the study of the 'technical' and 'the social' dynamic. 'Opponents' on both sides of the corporate/counter-culture 'divide' claim that Napster-type technology will be the demise of the music industry, or at least cause a radical restructuring, it is therefore necessary to address this question—not to predict the future, but, if possible, to deduct some indications from the data, the textual analysis and interviews as well as the historical and social context. When referring to the 'inside' and 'outside' of a certain dynamic or assemblage it is helpful to keep the words of Bachelard in mind: (p.211.PS.,1994) "Outside and inside form a dialectic of division, the obvious geometry of which blinds us as soon as we bring it into play in metaphorical domains. It has the sharpness of the dialectics of *yes* and *no*, which decide everything. Unless one is careful, it is made into a basis of images that govern all thoughts of positive and negative." Outside and inside *do not* equal positive and negative....

Theories and Methodology

As noted in the introduction it is an aim to shed some light on the reciprocal nature of the relationship between a 'corporate' and a 'sub-culture' in relation to the music industry. To see this as a 'creative' conflict leads to the rejection of the view that this one artefact, Napster, will be the 'end' of the industry as such. I intend to present a range of view-points regarding the conflict between the Napster Company and the music industry as well as views regarding more general assumptions on the relationship between the corporate side of the music industry and those representing independent activities. This reflexive practice has a place in every section of the study, and although 'polyvocality' is desirable, and to represent as many different voices as possible is an aim, the material has alas but one 'organizer' so there will not be any 'pure' part of the study-untouched by debate or personal biases. This is a case study employing and contemplating ANT practice and as such may differ from more 'traditional' (as described by, f.ex. Robert Yin, 1989) ideas of case studies. One important aspect is to do away with oppositions and classification.

Michel Callon (ST, 1992) claims that when utilizing a network vocabulary and method, "the opposition between description and explanation is in large undermined..." 'descriptive' and 'explanatory' Being two of the categories Yin supposes for the case study. I, furthermore, follow Robert E. Stake (1995) on how *intrinsic case studies* (one particular case focused upon) and *instrumental case studies* (study of a particular case to "provide insight into an issue or refinement of theory.") have no line distinguishing one from the other, rather "a zone of combined purpose separates them."

It is important to stress that the choice of research design is "to optimize understanding of the case rather than generalization beyond." (Stake, 1995) I will, throughout the study, try to emphasize the uniqueness of this particular case as well as try to show how events are part of certain 'mechanisms' and dynamics that did not surface simultaneously with this case.

The 'philosophical' works, mainly Deleuze and Guattari, are chosen to try and place the story within a larger framework and to 'test' the empirical data (the numbers and 'statements') against some of their ideas, especially concerning entities such as *territory*, *strata* and *becoming*. D and G set up a number of binary opposites like, *the pack/masses*, *line of flight/capture*, *molecular/molar* etc. and move on to explore the complexities of the relationships between forces and entities through a deconstruction of said binaries. The outset for our story is how 'assemblages' are "produced in the strata" (which are acts of capture), but "operate in zones where milieus become decoded; they begin by extracting a territory from the milieu." (p.40.1988. 'TP.' Deleuze/Guattari) Both *strata* and *assemblages* are "complexes of lines." - One type forming an arborescent system, the other type, the *rhizomatic*, is molecular and "frees itself, breaks or twists." (1988.D/G) This situation where *lines of flight* might operate in the strata and acts of capture might stratify the assemblages is a prerequisite for how to view the relationship between one *machine* (Napster) and its environment. This machine is also an actor-network and this environment is a network as well, they're *structures*, and both Jean Baudrillard on the 'operationality' of systems and John Law's notion of structure as a *process* are relevant ideas that contribute to the understanding of how networks 'work.'

The point of departure, however, for how to approach the questions concerning how networks emerge, transmogrify and multiply is Deleuze and Guattari's description of the *rhizome*.

It is a system which may break or shatter, but since it is "all lines" it will start up again on one of the old or on a new line.

“Every rhizome contains lines of segmentarity according to which it is stratified, territorialized, organized, signified, attributed, etc., as well as lines of deterritorialization down which it constantly flees.”(p.9.1988.’TP.’ Deleuze/Guattari) These ‘lines of flight’ are always a part of the rhizome which signifies that the very element that make a *rupture*-creates this flight might carry the potential for a ‘restoration’ of power to “a signifier.”

Viewed in this light it is not feasible to conclude that networks have any stable positions or status within, and that making ‘totalitarian’ assumptions about the outcome of negotiations and controversy between actants will not lead to any insight regarding the ‘totality’ of the case. A break down might always be followed by a ‘new flow.’

It is not within the scope of the thesis to conduct a philosophical or ideological debate, but the goal is to compare these ideas to other studies on the field of the ‘cultural’ industries to create a ‘setting’ for our story.

The studies of Keith Negus, Jason Toynbee and Simon Firth address the relationship between independent actors and a corporate ‘territory’ in the music industry. Furthermore this study will concentrate on two major ideas from the realm of Studies of Society, Science and Technology and ‘Actor Network Theory’;

‘Inscription’ and ‘translation’- how a designer tries to ‘hook up’ with social values and user ‘desires’ by choosing certain ‘inscriptions’ in the ‘text’ (the artefact), and then which efforts are made to ‘translate’ other actor interests so that they align with your own in the attempt to ascertain one particular ‘interpretation’ of the text. This is to try and track down how entities in a network; human and non-human affect each other, and co-create an environment.

If any assumptions about the consequences of the ‘entrance’ of one actor-Napster into the network is to be made it is crucial to try and reach a thorough understanding of the network mechanisms and dynamics, which includes trying to account for more ‘intangible’ variables as *power, strategy* and *control*.

The outset of the analysis will be Bruno Latour’s (as well as Madeleine Akrich and Michel Callon’s) ideas of *inscription* and *translation*, as well as Grint/Woolgar on ‘technology as text’ and ‘configuring the user.’ These concepts address the relationship between the designer(s) of an artefact and the surrounding environment.

A central question is the role of strategic decisions on the outcome of an object trajectory within a network dynamic.

I would argue that the emphasis on *action* in this context relies heavily on *strategic* action, and if this is the case what implications does this have for their effectiveness as narrative tools? Deleuze and Foucault refer to “anonymous strategies”(1988. ‘F’Deleuze) and “haecceities,” – “clusters of relations”(1980.’P/K’. Foucault), and whether these types of actions might be accounted for within this context is relevant to inquire.

Throughout the study these three strands of theory, Philosophy, cultural studies and ANT should overlap as well as illuminate different aspects of the story. And, since the main ‘analytical tool’ is ANT a summing up will be made on its relevance and possible contradictory elements in this ‘interplay’ with other theoretical works, as well as addressing the critique made by Collins/Yearly(1992) on the method as ‘performed’ by Latour and Callon and Silverstone/Haddon(1996) on the concept of ‘configuring the user,’ and conclude from the experiences gathered through the case.

I have , in this paper, used several different terms for one 'thing,' this is not a strategy to make things seem unduly complicated but, on the contrary, it has been one to clarify matters and a method to try and capture as many nuances as possible concerning the rhetoric and strategies as well as the actions concerning, and surrounding, each 'thing.'

'The Machine'

The idea of technology as 'machine' might be the most 'problematic' for an analyst to confront in this particular setting.

Some theories will deal with 'machines' as interchangeable with a purely 'technical' construction which is rigid and (con)formed, or, at least, *in creation not creating*. The Deleuze-Guattarian idea concerning 'machines' has quite different repercussions.

-A 'machine' could be social bodies, industrial complexes, psychological or cultural formations, instruments, human individuals.....'

"THE 'MACHINE' is *always productive, as against the 'anti-production' of a fixed structure* It's productivity lies in the creation of discontinuities and disruptions, it dislodges a given order and runs against routines and expectations."(1998.'M.M-H.M.'

A.Broeckman)

"The machinic appears in a mode of immediacy and incidentally, confronting a structure with other potentialities and questioning its given shape."(1998 .A. Broeckman). In 'Thousand Plateaus' Deleuze and Guattari put forward the notion of the 'machinic phylum:" We may speak of a machinic phylum, or technological lineage, wherever we find a constellation of singularities, prolongable by certain operations, which converge, and make the operations converge, upon one or several assignable traits of expression."(TP 406)

We will examine the 'machinic' aspect of Napster as a 'minor media machine' therefore having the potentiality of "following the deterritorializing flight of the phylum."(1998. A.Broeckman)

It is, consequently, critical to note that when quoting from other sources the word 'machine' has other connotations, which I plan to clarify within the framework in which it occurs.

Actant

"Whatever acts or shifts actions, action itself being defines from a list of performances through trials; from these performances are deducted a set of competences with which the actant is endowed.

An actor is an actor endowed with a character(usually anthropomorphic):"(1992. 'ST' Akrich/Latour)

The use of actant or actor for the object is employed in this paper usually to emphasize the network aspect of the analysis.

'A Matter of Fact/Black Box'

According to Bruno Latour(in 'Science in action') the 'matter of fact' 'works' in the same fashion regardless whether we are talking about regular scientific 'facts' or about (technical) 'objects.'"A matter of fact' is a 'black box' it is the end result of negotiations, and, at times, controversy.

The 'black box' seems to have the gravitational powers of a 'black hole'; objects 'crave' definition and settlement out of the turbulent centre of conflict, and seem eager to 'navigate' towards this 'state of being.'

This is , naturally, not an autonomous 'motion,' but it follows along a path that is revealed and encouraged by the actors that have interests in one particular end result or definition.

And, the nature of this 'momentum' is defined by all the (in)vested desires, some searching the 'black box,' some its dismantling.

One of the interesting features of this case is the status of the 'case' as 'unsettled'(even if the court-cases have come to a conclusion).

As Text.

“‘Text’ and ‘context’ are simultaneously produced, we do not ‘follow’ the ‘text’ through ‘context.’”(p.106. 1992.Latour)

Latour claims that if one studies an object by investigating the ‘path-building,’ ‘order-making’ etc. it is not necessary to specify whether it is an object or language one is analyzing. This is a method that creates interesting ‘openings’ as well as ‘traps’ for the analysts.

Placing oneself in the network in the role of ‘*analyst*’ then entails the responsibility to navigate with care through these challenges, and the storytelling here is based on this idea of ‘literary analysis,’ so one objective is to learn from telling this one particular story what this framework can offer to this ‘telling’ and to learn something about the ‘frames’ as well.

Furthermore, I plan to incorporate some of Grint and Woolgar’s ideas concerning this concept, "Construing the machine as text encourages us to see that the nature of an artefact is in its reading."

It is important to note that the authors reject the idea that "any reading is possible." This is a delimitation of sorts which needs to be accounted for;"...the machine text is organised in such a way that 'its purpose' is available as a reading to the user." (p.72.1997. Grint/Woolgar)

The aim of the *description* of the artefact is to follow the action involved in its writing(=construction) and reading(=use). The consequences of this approach will be further discussed in the analysis section as well as in the concluding segment.

The aim of constructing such an analysis based on the 'tools' and theories presented here is to explore the processual nature of artefacts and structures which might lead to some conclusions regarding the development of this particular artefact, and the context it is simultaneously 'writing' *and* 'belonging to.'

The notion of the 'rhizome' will need to be contrasted to 'other' concepts of the systemic that one might encounter through the engagement with this story. The way ANT presents 'networks' as well as how a network is perceived of in articles regarding the controversy might yield certain discrepancies regarding system ideas.

How relevant the cultural divisions are needs to be addressed, and to what extent it is possible to track the emergence of innovations, and their dissemination as resulting from this 'cultural tension.'

Does the emphasis on 'balancing' these conflicting elements give a pertinent depiction of how Napster emerged and posed a challenge to the 'status quo'? To what extent is Napster giving the industry a 'purpose' on the net rather than representing a type of technology that will be its 'demise'? ("I'm convinced that the traditional music business is finished. Napster and other environments like it will polish off the likes of BMG and Tower Records within five years"- 2000.J.P.Barlow, independent songwriter. "As technology (players, broadband) becomes commonplace, three to five years from now, Napster-like sites will spell the death of the record stores and a total rethink, if not disaster, for the record companies.

Everyone will be affected, artists, record companies, publishing companies and the public themselves.” -Miles Copeland, manager for ‘Sting’ and head of ‘Ark 21 Records’, Column-RIAA web-site)

Furthermore, ‘the Napster’ story intends to portray how a ‘crisis’ might emerge as a result of a *gap* between *inscription* (by the ‘designer’) and sub-scriptio(n) (by other actors in the network), and the importance of *interpretative flexibility* (1994. Bijker) in the closure process. The ‘end point’ in a sense of a translation process is where a consensus is formed among the actors (at least among those belonging to the most influential social group), and this particular case should demonstrate how the ‘success’ or ‘failure’ of an artefact is less dependent on technical quality than the result of prevailing translation efforts. This is why Latour proposes that one should be ‘symmetrical’ as regards to ‘false’ and ‘true’ claims, the truth is *not* “out there

METHODS:

The employment of rhetoric seems to be very pivotal in the 'closure-process' of this particular technology, and this question needs to be dealt with in a *textual analysis* on magazine and newspaper articles regarding the case as well as web-sites and transcripts from the injunction and ruling in the law-suit between Napster and the Recording Industry Association of America (RIAA) which might contribute to the understanding of the ‘inscription’ and ‘translation’ activities involved as well as the ‘variable geometry’/‘the interpretative flexibility’ of the artefact.

Furthermore, it is necessary, I believe, to get as complete a picture as possible of the 'nature' of the controversy, and the tangled 'weave' of interests and ideologies, even, that color the 'proceedings' and this might best be achieved in the light of a *case study* on the subject. This would present the data, mainly gathered from articles and web-sites, as a story to be told by the different actors involved in its denouement, in addition to some interviews to broaden the number of perspectives.

As this is a study on an *evolving* case it seems reasonable not to search for too many answers among the ‘statements’ made by numbers. It is, however, a fact that numbers form part of the arguments made, and as part of a statement they need to be scrutinized. These data concerning number of users on the Napster site and CD-sales etc. have been gathered from a number of sources including searching on the web as well as newspapers.

As the ‘corporate domain’ of the industry is more *visible*, it has been easier to obtain information from these sources(quotes in magazines, the RIAA web-site et al.), so to present a more balanced view I’ve conducted interviews with Dave Cawley from the independent label, ‘Fat-Cat Records’ and Howard Slater who has been involved in a magazine devoted to ‘post-media’(Guattari)activity in the arts.

The structure of the ‘Tale.’ basically involves telling ‘the same’ story three times over.

The first time(Ch.1) includes ‘piecing’ together the dates and ‘facts’ into a coherent narrative of events.

The second time(Ch.2) focuses on presenting a ‘setting’(‘Territories’) for the story followed by a development of a trajectory of the artefact from the inscription process(‘Signed, Sealed, Delivered’) through the translation strategies(‘Translation’)involved in building the ‘project’ by enrolling allies, and a depiction of the encounter with ‘*anti-programs.*’

The third telling(Ch.3) discusses the basic premises for the story-telling, the effectiveness of the narrative ‘tools’ and possible further developments for the artefact and its environment.

Limitations and Delimitations.

This is a truly multifaceted tale, there are ideological, historical, legal, technological and cultural as well as market related issues.

Each aspect justifying extensive study in itself. My focus, however, is on the *storyline*- the network aspects of Napster and these other 'themes' in relation to the artefact are 'invoked' not to exhaust all the mutually affective elements, but to place the story in a 'setting' and try to account for the network changes that are a result of this artefact and its interaction with a network. This leads to taking a 'holistic view' of the case at the sacrifice of certain details.

Ideally I would have liked to have based the study on interviews and filled in the gaps through articles in stead of vice-versa. But, a major downside tworking on a 'hot case' is access to subjects.

Neither those involved in this area from the 'corporate' side(in one of the major companies) nor the people at Napster were willing to take time out from busy schedules and answer any questions. This was something I had anticipated, so I chose this approach as the one that could provide the most insights to the case.

To try and keep the storytelling as lucid as possible I feel that it is appropriate to present a brief overview of the literature search in this section and return progressively to a more in depth presentation of theories as the analysis develops. To make the 'processual' aspects of the artefact's interaction with the surroundings a focal point demands attention paid to 'chronology,'

and that events not be separated from 'theory' in a limited 'milieu' such as this paper. This is the reason why there is no 'traditional' literature review followed by methodology and then the facts.'

The aim of the thesis is to portray the 'story' of Napster as clearly and extensively as possible.

PART 2

Chapter 1;

Introduction

It is the best of times, it is the worst of times. It is a tale of two machines. One being 'Napster- the 'pirate-machine,' the other being Napster-the 'liberator machine,' or it might be about the 'revolutionary machine,' and the 'capitalist machine,' even. Always creative or always destructive. The 'Napster-artefact' is, in a way, "all things to all people" depending on what light you see it in, and from what angle you observe it from. So, as a matter of fact one could claim that this is a tale of hundreds of machines (entities, units, cultural or personal), and of how one artefact might, in fact, contain several 'machines.'. There are large machines, like the looming 'corporate' machine/s, and smaller more supple machines like the 'sub- culture-machines,' machines within machines making their presence felt throughout this story. Why then the number two?

Well, it seems to make sense to set up the 'oppositions' (Revolutionary/capitalist, corporate/counter-culture) and the 'poles' from which the different 'energies' as well as actors flow back and forth between, and we should, during the course of this 'tale', be able to see that these 'oppositions' have no moat, no impenetrable walls separating them, and that metamorphosis's and fusions of the mercurial actors in this 'play' is quite commonplace. We will also see the image of two very different machines emerging from the discourse, as 'Q Magazine'(May 01 issue) put it, "in the eyes of the music world, Napster was either the underdog or the devil."

The first segment of this study is "'A Tale..'" in which the 'story' of the artefact is pieced together through articles and interviews. It should read like a story where the protagonists tell it from their own point of views, though the author cannot claim absence!

A Tale of Two Machines?- the Story so far....

"What are the roots that clutch, what branches grow
Out of this stony rubbish? Son of man,
You cannot say, or guess, for you know only
A heap of broken images, where the sun beats,
And the dead tree gives no shelter, the cricket no relief,
And the dry stone no sound of water. Only
There is shadow under this red rock,
Come in under the shadow of this red rock),
And I will show you something different from either
Your shadow at evening rising to meet you;
I will show you fear in a handful of dust."

(*'the Wasteland'*-T.S.Eliot)

Before the new millennium the world of online file-sharing was somewhat of a wasteland. A new technology, 'MPEG 1 level3 Codec(MP3 for short)' was developed by software engineers to enable a sound file to be compressed to a 12th of its original size by removing the sounds that were inaudible for the human ear. This would seem to be the new format that the music industry had been eagerly awaiting since after the shift from LPs and cassettes to CDs(and the re-circulation of back-catalogues in the new format) sales had been stagnating. A new 'boost' provided by a format shift would surely be welcomed, and could MP3 be it?

Well, no, actually. It seems fair to say that this was regarded as too much of a volatile format since it was not implemented in the conventional structures for pricing, marketing and distribution and seemed to be too elusive for control.

"Let's ignore it and hope it will go away," might have been an attitude that some planners and strategists in major record companies subscribed to.("It takes an enormous amount of effort to determine how to offer music to consumers online in a way that meets their needs and grows the business."-the Recording Industry Association of America/RIAA,21/08-00¹)

It took the efforts of 'one man'(let it slide for now...) to radically change the situation by 'planting a new weed, 'Napster.' At the Northeastern University(1998) in Boston 19 year old Shawn Fanning was working on a code that would land him a few law suits, the cover of Times Magazine, numerous awards and ultimately a software company that might change the set-up of the music industry.

¹ All quotes from the RIAA are, unless otherwise indicated, taken from their web-site: www.riaa.com

According to legend he was working around the clock, basically learning windows programming in addition to Unix server code that he already mastered as he went along, always with his laptop wherever he went.

The inspiration for this fervour evidently came from friends complaining about the unreliability of file sharing, and he says(to Ansir comm.Inc.) "I had this idea that there was a lot of material out there sitting on people's hard drives, I just had to figure out a way to go and get it."⇒see. '*Signed, Sealed, Delivered*' regarding the technical.

An interesting view on why and how it was just Fanning that managed to piece together this solution was given by Ali Aydar, friend and co-worker at Napster(to Ansir Comm.), he insists that Napster couldn't have been written by a team, nor by anyone 21 or older!" Shawn could focus on problem solving-and there was no one to tell him he couldn't do these things. There was no one who ever really understood what he was doing. He didn't even understand the legal issues involved. It was such a *cool idea* that he never once stopped, never really came up for air."(my italics)

Napster took advantage of P2P² technology and functioned as a directory of MP3s while connecting together via its central server music fans with files to share on their hard drives. You just searched an artists name or a song-title, and a maximum of 100 'hits' would turn up, then doubleclick 'download', and you'd have a new, instant, addition to your music collection! Napster made access to(working) files a lot easier,

² Connecting the hard disks of individuals together in an independent network.

and by creating an application that *worked* Fanning attracted the attention of the Evidently Napster became the fastest growing site in history, hitting the 25 mill. mark within a year .

Crisis

As users flocked to the site like seagulls to a ship loaded with fresh catch, the RIAA-Recording Industry Association of America took (in Nov. 1999) action, of the legal kind. RIAA filed a 'contributory infringement of copyright' suite, each individual 'infringement' with a \$ 100.000 price tag. It is important to note that, at this point in time, there were no indications whatsoever that Napster was 'harming' record sales, thus indicating that the case was about more than profits, whether principles, legitimacy or control or all of the above. ("In view of the healthy state of the US economy, it would be surprising if record sales did not increase. Common sense suggests that sales would have increased even more without Napster."-RIAA. Figures from IFPI-the organization representing the global recording industry) show (2000) that CD sales grew globally with 2.5% with a particularly strong increase in Europe (5.1%).)

As spring was turning into summer in May 2000 a black van drove up to Napster Inc.'s HQ in San Mateo, California. It could, perhaps be called a 'commando raid' of sorts, the van was delivering 13 boxes containing the names of 300 000 Napster users who had been downloaded the music of the American rock band Metallica during *one weekend*. Metallica had requested that Napster removed their songs from their directory since this was a violation of copyright, and Napster agreed to remove people from the list who were trading if they were individually named, and that's what Metallica did, as well as suing the company and Yale, Indiana, and the University of Southern California for violating 'the Racketeering Influenced and Corrupt Organizations Act.'

They clearly wanted Napster to stop "looting our art" as Metallica's drummer Lars Ulrich put it (and in the process alienating scores of fans that their success was dependent upon, and spawned dozens of "I hate Metallica" campaigns on the net.). Napster's weakness (as an independent, renegade operator) was becoming apparent, the system that made it so easy to use also made it very easy to monitor (having a central server which organized the search).

The short term consequences, however, of the law-suits were to create an even bigger 'buzz' around the site, and user numbers mushroomed. By now, even though no profit was being made, investors in the San Francisco Bay area had realized Napster's business potential and invested enough money to a.o. enable the company to hire 'big-shot lawyer' David Boies (counting among past clients Al Gore and Microsoft) to argue their case for the courts. Despite having the financial clout to fight a hard legal battle the ruling of Judge Marilyn Patel (in July-00) was not very uplifting for the company (see; appendix 1). She found that there were no proofs of any significant 'non-infringement' activity through Napster, and that although there was no evidence of any widespread sales of copied material, the users were still benefiting financially by getting for free what they otherwise would have bought. She ruled that Napster had to stop free access to copyrighted material within a couple of days. The company appealed. By now Fanning also had to release the reins of the company which was molded into a standard business model headed, eventually, by CEO Hank Barry (a copyright specialist)

And, thus the image of the 'independent renegade' vs. 'the Giant Corporate machine' started cracking up, and was shattered completely, in the eyes of some, when the German entertainment giant Bertelsmann Music Group (BMG),

in October 2000, bought into Napster by issuing a massive loan (reportedly \$50 mill.) for the company to develop a paid subscription service. This was a move which, moreover, discouraged impending lawsuits from other record (independent) companies.

The 'Softwar'

The ruling in the 'RIAA vs. Napster case' did not do anything to discourage the amount of actants involved within this network, in fact it generated a virtual 'software war.' The situation was, Napster had to cut access to copyrighted material. Fine, how?

'Monitoring' is one thing, 'control' could be quite another.

The second Napster verdict would further bring the 'control issue' to the centre of the proceedings, and, the importance of 'Digital Rights Management software' (DRM) surfaced as a key factor after the second Napster verdict.

" While they would never admit it, Napster is doing the record industry a huge favor. Napster is demonstrating that the only way to control copyright violations is to protect their content before they release it to the public. The technology to do so, called Digital Rights Management, is new but rapidly maturing. The recording industry, however, has failed to adopt it, largely due to political in-fighting and poor communication. Perhaps Napster will force the music industry to be more proactive with technology." ('Suing is better than doing,' By Bill Burnham, ZDNN May 9, 2000).

-12th of February; California's ninth circuit of appeals ruled that Napster was guilty of "vicarious copyright infringement," ,however, it said it is the responsibility of the record labels and music-publishing companies now suing Napster to show which tunes should not be

freely traded. That means an earlier stay of the injunction issued by the Appeals Court July 28 will remain in effect until the injunction is amended by Patel.

-Feb.27/02/01- BMG was reported to be testing a Napster 'clone,' 'Snoopstar', unawares to Berry and the 'Napsters.' A backup was obviously prepared for the possible shut-down of Napster.

(12/03 CNN.com)-PulseNewMedia,a Canadian software firm releases a software that alters the names of MP3 files('Metallica' becomes 'Etallicam') and thus enables downloading from Napster.

-"We are trying to allow users to download files they are *entitled* to"(CEO of PNM, James Chillcott).(my italics) the main reason for releasing the software is to "create a better recording industry in general."

While Napster has begun blocking access to some files, its efforts have been thwarted by users who have changed file names by deliberately misspelling titles or by using programs like the Pig Encoder to change names.

(20/04/01)- CNET News.com reported that Napster licensed technology from 'Relatable' that identifies wavelength patterns produced by their sounds. The technology, called TR<M, identifies each song by comparing acoustic patterns(the song's 'fingerprint')instead of the ,inadequate, text-based system.

This is, naturally, not a 'foolproof' system, the compromising actor could feed nonsense codes and numbers while the software searches for song identifies.

The software mirrors a program released March 4 by U.S. company Aimster that lets users trade files by piggybacking on instant message networks.

Aimster Chief Executive Officer Johnny Deep said last week that changing file names with encryption makes it illegal to systematically remove the altered files. Deep said Napster might be able to remove encrypted file names one by one, but it couldn't "reverse engineer" the NapCameBack Encoder to remove all songs that had been encrypted -- even though the encryption is so simple that anyone can deduce the real title of an encrypted file name.

The Digital Millennium Copyright Act outlaws the reverse engineering of encryption schemes, Deep said. Encryption is defined as "the scrambling and descrambling of information using mathematical formulas or algorithms."

(Aimster did later agree to withdraw the software from their site.)

The plot certainly thickens as other actors take advantage of the fact that new technologies are challenging laws and statues which have not really been upgraded sufficiently to 'keep up.'

By now it was rather obvious that the 'control technologies' had to be honed to keep the 'renegade technologies' at bay-outside the gates.

In the UK the International Federation of the Phonographic Industry(IFPI) has commissioned a development of software to track internet file swapping(Q, May-01).

And, in Nashville a company called 'Copyright.net' has invented a software 'robot' which seeks out and reports illegal downloads. The copyright holder can then demand that your Internet Service Provider(ISP) terminates your connection(Q,May- 01).

A problem with sharing files is that you then, basically, invite anyone into your hard-disk, and the prospect of using this for control purposes opens up a whole new 'can of worms' of

ethical and legal questions, and this type of technology will create a network that is both rigid and volatile. The complex system of publishing and mechanic royalties that exists in the 'real world' music business model has yet to be developed for the internet, though 'the Guardian'(12/04/01/) reports that a company called RioPort claims to have developed a software to keep track of the parties that need to be compensated when a song is sold. And, it is still unclear whether download can be burnt on a CD-R or placed on portable devices.

Further complicating the matter(of legal issues, and organizing technology accordingly)is the fact that no central database and file protocol for songs have been established, to successfully implement the new 'control technologies.'

When the problem of 'piracy' surfaced the majors realized that this was an area, a territory, that had to be conquered and controlled. Intel, IBM, Matsushita Electric and Toshiba created 'Content Protection for Recordable media'(CPRM) that implied that CDs or flashcards should include a CPRM code to make it impossible to record copyright protected files onto them at all, or even have it implemented on users hard disks(Q Magazine, May-01) with the questionable consequence that it would give technology companies 'quasi-legal' rights to determine what is copyrighted or not.

User activity keeps plummeting, but Napster's restructuring to comply with the ruling has kept the service from being shut down .

By now it is pretty obvious that the technology involved with downloading is going to be an integral part in presentation and distribution of artists, and Napster already had a working system, and since the company had to enforce copyright it made sense for record companies

to 'sign up.' In June, 2001, Napster inked a deal with MusicNet, a company created by media software developer and BMG plus AOL Time Warner's Music Group and EMI Recorded Music, thus allowing Napster to sell songs offered by MusicNet, though spokespersons for Warner and EMI are eager to stress that the company will have to prove that it is successfully blocking the downloading of copyrighted material.

Curiously enough, according to SoundScan, a company that tracks record sales, the industry's gross sales dropped 5.4 percent in the first half of this year.

This drop coinciding with Napster's problems have led to speculations that the company was in fact 'boosting' CD-sales. (Joel Selvin Sunday, August 5, 2001 San Francisco Chronicle.).

Others, on the other hand would argue that the 'Napster effect' was finally taking hold, "Global record sales drop for the first time as US consumers succumb to Napster effect."("Music Pirates sink industry"(David Teather, media business editor. The Guardian, 20/04/01).

An argument is that the biggest decline was in the US-"the most internet literate nation."

Especially the sale of singles was plummeting(down 39% in the US, down globally, 14%).

I think it imperative to stress that the 'Napster-effect' is very hard to measure, and that other factors like the fact that the exposure to the singles from albums has become so ubiquitous(radio, MTV videos, internet etc.) have contributed to such a decline for quite some time. A paradox, not addressed in the same 'Guardian' article is that Recorded music in Europe grew(1.4% in value), with Britain and Scandinavia being "the most buoyant markets." These being highly computer literate markets as well one might wonder how to explain "the Napster-effect" in view of this fact.

June 27th: Britain's Association of independent Music(AIM) and the independent Music Companies Association(IMPALA) signed a worldwide licensing agreement with Napster this week. This authorizes Napster to use thousands of tracks belonging to hundreds of independent labels across Europe.

In a printed statement, Shawn Fanning said, "Independent artists and labels have always been the trendsetters in music and the music business. I'm grateful that they are now showing that leadership when it comes to using technology to make music more accessible."

Hank Barry added, "Later this summer, the new Napster will launch to the benefit of artists, labels, and consumers alike. Independent artists who record for the labels represented by AIM and IMPALA will be the first to benefit, thanks to the forward-looking leadership shown today." (27/06-01. Doug Wyllie, Gavin.com)

-Friday 13th of July:Napster settles out-of-court with Metallica and rap star Dr.Dre Chief executive Hank Barry described Metallica's lawsuit as "a courageous...and principled approach to the protection of its intellectual property.

They brought to our attention essential artist's rights issues which we've addressed in our new technology," Mr Barry said.(www.ananova.com)

At present Napster remain out of service to comply with the latest ruling that it needs to show that it can prevent all users(100%) from downloading copyright material.

Clearly this territory is no longer a 'wasteland,' but rather more like a jungle with branches that intertwine and merge, but willingness to harvest and cultivate the land is evident.

Like any other story, this story needs a *setting*(Akrich, ST.1992: 'the object of analysis'). We have a *theme* for this story(the 'Napster artefact'), but as Akrich and Latour point out, "a machine can no more be studied than a human, because what the analyst is faced with are assemblies of human and non-human actors...."(ST, 1992). The 'object of our study' is thus not the 'object' in and of itself, but the object as an assemblage of forces and entities. Though Akrich and Latour emphasize the 'connectedness' of the assemblage, it is helpful when shifting focus from the object to the dynamics it is caught up in to preserve the more literary connotations and separate the 'setting' and the 'theme' and keep in mind that one writes the other equally.

Now, there is a case for saying that the network of music-distribution is the realm in which the action unfolds.

This, however, would be too limiting for our story³ and we have to find a vantage point that is appropriate for accounting for the actions and the motion of the story-line, which develops as the actors develop. Within the field of 'creative work,' 'cultural production'(there really is no good term for this, is there?) one could identify a certain process, a dynamic which creates and re-creates itself over and over again thus writing a new story every time employing different actors, written by different authors(or, indeed the same.) who make up a play both autonomous as well as part of a 'larger body of work.'

³ as well as resembling too much of a 'physical' notion of what a 'network' is this would dim the holistic picture that this network presentation is aiming for.

It is a process which concerns the forces involved in production and innovation (whether 'technical' or 'cultural'- no need to distinguish.) in the music industry (in this particular case), and it is in this process/dynamic that our story is sited. This *dynamic* entails the tension of the 'outside' and 'inside' of musical creation and commodification. I would argue that at the hub of the 'tension' between a dominant 'culture' and those operating on 'the fringes', on the outside, are the questions concerning *territories* (It is about possessing *distance*; "It is a question of keeping at a distance the forces of chaos knocking at the door." -p.320.19 . 'TP' Deleuze & Guattari)

There seems to be a perpetually ongoing reterritorialization/deterritorialization dynamic in this relationship.

This dynamic embraces the before mentioned 'repressive' appropriation tactics of the music industry and the propensity for 'twisting' the canon (as propagated by the 'industry') by sub-culture actants.

"The orchid deterritorializes by forming an image, a tracing of a wasp; but the wasp reterritorializes on that image. The wasp is nevertheless deterritorialized, becoming a piece in the orchid's apparatus.

But it reterritorializes the orchid by carrying its pollen. Wasp and orchid, as heterogeneous elements, form a rhizome." (1988, TP, p.10) This potent image of Deleuze and Guattari's clearly points out how this process of *becoming*, and of *rhizome-forming* is more complex and intertwined than merely a question of 'repression' and 'subversion.' The 'wasp' is 'becoming-orchid' and vice versa, and so the elements involved might even become indistinguishable. (p.508. 'TP' Deleuze & Guattari) - "The function of deterritorialization; D is the movement by which "one" leaves the territory. It is the operation of the line of flight."

The point of departure, however, is *the rupture* which, simultaneously, causes a break in the rhizome and causes it to expand and form new rhizomatic structures.

This is the work of a *machine*. Definition of 'machine'; a system of interruptions or breaks." - a cutting off and slicing the associate flows. The machine produces an interruption in the flow only insofar as it is connected to another machine that supposedly produces this flow. Defines what it cuts as an ideal continuity. Every machine functions as a break in the flow in relation to the machine to which it is connected, but at the same time is also a flow itself, or the production of a flow, in relation to the machine connected to it."(p.34,199, AO, Deleuze/Guattari)

Why then is this a 'positive' process(this forming of a 'map' or rhizome)?

It is a removal of 'blockages' it connects fields, "susceptible of constant modification. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a mediation." (Deleuze/Guattari, TP1988)

This is naturally a level/plateau certainly remote from the questions of 'right' and 'wrong', 'legal'/'illegal' etc. It is about *forces* and the significance of *motion*.

Whether ones agenda is to preserve a controlled 'status quo' or to trespass on other territories, stagnation is a 'black hole' a 'capture' threatening to 'swallow' the very foundations of the structure you're building or preserving. "if momentum results in actual-not only potential-irreversibility, then changes are impossible and it will collapse." (E.Monteneiro, Actor-Network Theory and information Infrastructure') The irony is that a dominant force, able to perform the strongest influence on an inteneary seeking a state of irreversibility of an actor-network will also seek it's demise!-

This dynamic of 'outside'/'inside' is what has constantly supplied the industry with cultural and technical innovations, and 'outsiders' with inspiration to counter the dominant expressions.

Deterritorializing and reterritorializing('a decoding of ancient forms'-anonymous.1997) on 'outside' culture('the life of any culture is always both collapsing and being restructured.'-anonymous.1997⁴) is at the core of industry activity. Deleuze and Guattari points out that there are different types of deterritorialization, and I would argue that the type of deterritorialization involved in 'restructuring' culture and 'decoding' forms which is at the core of 'corporate' activities in this area, is comparable to that of the 'State apparatus' in 'Thousand Plateaus' which performs a deterritorialization, but one "immediately overlaid by reterritorializations" on work, money and the private..."

"D(eterritorialization) may be overlaid by a compensatory reterritorialization obstructing the line of flight; D is then said to be *negative*. Anything can serve as reterritorialization, in other words *stand for* the lost territory; one can reterritorialize on a being, a book, an apparatus or system...."(P.508. 'TP'19 .D/G)

Again, *negative* is *not* a judgement of value, but a differentiation between 'energies.'

This, 'restructuring of culture' and process of 'decoding' is what turned punk into a fashion 'statement,' MTV into a an advertising vehicle for the major music/media companies, and hip-hop into a multibillion 'lifestyle' industry. And, particularly hip-hop exemplifies this. In a sense early hip-hop practice was a deterritorializing on the industry's reterritorialized version of 'black' culture, by playing the records on the streets and at parties while juxtaposing different beats and adding spoken(rapping) vocals on top.

In the late 80s and early 90s the major labels took over scores of successful 'indie'(independent) labels which a.o. resulted in a reterritorializing on 'street' culture.

⁴ the 'anonymous' quotes are taking from:
<http://www.uta.edu/english/apt/d&g/d&gweb.html>

So, a band like South Central LA's 'NWA' (Niggaz With Attitude) went from being 'instigators' of 'gangsta rap' to their leading figure Dr.Dre being one of the most sought after hit producer's(after the demise of the band) and plaintiff in the Napster case (along side Elton John a.o.). Today what started as a grim depiction of life in destitute American metropolis' has become a representation of corporate America (artists name-dropping 'Versace' and 'Gucci' instead of Malcolm X and Farrakahn). The sub-culture has been restructured with an extensive decoding of its forms, what remains today is an 'image' of the 'original' which is 'projected' 'on top' of the restructured form. One consequence is that artists may represent 'corporate culture' in any context and from any perspective one might examine the artists position while still remaining 'street'-representing one's neighbourhoods and cultural and racial backgrounds. A complicated 'merger' of cultural signification.

-“Among regimes of signs, *the signifying regime* certainly attains a high degree of D; but because it simultaneously sets up a whole system of reterritorializations on the signified, and on the signifier itself, it blocks the line of flight, allowing only a negative D to persist.”

(p.508.19 'TP'. D/G)

The original expression is retained in a deconstructed form, or even as a simulacrum in certain instances.

Deleuze and Guattari point out the importance of *decoding* in the creation of territories which seem to “form at a level of a certain *decoding*.”(p.322.19 .'TP')

The 'history' of popular music in particular points to the situation that new genres and innovative expressions are 'constructed' on the 'fringes' of the industry;

“When the 'big four' dominated(1948-55) there was relative stasis, whereas innovation and diversity increased when smaller, independent, companies entered the market as rock'n'roll took off in the late 50s. This trend seemed to be pervasive through the 60s and 70s as well.”(2000.Jason Toynbee)

The importance of independent labels in 'detecting' new trends was exemplified (in the late 80s, early 90s) as well by both the dominance of 'grunge' or 'alternative rock' (through labels like 'Sub-Pop) and electronic and club music with numerous labels ('Ninja Tunes', Mo' Wax, 'Warp' etc.) It is perhaps not surprising that smaller, more flexible organizations often lead by individuals driven by a keen interest in a 'niche type' of music have their 'ears closer to the ground' and are more liable to introduce a 'new' genre than the major companies.

Keith Negus(1999)quoting S.Frith(1996,p.88): "A new 'genre world'...is first constructed and then articulated through a complex interplay of musicians, listeners, and mediating ideologues, and this process is much more confused than the marketing process that follows, as the wider industry begins to make sense of the new sounds and markets and to exploit both genre worlds and genre discourses in the orderly routines of mass marketing."

This('making sense of' and 'exploiting the new') is a way of 'stratifying' a territory, "the integrating factors or agents of stratification make up institutions(institution=reproductive mechanism)."(1988.p.75.'F.'Deleuze)This way of "organizing visibility" is perpetuated through the institution of a *canon*.

“ the canon is the cultural expression of capitalistic atavism; the hegemony of lineage and descent that does not allow for the self-creation of the living culture (“the dispersion that we are and make”) but offers instead the fixed points and superlative lines of originary distinction.”(p.4.1999, H.Slater). The canon is a 'cutting off' of the connectedness of artistic expression, separating the individual from community, a molding of disperse and multivocal culture into a uniform representation.

This representation of the artist as 'autonomous author' of *originality* is propagated by the industry to simplify marketing and to generate interest in the 'new' and by the mainstream media since this satisfies a desire among critics to signal that they are on top of what's 'new'

and understand the coding of 'art,' or more precisely, *commodities*. It is a process of simplifying as well as complicating the representation of music.

It simplifies the dynamics involved in the creation of an 'original'/'star' and it complicates musical 'packaging'(representation/presentation) by 'tagging' products with a genre 'label' to maintain interest among consumers. It is not this 'author's' intention to negate the existence of creative 'geniuses' instrumental in crafting new fields of expression.

It is, nevertheless, necessary to point out that these practices might create a smokescreen masking communal creativity and, at times, promulgating a distorted image of artistic expression. "Primitive segmentarity is characterized by a *polyvocal code*(my italics) based on lineages and their varying situations and relations, and an itinerant territoriality based on local overlapping divisions, codes and territories, clean lineages and tribal territorialities form a fabric of relatively supple segmentarity."(p.209.1988,'TP' Deleuze/Guattari) In 'Chaosmosis'(p.9.1995.)

Guattari describes 'subjectivity' as "plural and polyphonic" with "no dominant or determinant instance guiding all other forms according to a univocal causality."

It is produced by various individual forces, group forces, and social fields, the molar and molecular universes that are available to a given subject. This above mentioned 'simplification' might be compared to a 'rigid line' which "implies an overcoding that substitutes itself for the faltering codes; its segments are like reterritorializations on the overcoding or the overcoded line." (p.219.1988. Deleuze/Guattari) This process of muting the 'polyvocal' or masking the 'network nature' of artistic expression allows for the absorption and substitution of 'flows' whereas Napster created, or amplified, a new, 'mutant flow' which "always implies something tending to elude or escape the codes.."(P.219.1988.D/G)

And, central to this paper is to illustrate how Napster (and its 'arrival' in the network), while being emerged in the deterritorialization/reterritorialization process, opened up new 'expanses' for many actors and challenged the 'institutional dynamics' of this field.

This was facilitated by a combination of 'technical' (the programming, MP3 and P2P technology etc.) and 'cultural' aspects (music and computer involved individuals etc.) which forged an 'alliance' that through its particular 'connectedness' was instrumental in the 'opening up' and expansion of the network. This will be dealt with more closely in the following sections.

Signed, Sealed, Delivered.

A pivotal point for this thesis is the interpretative flexibility of the artefact as text. We have previously acknowledged the artefact as a text that needs to be interpreted, and it is a text that is written (and re-written) by every actor within the network, even if we acknowledge one particular individual as the original *author*—we are all its author or more precisely, *interpreters*. An interpretation "consists in developing what is enveloped in the sign" (p. 45. Massumi, 'CS' 1992). The outset for interpreting what we know of the story is the 'unwrapping' of this inscription, and, consequently, follow how the plasticity of the object is 'stretched' through numerous 'negotiations.'

This flexibility is what Law/Hassard call variable geometry.

-variable geometry concerns how one artefact is "representing different things to different actors" (Law/Hassard, 1992).

The notion of variable geometry (or 'interpretative flexibility') is usually the pivotal point in the center of a controversy and 'the Napster case' is no exception.

What does it *really* represent to its creator, musicians, music fans, 'the industry'? This is not a question with clear-cut answers, actors will have hidden agendas, there will be 'anti-programs' ("all the programs of actions of actants that are in conflict with the programs chosen as the point of departure of the analysis." 1992. Akrich/Latour) at work etc., none of which will contribute to our understanding of these matters. It is, nevertheless, crucial to look into what indications that might present themselves regarding the varying 'geometrical' features of the artefact, as these aids our understanding of the actor-actions, of strategies concerning 'territory' and 'translation' etc. A controversy is propelled by as well as characterized by *textualization*. " there is textualisation when objects generate controversies— that is explicit but contradictory network structures."

Rival descriptions and accusations are a chaotic mixture of the technical and social." (1999. Callon). This chaotic mixture is something we will try to observe in detail when we tackle the translation strategies at work in enrolling allies for one specific interpretation. The aim of the analysis is the *de-description*, "the opposite movement of the inscription by the engineer, inventor, manufacturer, or designer."(Akrich/Latour, ST., p.259,1992) This is facilitated by *the crisis* which "modifies the direction of the translation from things back to words and allows the analyst to trace the movement from words to things.(Akrich/Latour, ST., p.260,1992,) The presence(or absence) of such a crisis is defined by the gap between the *prescription* (what a device forbids or allows from the actants), and what the actors/s *subscribe* to. This concept is clearly exemplified by the 'crisis' regarding Napster in the shape of a law suit.

There seemed to be , not so much of a 'gap' as a , 'great divide' between the 'pre-scription' and the 'subscription' of certain actors, leading to extensive 'de-inscription'(re-defining/re-interpretation) activities. A natural outset for trying to place these 'activities' within the appropriate context is to try and trace what indications there might be regarding the innovator's 'inscriptions.'

The questions concerning 'frames of meaning,' 'inscription' and 'de-scription' might lead us to some clues as to what the creator of the artefact 'had in mind,' subsequently as well as to why different actors 'reacted' the way they did.

What is it that is written into the text(artefact) prior to its 'introduction' to an environment? This is a vital question to ask if one is to 'pry open' the box to see its contents and reading the 'labels' attached to the object.

"..inventors invent both artifacts and frames of meaning that guide how they manufacture and market their creations."(Carlson, 1992, p.176)

Carlson claims that these inventors must make *assumptions* about potential users of the technology and the meanings the users might assign to it. This constitute a *frame of meaning*(a concept of Collins and Pinch, 1982) and is a guideline to how to design, market etc. a particular artefact as well as 'linking' it up to cultural(and social) values.

As Carlson points out this is a concept that is very similar to Bruno Latour's and Madeleine Akrich's ideas concerning the 'script.'

"A large part of the work of innovators is that of *inscribing* this vision of(or prediction about) the world in the technical content of the new object"(M.Akrich in 'Shaping Tech., 1992).

Akrich likens this idea to that of a 'filmscript' in so much as the object with the actors define a "*framework of action*" together as well as creating a space in which to act, as some kind of theatrical setting. 'The script' is, according to Akrich, "a major element for interpreting interaction between the object and its users"(Akrich, ST., 1992).

- "A large part of the work of innovators is that of '*inscribing*' this vision of(or prediction about) the world in the technical content of the object." (Akrich, ST.,p.208,1992) This inscription practice could be construed as an attempt to '*configure the user.*' It is not a mere 'prediction' but "'instructions' which enables readers to make sense of content in terms of conclusions stated at the outset."(p.72.1997.Grint/Woolgar) As Grint/Woolgar see this practice as an attempt, by the 'evolving machine,' at configuring the user by setting parameters for user actions.

It is a methodological suggestion that when studying the use of an artefact one shifts back and forth "between the designer's projected user and the real user."(Akrich 1992, p.209)

I want, at least in relation to the Napster case, question the idea of focusing on technical content and user when 'reading' the inscription.

The notion of '*inscription*' will need to be made *both* less 'tangible' as well as more 'encompassing.'

It needs to be seen as less tangible in the sense that "inscribing this vision of(or prediction about) the world *in the technical content*."(my italics) seems too much of a fixed, strategic process to really capture the nuances of the relationships between the designer, the object, the users and the '*others*.' Just as other 'actions' might occupy a space in time without necessarily being granted this *space* by 'agenda-pushing' actors, the *inscription*(for it is, no doubt, an *action*) will come into play assisted by less visible factors than we normally credit within a certain dynamic.(ex. Choice of logo, choice of name (Napster/'prankster'-) all, potentially, 'accidental' events that contribute to the *inscription*).

The idea that the 'inscription' is described only in the "technical content" and that it refers somewhat exclusively to the designer/user relationship appears to be too limiting for this particular case.

-"...the designer not only *fixes* the distribution of actors, he or she also provides a "key" that can be used to interpret *all subsequent events*."(my italics) Even though Akrich acknowledges that questions might arise concerning the 'key,' and that users add their own interpretations

I would argue that too much emphasis is put on the 'limiting' capability(of actors and events) of the object, and not enough on the relationship between the inscription and other(or even an expanded user interpretation) actors.

Akrich suggests that (unless the circumstances of its use do not diverge too much from the original intentions);" the script will become a major element for interpreting interaction between the object and its users."(ST, p.216)

Perhaps this should be reshaped into;"the object and *the network*." And, in the Napster case there does not seem to be any divergence between the 'projected' and the 'real' user. Problems arose from other corners of the network.

Another important question to ask is; "where does inscription 'end' and sub-scriptioin 'begin'?" The case with Napster(as with a range of software products) is that interaction with the object and users began at an experimental stage; "user feedback was excellent. Even when the software didn't work at all, there were few people who were avid users, and there were people who were just sending excellent feedback and excellent ideas.

"I think then, when we started receiving the first of the user feedback, feedback from people that I had not specifically told about it, but had spread from friend to friend and then they were giving us feedback."(S.Fanning, ZDNet interview, 3/3/00)

There is no room to turn this into an *ascription* debate, we have learnt the lesson of avoiding the pitfalls of ascribing the artefact to the innovator-genius and overlooking this actor's actor-network character, but I think there still might remain questions regarding the actor-network involved in inscribing and sub-scribing.

Despite its limitations the concept of a 'script' and an 'inscription' is, nevertheless, a useful tool to 'unfold' the meanings of an artefact as text as"...certain organizational features of texts provide 'instructions' which enables readers to make sense of content in terms of conclusions stated at the outset."(Grint and Woolgar, 1997)

An indication to the 'script' embedded in Napster is perhaps provided by its logo- that mischievous 'cat-kid' with headphone representing a 'rebellious streak' and a DIY attitude appealing to the wanna-be hacker as well as to the music lover subscribing to the 'good old' rock 'n' roll ethic.

And, the name, 'Napster,' which gives associations to 'prankster, and 'jester' and in tandem with the logo gives the impression of something new and innocuous, fresh and a bit naughty. This name was a nickname attached to Fanning by a friend who used it to describe his hairdo, and it became Fanning's log on name in chat rooms, and eventually the name of his software and company.

It appears to be a chain of events that has very little strategic significance but still makes up a vital part of the inscription. Latour(p.115.1991. 'SM') attracts attention to Jenkins' study of 'Kodak' in which the 'name' is treated as an actor among actors. This might make a good case for the actor-network nature of the concept.

Pointing out the necessity for an *extended, more inclusive* understanding of the inscription does not, however mean that the technical content is not an integral part of this process. It is quite clear that the inscription was modified through its technical coding to facilitate the subscription process, which undoubtedly was a major success(from the user point of view); "And, as Fanning predicted his program does everything a web application is supposed to do; it builds community, it breaks down barriers, it is viral, it is scalable, it disintermediates- ..."(Ansir Communications Inc.)

Why the vision inscribed in the artefact interacts in this manner with users has a lot to do with its set-up and technical content.

To 'get a handle' on this a trip to Utah is required to let the designer explain it himself; "A traditional search engine sends out "robots" to roam the Internet periodically, updating itself every hour or more to remove sites that are down or unavailable. The database created is entirely driven by what the central computer finds by "crawling" the Internet.

The indexes become outdated as sites go up or down, a significant problem when looking for MP3s because most of the files were housed on people's home computers.

My idea was to have users list the files they were willing to share on a computer that they all could access. That list would then be updated each time a person logged on to and off of that computer. The index computer would at all times have an up-to-date list of the files people were willing to share, and the list would be voluntarily made by the users as they logged on and off the system. A user searching the index would see all the files shared by users on the network and available to others on the network at that moment.

In contrast to traditional search engines, I envisioned a system that would be affirmatively powered by the users, who would select what information they wanted to list on the index.

Then, when the user exited the application, their portion of the list (their files) would automatically drop from the index. The index was only one part of participating in the community. I also wanted users to be able to chat with each other and share information about their favorite music, so I added these functions to the application."

(testimony before the Senate Judiciary Committee, Provo, Utah.9/9 -00)Fanning goes on to describe how Napster differs from other web-based search engines , mainly that the Napster system does not index files based on content since MP3 and Windows Media Audio(WMA) are not today designed for such content-based indexing.

Instead users assign file-names which are then located and organized based on theses as well as specific information in the MPEG header(a block of data in the coded bitstream containing the coded representation of a number of data elements pertaining to the coded data that follow

the header in the bitstream), bandwidth or ping time of the source(such as T1, cable DSL, 35mill.sec.)⁵or manually opening the file and categorizing based on personal preference.

“Napster provides a directory through which users may find files, by file name, residing on the computers of other Napster users. The Napster service also provides location information allowing a computer to connect to the other user and transfer the file from its location.”

Especially this way the search was organized without taking the question of ‘genre’ into account was an *inscription* feature with a strong influence on user relations.

In the former section we addressed the processes involved in genre construction and ‘*canonification*’ and established these interrelated practices as central to holding the network together and rigifying the territory.

A consequence of the above mentioned ‘practices’ is that genres on display in music stores have to be as clearly defined and marked as possible.

This 'segregated' world of music presentation has been a cause of frustration for many music lovers.

I'm sure most consumers might find it reasonable to have a 'classical' section, a 'jazz' section etc. to ease the search, but this need for 'over classifying' products has led to a lot of confusion, especially the last ten years when club music and experimental electronic music have been slowly 'integrated' into the mainstream distribution networks.

I presume many buyers have found themselves standing in a record store wandering; " in which section can I find this CD; 'drum&bass,' 'electronica,' 'techno,' 'jungle,' 'ambient,'

⁵ Ping-time and bitrate determine the speed of downloading. Ping Time is the round trip time a "Packet" of bytes takes to be sent to another computer and returned to your machine. Ping time is measured in milliseconds. Ping is often referred to as "Lag".

...where?" Unless you are completely initiated in all the codes concerning this type of genres, shopping for CDs might be a lot more time consuming than what you'd want it to be!

This proves no less challenging on the net, where finding anything but the 'best sellers'-the most hyped(by the record companies) is next to impossible, at times. This is, partially, why Napster 'caught on' among users as it did.

The way the search was organized just by title, title and artist, or only artist without any 'genre' considerations appealed to many.

If you, for instance, searched for a particular song(say, 'the Thrill is Gone'), you could choose to download among artists as diversified as Chet Baker(jazz) and 'Faith No More'(hard rock).

An important consideration if one is to look upon an artefact's 'life' as a processual trajectory is that no part of this process is necessarily 'closed.' As noted earlier the lines between inscription and subscription might be blurred(as well as the borders between 'author' and 'reader'), and the influence on the inscription is often another intricate actor-network.

The 'relationship' between Napster and the CD is illuminating this 'process'.

At a conference at the Open University in Milton Keynes on 'contemporary music practices'(May- 01) the future of the industry was discussed, how could record companies counter the challenge of free access to downloads(it seemed to be a consensus that this was a 'tap' that couldn't be 'turned off.')

Jason Toynbee(from the University of Coventry) pointed out that there was a need to "re auralize"(if I heard him correctly..) the CD, "make it lovelier."

This 'simple' solution refers to the fact that the record industry not only produces music but it produces culture, it produces myths and 'star' worship, and this is not going to change 'just because' free MP3s are available! If one harbours hope for the demise of the music industry

the availability of the new technology alone is not enough, one will have to 'take on' a whole range of 'meta-narratives' which have been instrumental in replacing old ones.

'Corporate culture' has been extremely successful in embedding artefacts with 'meaning,' and if a 'break down' of sorts, within this culture, is envisioned it is not advisable to overlook that the complete 're interpretation' and a 'breaking down' of meaning within a range of artefacts and their networks will need to take place. "In the logic of signs, as in the logic of symbols, objects are no longer tied to a function or to a *defined* need. This is precisely because objects respond to something different, either a social logic, or to a logic of desire, where they serve as a fluid and unconscious field of signification." (Baudrillard, 1988 SW)

How do you start 'mowing' an unconscious field of signification? There is really not much else to do than 'plant' new weeds, or couchgrass as Deleuze and Guattari suggest. So, there is always a possibility for mutations and change by creating new rhizomes and cutting into flows which we will investigate further.

The *inscription*, in a sense, attaches the object to a 'signifying chain'(the *hook up*), and thereby is opening up a new flow, though it is vital to note that this chain does not *lead back* to the inscription, for the chain, as well, as the inscription are themselves rhizomes in free flow. This 'construction of meaning' that we see in the CD is a valid example of how also the process of *inscribing* may involve a rather large number of actor-networks. The 'hook up' with social values, tastes etc. is done by the songwriter, the performing musicians, the sound engineer, the producer, the marketing dept., as well as the sleeve designer. Especially the sleeve gives us a good indication to what kind of 'meaning structure' the artefact is (trying to be) emerged in.

We have, for instance, the typical heavy metal cover (most notably in the 80s) with their fantasy images of dragons, monsters etc. with some sex thrown in for good measure to appeal to the pubescent male whose interests include horror pictures, fantasy novels and girls (looking at them). And, contrast this image to the classical artist who looks like s/he is posing for his high-school graduation shot or the 'serious' electronica artists' sleeves with abstract, avant-garde type images made by cool designers so that the buyer can be convinced he is buying an 'art piece.'

When the industry, by and large, abandoned the vinyl format (in the late 80s) for the CD the importance of the cover sleeve faltered. In the late 50s 'Blue Note Records' turned the record cover into an art-piece in itself through the atmosphere of Francis Wolff's photos and daring and different design. The first CDs, however, were miniature versions of the vinyl edition thus had little to offer visually.

I would argue that even today few artists and labels seem to be concerned with the limitations (and possibilities) in this format as a *visual* as well *aural* artefact.

So, why is this important in relation to Napster?

Well, as hinted at earlier merely downloading files from the net excludes a large part of this inscription process (cover art), and will, potentially, have repercussions for how we relate to the artefact, and our two grand antagonists from the artist community seem to agree on this one thing, Chuck D (at 'NME.COM's 'Netsound' conference in London, 02/05/01) explicitly when he says: "The romanticism of buying a record from your local record store has gone. Thirteen-year-old kids prefer to burn their own CDs with tracks downloaded from the web. It's something they've created and can call their own."

And, Lars Ulrich(12/05/00 in 'Macworld Magazine') more indirectly hints that the way people relate closely to their computers may pose a 'threat' to how they relate to music and the way it is (re)presented:

"I think people are getting a little too comfortable with their computer as a tool and are taking it for granted." And, as his band mate, James Hetfield('Yahoo! Chat', 02'04'00) put it ;" We put pictures, lyrics, something with impact to go along with the music, that don't get around through the internet. As Metallica, we should choose how our music is represented."

And, Nigel Godrich(19/07/01, 'the Guardian') producer of bands like Radiohead and REM also addresses the question of representation, from a different perspective;

"You're never going to have the relationship with a file that you have with a CD. With Radiohead's 'Kid A', in America, a lot of people heard, and then bought it because of Napster. I don't think the subscription Napster will work, as people won't pay for something so ephemeral."

The way Napster cut into the 'signifying flow' connected to the CD, I believe was facilitated by a failure to make the CD "lovely" enough.

Therefore, I wouldn't say it is a matter of "re-auralizing" the CD, but it is about endowing it with an 'aura' in the first place, rethinking the inscription process.

And, naturally, the well established 'majors' have the 'upper-hand' when it comes to resources, and how to use technology to connect the 'flows of signification' more strongly, and keep them more securely fastened to a set 'passage point.'

One of the ways to make it more attractive is the use of multimedia and included videos and such in the CD you purchase. ("Record companies recognize that the ultimate response to

technologies like Gnutella and Freenet⁶ is a legitimate alternative that consumers will prefer. It's up to the industry to offer consumers such convenient access to music, with such ease of operation and great sound quality, that consumers will choose to use legitimate sites."-RIAA)

I had the opportunity to ask Dave Cawley from the independent label 'Fat-Cat' whether the 'presentational' factors surrounding the music influenced by the 'new media' will take on new images or formats etc.

"the "traditional" will never disappear.....vinyl etc. is still here and has a bigger following than ever..but i understand where your question is coming from.

.i hope we will see an all in one media format that crosses platforms..i.e sound / visual.....there's endless possibilities then for how the artist presents their work..it's going to be amazing the creative doors that it will open.....i hope that these new media can remain from the grasp of the corporations.....the corporations will invest the majority of their attention to putting in guards so these new formats can not be copied or distributed freely without gain to themselves....."

And, *format* is certainly a key word in relation to how music as product is *hooked up* to user needs and 'values.' The focus on the compressed MP3 format brings forth some interesting questions.

We have already discussed the effect of cutting into a chain of signification by excluding cover art, but the question of the ramifications of a new technical standard remains.

⁶ These are new 'file-sharing' sites operating without a central server.

Walter Benjamin discusses how 'modern means of production' affects art; "infinite repeatability is one of the essential characteristics of the modern means of production."(Benjamin, 1935) The emphasis on *repeatability* challenges the authenticity of an art-work and, "the instant the criterion of authenticity ceases to be applicable to artistic production, the total function of art is removed."(Benjamin,1935)

According to Benjamin mechanical reproduction destroys the 'aura' of the art-work(its connection to historical objects), it "shatters the tradition that it has been hitherto embedded," and it replaces "uniqueness and permanence by transitoriness and reproductibility."

Napster then poses a two-fold challenge; 1) it challenges the authority of the author, and 2) it gives a representation of the work '*twice removed*' from the 'original.' In Benjamin's terms you have the pure, original performance, it's mechanical reproduction(in this case, the CD), and now a MP3-file made from the CD, which makes this a *mechanical reproduction of a mechanical reproduction*(or digital, if you will..).

Mark Poster(1990 ,'Mode of Communication'), however, illustrates how rock performances, in particular, "*exist only in their reproduction.*"

Traditionally, the ideal for 'audiophiles' has been that, in its electronically mediated form, musical information may be reproduced without alteration, and information as representation "achieves its apotheosis."

The 'perfect' recording, in the 'perfect setting(sound system, acoustically balanced room) should 'transfer' the listener to the original performance space.

In a rock recording this 'original' space usually exists only as fragments pieced together on a 'master tape.' The individual musicians are recorded on separate tracks, at times in different cities, there might be sampling involved in which a fragment originates from another

decade(or century, even). After the recordings are done a producer and a mixer will then rearrange instruments, apply new effects, change the aural characteristics of the recorded sound and basically modify the spatial specifics of the product. So, what is the *original*? Music might today be viewed as any other 'information'; "depending on how you look at it, in the online world, music has either been stripped or liberated from its body; only its soul remains, its digital code."(p.4.2001. 'SB' John Alderman.) Some would certainly object to this idea claiming that music has been stripped of parts of its 'soul' as well.

If this view of the 'soul' encompassed in the digital code prevails then that indicates a paradigm shift indeed, it means that the inscription process that has been the standard since the birth of the industry might be rendered partially obsolete.

The questions concerning 'aura' notwithstanding there remains the question of *technical quality* and the implications of the 'Napster challenge.' Several audiophiles would argue that the compression technology of MP3 is aurally inferior, and presents a very 'flat' representation of the original recording, and one need to ask how attractive a file of this quality removed from the 'realm of images' really is.(02/13/01 By D.D.Brand ,owner of AMO.net"MP3 files, the technology driving the music on Napster is a small file, about 1/10 the size of the actual song on the CD, and their quality is thus, about 1/10 the quality of a CD.")

I would argue that Napster shows the importance of recognizing the 'presentational' features of an artefact and its inscription. It is productive to take care to look beyond the "patterns of use," and identify how a 'code' alluding to all the networking(cultural, social, technical) involved is inscribed and which compiles a formation of a 'picture'- a presentation. It is an attempt not only to set "patterns for use" but also of its entire network 'function'-its 'sign' function; "The presence of the sign is a contraction of time. It is simultaneously an

indicator of a future potential and a symptom of a past."(p.11. Massumi, CS1992) "Reading the 'code' is like reading a book, the whole 'story' is within the signs, but the interpretations of it might actually re-write the 'story.'⁷

² this is where the literary metaphor is stretched to its limits, although different readings of a book may constitute different 'stories'– a re-writing is to my knowledge not 'permitted.' Whereas the signs that are 'hooked up' with and 'written' into the artefact might be re-directed and replaced as we will look into in the next section.

Translation

When building a project or an object a crucial element of the procedure is *translation*.

Translation is "The interpretation given by the fact-builders of their interests and that of the people they enrol."(Latour, SIA, 199), and as such always part of a negotiation which will form the basis for the artefact's position in a network, and it's degree of stabilization. "The notion of translation implies definition that is inscribed in intermediaries"(Callon,SOM, 1991). They are "embodied in texts, machines, bodily skills(which)become their support, their more or less faithful executive"(p.143,Callon,'SOM', 1991)

This, like any other activity surrounding the artefact, is not a purely 'social' arena. The 'technical' is very much a part of the negotiations as well. From the outset of the project there was a negotiation taking place between Fanning, his codes and programming and users suggesting modifications. And, negotiations with the 'technical' is now very much the issue, which is due to other actors refusing to sub-scribe to the 'original' inscription and 'pre-scriptions'("The competencies that can be expected from actors before arriving at the setting that is necessary for the resolution of the crisis between prescription and subscription."- Akrich/Latour,p.261, ST. 1992)

and demanding further modifications and *re-inscriptions* ("the redistribution of all the other variables in order for a setting ⁸to cope with the contradictory demands of anti-programs..."- Akrich/Latour,1992) through translations and *substitutions*. We will try and follow how actors seek to translate other interests into their own to secure support for a project or dissent.

⁸ Here 'setting' is used to indicate a particular actor-network concerning our 'object of study,' whereas I would use the more direct 'project' or actor-network to keep separate the activities that are undertaken enveloped within the larger frame of a 'setting' and those that require a shift to a 'macro' level.

An important part of the process of translation involves *presentation*, it is not enough to have a convincing argument or an alluring proposition, one has to present oneself with credibility and give the impression of showing ones 'true colors.'

This is where the 'polarized tension' again comes clearly into play. As noted earlier the image(as in *imagined reality*) of the two confronting opposites might be more prominent in the consciousness of the actors than what might appear to be the 'reality' of the situation. Especially for actors that find themselves in a place not obviously defined as a 'corporate' or a 'counter'-culture structure, it is a balancing act when translating interests, and the question of whom the technology is going to 'serve' is at the forefront of the conflict. Therefore, convincing your allies of who you really *are* might be even more crucial than convincing them of the 'attractiveness' of your goals.

All the actors we have chosen to follow in this particular case seem to adopt *presentation* as an integral part of their strategies. And, as Latour points out; "a program's capability to counter an anti-program obviously depends on how well an actor's conception of others corresponds to their conceptions of themselves or said actor."(p.127.1991.'S.M.')

For Napster it was essential to appear to the court as a service for music lovers wanting to communicate and not about cheating musicians out of royalties.

"Napster is about love for music and wanting to experience music."(S.F. in MTV interv.28/07/00.)And, I will argue that presentation is at the nucleus of the strategic challenges that Napster is now facing. Furthermore we will see how the RIAA was concerned with not appearing to be presenting only the big corporations, but the individual musician scorned by piracy ("Napster is devaluing music itself, teaching an entire generation that music is free and has no value."RIAA),

and how Metallica(Nikki Sixx from the hard rock band ‘Motley Crue’ on Metallica’s involvement: “it’s an embarrassment to Rock ’n Roll”-‘Q-Magazine,’May-01) realizing that they were jeopardizing their rock credibility by suing such a popular site among fans were focusing on their own career as rock rebels and pointing out the business aspects of Napster.

Translation and substitution activities relied heavily on a presentation of what the object *is* (a 'pirate machine'/a 'new, open door' etc.) and what it can do('unravel the music industry structure; loss of control/'unravel the music industry structure; new opportunities' etc.), so our focal point in unfolding some of this activities should be the *statements* made. A common ground for the contestants is the artefact as *new technology*, and central to the debate concerning *presenting* Napster is how actors play on the idea of 'new technology' as an entity 'encapsulating' the case to elevate their argument to another level, or plateau if you will. This strand of argument pushes Napster-the software in to the background, and makes the case that the conflict is primarily about 'new technology,' which is either always contaminated with 'dangerous aspects' and 'uncontrollable consequences' or something ‘frail and fragile’, like a newly sprung flower, that needs to be nourished and ‘shielded’ into existence.

Shawn Fanning (MTV Online) commenting after a congressional hearing on judge Patel's ruling; "It was definitely hard. I didn't get much sleep.

And the e-mail started rolling in last night too... there were so many people who wanted to help and try to *save the technology*. "(my italics) It is as if there is something greater at stake here than the future of a software program and its designer's profits.

And, Chuck D (12/05/00.'Macworld Magazine.' points out the importance of early access: "Now, for the first time, the fans have gotten the technology before the industry".

As mentioned earlier the fact that this was the 'first time' a technology of such significance emanated 'outside' of industry control is something that contributes to the uniqueness to the

case, as well as to the level of controversy involved. Whereas Lars Ulrich's statement about people "getting too comfortable with their computers" might allude to a hypothesis that one risk getting too caught up in the possibilities of technology and tend to ignore the rules and laws that govern its use and the consequences of that use.

This situation gives us the opportunity, and duty, to expand on the idea of technology as text, since an artefact is a 'statement,' or it envelops several statements into one expression whether uniform or ambiguous. And, Latour(1992, 'STBS') directs attention to how an artefact, project, word etc. moves through a syntagmatic dimension where *associations* may be hooked onto the original statement, and the paradigmatic dimension which allows for *substitutions* (Substitution: technological shifting to another matter.)to be made.

The latter(the 'OR' dimension) indicates how many translations are necessary in order to move through the former(the 'AND' dimension). The 'story of a script' is mapped out through a *translation diagram* in which one can follow the trajectory of an artefact negotiating its way through programs and anti-programs. "The plot is defined by the line that separates the programs of action chosen for the analysis and the anti-programs.

The point of the story is that it is impossible to move in the AND direction without paying the price of the OR dimension, that is renegotiating the socio technical assemblage." (p.254.1992. Latour, 'STBS'.)

The negotiation process might be illustrated by a *front-line* which indicates to what extent other actors subscribe to the statements being made.

The challenges to the validity of the statements, and even to the very existence of the socio-technical assemblage that is 'Napster' seem to stem from having to negotiate along *two*

different front-lines. This does not, however, indicate two ‘different’ networks, or ‘networks within networks’ but it is presented this way to emphasize the conflicting interests of actors which complicated holding the network together, as well as to keep the chronology of the story lucid.

Front-Line 1

When the designer sits down to develop a ‘project’ the programming involved could be construed as a *proposition* to different non-human actants on how to co-operate.

To view these actants just as any other allies is necessary to ensure that the same language and framework may be employed whether the description is concerned with human or non-human actants.

We know that the help to enrol these actants came, by and large, from a network of ‘Net-techies’ with whom Fanning communicated mostly on internet chat-rooms, so-called ‘Internet Relay Chat’(IRC)rooms⁹. John Alderman(p.103.2001-‘SB.’) identifies two of these ‘allies’ as Jordan Ritter and Sean Parker.

As mentioned in the ‘Methodology’ section the specifics of these negotiations are hard to identify without ‘access’ to any of the individuals involved.

Nevertheless, a picture of the incremental, collaboratory nature of the proceedings does emerge. When a prototype was developed(early 1999)Fanning enlisted a network of friends to test it out and supply more feedback. And, in May-99 the company was incorporated with the help of his uncle and the release of an early beta version followed, and the word spread.

⁹ IRC is a ‘community’ of people organized through real time channels. And, Fanning saw the possibility of org. the Napster chat rooms in a similar manner.

(“ I think the point at which I realized it had serious potential was when download.com put us in the download spotlight. It was very early, and we were still like beta or alpha stage, and so we started receiving a ton of download. The server became overloaded, and that's when I realized that this had a huge market.”- Fanning to ZDNet,03/03/00). To simplify matters it is necessary to identify this as the ‘first statement.’ and to pay less heed to the incremental nature of the artifacts development.

The first *anti-program* leading to a substitution came from one particular, important, user group-the universities.

Several Universities in the US started denying students access to Napster claiming that the traffic on the site occupied about 5% of the total bandwidth available. Over 200 colleges and universities banned the use of the program, which caused a lot of controversy, especially among students.

“Now Napster Inc. announced that it is currently working to solve the problem and is suggesting the following model; in future versions Napster would first try to find the files inside the campus network, secondly it would try to find the files from so called "Internet 2" which is faster Internet that many universities are already members of.

As a last resort it would try to find the files from regular Internet. “(DRD-afterdawn.com 3/23/2000) So, by modifying the search set-up slightly a substitution was ‘activated’ to counter such anti-programs-*Statement 2.*

There are naturally more than one way to ‘skin a cat’ or in this case to translate interests. Latour(1994. ‘SIA’) presents five different, though related, translations. The object of the ‘fact-builders’ is to appear as the ‘only’ or most prominent ‘path-finders’ to the goals of the enlisted actors.

One way Napster did this was by “reshuffling interests and goals”(‘translation 4’). First, “inventing new goals” was crucial to the process-The need to have quick and free access to MP3 files. Secondly, ‘inventing’ new groups was necessary since “the ability to invent new goals is ‘limited’ by the existence of already defined groups.”(p.115.1994’SIA.’Latour.) A new consumer group was emerging as a consequence of negotiations along this front-line, ‘MP3 downloaders.’ (“what’s in a name?”-the emphasis here is on *new*.)

To identify ‘tactics’ in the process like these is helpful to illuminate more of the mechanics of ‘propelling’ the ‘project’ forward. The problem, however is the use of words like ‘tactic’ and ‘invent.’ To what extent is it possible to claim the outcome of these negotiations was exclusively a result of ‘tactics’, and is it appropriate to say that Napster did indeed ‘invent’ a new user group?

It might be fair to say that creating needs and ‘inventing’ groups is basically a process of ‘tapping into’ unreleased potential, whether this is down to extensive market research, a ‘hunch’ or just ‘dumb luck’ is not always easy to figure out.(some subscribe to the notion of Fanning as a ‘visionary’ others that he just ‘happened’ to be the guy who wrote the right codes.)

Be that as it may, Napster was about to encounter anti-programs with substantially graver consequences for the translation process.

Front-Line2

Though the negotiation process, and consequently the *trajectory* of the artefact is divided into two *front-lines*, one is necessarily an extension of the other, and when negotiations are ‘complete’ and a form of ‘consensus’ is reached along the first one this is not ‘erased’ and “ it is impossible to move in the AND direction without paying the price of the OR dimension, that is renegotiating the socio-technical assemblage.”(p.254.1991. ’S.M’ .Latour)

A continuous developing of the trajectory is not confined to efforts to expand into new territories, but is vital to avoid stagnation, and being expelled from the territory the assemblage ‘occupies.’

“Maintaining reality is thus paid for by a continual extension of the syntagm(AND). Thanks to this narrative the 'inertial force' of innovations-the famous state in which they would be irreversible and zoom through society by their own steam-is quite simply dissolved.”

(p.118,199 . ’SM’ .Latour)

‘Reality’ is, as such, in continuous negotiation and when the premises concerning *the statement* change, a new reality must be negotiated. When negotiations opened along a second front-line, as a consequence of the law-suits, modifications had to be made in the statement, and subsequently this had implications for the negotiations along the first front-line.

Negotiations along the two front-lines followed each other in a quite chronological fashion.

The success of the negotiations along front-line one was instrumental in opening up a *line of flight* which attracted the attention of other actors submerged in a *strata* in which this rupture was taking place. Curiously enough it is apparent that the possibilities of expanding on the territory(that the technology could offer) did not attract the attention of these actors, but the trespassing it allowed for on ‘their own’ did. BMG was the first ‘dissident’ to re-interpret ‘Napster-the artefact’ and *sign on* to the idea of using this as a tool of expansion.

There seems to be little evidence of negotiations taking place between Napster and actors representing the ‘corporate’ side of music production and distribution before negotiations along front-line one were completed. It would also seem that the fact that Napster had so successfully negotiated along front-line one, should have formed a very solid basis for negotiations with ‘other’ actants along the ‘new’ front-line. This has not been the case, and perhaps the statements made can offer some clues why.

It seems fair to say that the negotiations along front-line 1 led to a consensus on ‘Napster’ (not necessarily as company/Object but as ‘system’) as the ‘future’ of music distribution. If nothing else the massive user subscription shows this. The *statement* as it stood now, however, proved to vague to convince most representatives of the music industry.

Fanning, in his speech to the senate (9/10-00), emphasized the future potential of P2P-technology in particular leading to “better use of computer resources, but also the development of a myriad of communities and super-communities fulfilling the promise of the internet that its founders envisioned.” So, we have a technology with a lot of future potential and a proven ‘track-record’ with users which is still refused by and large by the industry that is ‘first in line’ to benefit from its potential. I believe that this was due to the fact that neither the *technical content* nor the designer (publicly) addressed the issues of security and control. Record companies (and musicians as well) want to control how the products and the profits thereon are distributed.

To gain insight regarding some of the issues concerning the importance of *interpretation* and *presentation* at this stage (at the ‘opening’ of new negotiations/Front-line2), it is beneficial to leave the stage to the protagonists from the music community,

Chuck D and Lars Ulrich and Metallica. Musicians are often the most 'implicated' in the 'independent vs. corporate question,' and it's interesting to see how this question is at the core of the debate.

James Hetfield(singer/guitarist, Metallica): "We are going after Napster, the main artery here. All the people doing illegal things here, whether with good or bad intentions, we are not going after individual fans. Metallica has always felt fans are family Metallica has always been the underdog over the past 20 years, we've weathered a lot of storms and taken a lot of shit for the things that we thought were right for us."

This excerpt from the Metallica web-site illustrates the importance of not alienating your allies-your fans-and present the band as an *underdog*(though signed to a major label, selling millions of albums). The following exchange, from PBS 12/04/01, 'Charlie Rose Show', between Lars Ulrich and Chuck D further illustrates the nature of translation 'vocabulary.'

Lars: "Right now it's really not about the money. It's about control and about the future. The money that's being lost right now is pocket change. To me the core issue is about people's perception of the Internet, people's perception of what their rights are as an Internet user and how it relates to intellectual property."

Chuck D:"Well I look at Napster as just being a version of *new radio*. I look at, with all due respect to Lars and Metallica, they have an issue where they own their masters and they want to talk about control of their realm which is warranted and granted indeed, but they are the exception to the rule. I think the degree of artistry over the last fifty to sixty years has proven that the music business has been the one in control of an artists destiny, throwing them, in throwing them out, and right now this war goes beyond their heads. I look at Napster, or the connection between file sharing, which this is, as *power going back to the people*. I also look

at this as a situation where the industry had control of the technology and therefore the people were *subservient to that technology* at whatever price range the people have to pay for it."

(my italics) And for an industry that's prided itself off the enthusiasm of the fans it's really funny to see them try to put their hands up and say well this is the biggest thing since the Beatles but we have to stop it until it gets regulated."

Lars: "if it's intellectual do I have a right to it for free because technology allowed me to get it? And it's gonna throw commerce and the whole perception of this stuff on it's head. Does it mean that the only people you can't apply this to are people working in assembly lines?"

Chuck D:"We have to look at the sound, as dominant as it was in the last fifty years, the industry controlling the hardware and making you also have the software, that you have to comply to both. That whole paradigm has changed."

Lars:"there is nobody at Napster that is doing this as a charitable event for all of mankind. There are investors behind Napster, and there are people sitting counting the days when Napster has an I.P.O. offering and they all make millions of dollars in return for their work."

Chuck D: "But there's always gonna be the shadow of technology lurking over entertainment anyway."

"I think that there are artists, whether they're in Oslo or the middle of the United States, who can't get signed or probably couldn't get signed because of the limitations of the music business. This actually expands that whole paradigm and I think that they will thrive on the new system as opposed to having to beg on the old system."

Lars: "I'm not saying that they can't thrive on it. I'm saying that there's gotta be a way to make people who want to maintain control of their copyrighting material happy and in the same way make Napster available to people who want to use it."

Chuck D: "This is industry versus the people and the people got technology on their side and we gotta adapt."

Lars: "When you say the industry versus the people you have to put in a third component, you have to talk about the service providers; they are an equal component in this game. It's not just the musicians and the fans and the industry. It's the potential service providers knocking on the doors with their new technologies is a big part of this game."

Chuck D: "And the record companies would love to control them. Just like they would love to control radio and TV but..."

This debate clearly indicates the 'variable geography' of the artefact in addition to how actors were positioning themselves in relation to it. For some musicians it was the *new radio*- a new opportunity to get their voices heard, and it is perhaps natural that artists who do not have marketing millions of a major company as backup would be more intrigued by Napster's 'offer.' Ulrich, siding with the majors directs attention to the question of *control* as the main issue- who has the right to control and consequently profit from art as commodity? And, he promotes the view of the artefact as 'a pirate.' It is, however, imperative to point out that even though these two actors clearly symbolizes the polarization of the debate that does not mean that there weren't 'independent' artists who shared Ulrich's concerns("I don't have a big giant record deal or a movie deal. I don't make money on the road; I lose money on the road. A *newsweek* article said, 'It's the kids versus the suits.' Well, it's not really that – it's kids versus the damn musicians, the people you supposedly like, whose music you listen to." -- *Aimee Mann, Yahoo! Internet Life, August 2000*) and that there weren't major artists(major act 'Limp Bizkit' giving concerts sponsored by Napster) who felt that Napster, as it stood at this point, was beneficial for the industry.

Napster's main argument would be this, the notion of the system as the future in marketing and distribution of the industry. We have by now established how user interests were translated into the socio-technical ensemble of Napster. The statements made by Chuck D also effectively summed up the main interpretations a number of independent actors subscribed to, one being the 'new radio' with its promise of more exposure and the other being a 'political tool' to undermine the corporate stronghold on the industry.

We are now beginning to see the complexity of the translation process as the associative chain lengthens-the plot thickens. This 'extension' was, obviously, escalated by the law-suits. As mentioned earlier, there did not seem to be much evidence of any conscious strategic effort on the part of Napster to 'enrol' the major companies, who on their part realized that the realm of MP3 downloading needed control enforcement.

There is not room in this paper to go into detail of the different court cases and appeals, but rather to concentrate on some of the arguments that were central to the main debate.

Reducing Napster to the role of a 'punctualized actor' ("an actor that is reduced to a single function."-1992. Law/Callon) did, in fact, become an important *legal* strategy for the plaintiffs. *Punctualization* is regarded as a strategy to "offer a way of drawing quickly on the networks of the social without having to deal with endless complexity."(1992.'OSH' John Law) To replace a network with "the action itself" facilitates the heterogenous engineering-'tying' different elements together to a "single block." It may, however, also "degenerate into a failing network."(1992.Law), and what the action really *is*, is subject to negotiation and interpretation. It was vital to convince the court that Napster was a 'pirate,' with no purpose besides 'looting' artists of their intellectual property. "RIAA, on behalf of its members, sued

Napster because it launched a service that enables and facilitates piracy of music on an unprecedented scale.” (RIAA)

The argument was clear, Napster was guilty, as described in copyright law of “enabling and encouraging the illegal copying and distribution of copyrighted music.”

RIAA’s lawyer Russell Frackman also expressed the industry fears that Napster might position itself as an *obligatory passage* point between networks, local and global, artistic and consumer networks; “Napster really is and was designed to be the gatekeeper of this entire system. They were going to ‘control’ the user’s environment.”(P.159.2001.’SB’ Alderman) Such a position would coincide with what Latour (p.120.1994.’SIA’) would identify as ‘translation five’; becoming *indispensable*-through building *facts* (by forging alliances and translating interests) to the point where your *metaphor* “brings worlds together, and holds them there.”(1999. S.L.Star) Naturally this is not acceptable for the present *gatekeepers*.

During the court proceedings, however, one of the plaintiffs, Bertelmanns Music Group(BMG) chose to ‘jump ship’ and invest in the company;

“We have to deal with file-sharing. We can't criminalize 37 million users. We have to develop business models that are legal. Somebody has to take the lead for the industry.” (BMG Chairman and CEO Thomas Middelhoff to Business Week Frankfurt Bureau Chief Jack Ewing. Nov1-00, ‘Business Week Online)

Leonard Rubin, head of intellectual property at the Chicago law firm Gordon and Glickson LLC. Rubin, who has represented record companies, musicians and composers, said BMG's move was telling.

"One of the plaintiffs has begun to recognize that Napster has something to sell with over 30 million [users]," Rubin said. (By James Evans, IDG News Service, 10/31/00) BMG had decided, after all, to accept the ‘Napster program’ as the future of (online) distribution, and to

sign on to have a strong foothold in this territory, thus offering Napster a *negotiation space* (“this 'space' might be about securing resources or securing the neutrality of actors for a period. In any case, it is about defining the relationship between the project and its neighbors.”-1999.M.Callon) which is crucial for a social ensemble to develop its network.

This change in the 'constellation' of actors had, however, no bearings on the court case itself. And, Napster chose to contest the plaintiffs arguments on several accounts. The best qualified to sum up these arguments are, naturally, their lawyer David Boise:

-“The record companies have created a "copyright pool that dominates an industry," and have used that power to "disable the competition." that means the industry should lose the ability to sue to protect its copyrights. “ (Cnet-news 20/07/00)

“Napster cannot be guilty of any contributory infringement or vicarious liability unless there is liability on behalf of the Napster users.” The United State’s Congress had written a stature that immunized all ‘non-commercial’ copyrighting.

Since there was no buying or selling involved, the activity on the site should be deemed ‘non-commercial.’

The 1992 Audio Home Recording Act, explicitly bars copyright suits from being brought "based on the noncommercial use by a consumer" of a digital or analog recording device or medium. According to a survey by a Wharton School of Business professor, 70 percent of Napster members polled reported they've used the service to sample music before buying it, the brief added.(Cnet News.03/07/00) “Napster simply has to establish that its service is "capable of substantial non-infringing use" to meet that legal test,” Boies said.

We know now that (accounted for in 'the Tale') that the court rejected the Napster arguments, though it was a significant 'victory' for the company that the appeal court granted them the right to remain open until measures were made to comply with the ruling.

In our story, along this path, a crossroads has been reached. And, to follow this new 'thread' in our tale we need to expand on the vocabulary. The only way 'forward' for this artefact is a 'reshuffling' of the socio-technological ensemble. In a sense this situation demands a 'back to square one' 're-action.' The 'content' of this Napster-text has been judged unacceptable by the courts. "Closure through redefinition occurs when an artefact stabilized incompletely by one social group is stabilized more completely through association with a larger more powerful group." (p83.1999 Thomas Misa) Napster had now been defined as a 'pirate' but due to the fact that it could be redefined again through a process of renegotiation and realignment of actants a 'reprieve' had been granted.

This involves the *pre-script* and *re-inscription* process in particular. "*Prescription*, we call prescription whatever a scene presupposes from its *transcribed* actors and authors.

- "User input" in programming language is another very talking example of this inscription in the automatism of a living character whose behavior is both free and predetermined. "

"-Encoding prescriptions; string of sentences uttered in the imperative." (p.263.1992 Akrich/Latour) . Re-inscription: "the redistribution of all the other variables in order for a setting to cope with contradictory demands of many anti-programs; it usually means a complication-a folding-or a sophistication of the setting: or else it means that the complication, the sophistication is shifted away into the pre-inscription (*Pre-inscription*- all the work that has been done upstream of the scene and all the things assimilated by an

actor before coming to the scene as user or author.) : the choices made for the re-inscription defines the drama, the suspense, the emplotment of a setting.”(Akrich/Latour)

This ‘dramatic’ re-writing concentrates on stopping Napster users downloading copyright material for free. To achieve this a whole new set of prescriptions; “pay here!” “This you can download, this you cannot!” etc. is being included in the re-inscription process.

In ‘the Tale’ we learnt how the first ‘post-crisis’ substitution failed to convince the industry. A filter based on file-names(text) was rendered unreliable by other actors (software engineers and ‘pig-latin encoders’), and was not able to offer the appropriate control system. So, it is back to the ‘drawing board.’

The next substitution(as referred to in ‘the Tale’ included the TR>M system (licensed from the company Relatable) that identifies wavelength patterns(acoustic ‘fingerprints) produced by their sounds. This 'last' statement(4)(incl. Re-alignment of actors) offering a 'guarantee' of control and a 'promise' of profit. It is a paradox, though, that as the number of translations and substitutions grew to satisfy the 'control-actants,' the 'de-subscription' among users escalated. Analysis of user traffic showed that it was, during this period, reduced to 1/10 of what it was during the ‘heyday’ of the site. "Those things composed and linked by the translation operation might disperse themselves like a flight of birds. This is precisely the possibility we must predict if we want to explain and produce some evaluations." (p.126.1991’S.M.’.Latour)

Nevertheless, this ‘final’ statement seems to have convinced a number of those actors seeking a profitable, controlled solution as evident by the final law suits being dropped and the deals signed with Music Net, AIM and IMPALA. What still remains, however, is to hone the new technology to the point that is satisfies the demands of the courts.

At the outset of this paper the artefact as a *fact* or ‘black box’ was discussed, and this is a *state* that presupposes *Irreversibilisation*-The degree of irreversibility of a translation depends on two things; a)the extent to which it is subsequently impossible to go back to a point where that translation was only one amongst others; b) and the extent to which it shapes and determines subsequent translations. (1992.Callon)

We have, through the denouement of this story witnessed black-boxing strategies of the actors involved, but unlike most stories seen from an ‘ANT’-perspective this is not a story about uncovering or ‘prying open’ this particular black box, it is about the attempts to build it in the first place.

The 'desert' 'the wasteland' alluded to at the outset of our story exists no more. Our 'Tale' concluded that the image of a 'jungle' is more appropriate. And, one important objective of this paper is to give an account of how this 'machine' we call Napster has hooked itself on to a network and become an integral part of a process of challenging the status quo, staking out new possible territories. We have witnessed how one-actor network has the capacity to fundamentally change the 'geography' of a network.

The data(numbers) we have regarding CD sales and Napster user activity(as well as 'post-Napster case' sites, as we'll see in this section) do not give any conclusive answers. There has been established no clear link between increased downloading('pirate') activity and a decrease in sales, and this is a good indicator that the issues are more complex than merely a case of loss of income.

New constellations of actants have challenged the notion of the autonomous author, the practices of online marketing and distribution, and might have repercussions for the format music is presented in, thus artistic expression as well.

It is all, however, taking place within a dynamic(of deterritorialization/reterritorialization) that is not special to this case, but which has manifested itself in a unique manner and form in this story.

It is now relevant to further question some of the central premises for the *description* of the story and the forces involved in its development.

-Is the 'corporate'/'counter'-culture relationship accurately portrayed, is it even a relevant distinction?

-Is it possible to accredit the changes we can identify in this realm, and the tempo of these, to Napster only?

-On the grounds of the data(numbers and statements)is it feasible to deduct some conclusions regarding our research questions (motives and consequences) ?

-What 'becomings', expansions, mutings and mutations have we witnessed?

-Furthermore, is it viable to indicate some 'problems' or 'opportunities' regarding the use of ANT concepts to advance the storytelling of this particular case?

As to the question of 'corporate' and 'independent' actors it is a divide and a 'classification' which needs to be questioned. Several existing studies of the music industry have addressed the issue of the reciprocal relationship between the majors and the independent actors(Toynbee, Firth and Negus mentioned in this paper), and the Napster-story has illustrated the problems concerned with this 'clear-cut' classification, and seen in the context of deterritorializations/reterritorializations this underscores the complexity of the issue. in 'Music Genres and Corporate Culture' Keith Negus addresses the question of the commercialism vs. creativity point of view. (P.24.1999Negus) Negus contradicts the idea that Cultural production is "characterized in terms of a conflict between commerce(industry) and creativity(the artists). This is a distinction that also informs the claim that subcultures and active audiences(creative) can appropriate and hence transform the products that are disseminated by the industry(again, commerce)."

Another central question that arises when considering these issues is whether 'creativity,' 'originality' and 'innovation' is something perpetually 'outside' 'the corporate machine,' therefore always in the hands of 'the outsiders.'

I do, however, believe that such a 'conflict,' as mentioned above, is central to (some forms of)'cultural production,' be it producing music or, principally, technology.

But, I see it as a '*creative*' conflict, and perhaps even a *necessary* one. There seem to be quite a few indications that this conflict of *control* (over creativity, over production, market and distribution etc.) might be a *driving force* which spurs the different actors on, especially in relation to technological innovative activity. I believe that this 'story' has well illustrated this point. Several analysts point out the scurry of industry activity to propose an answer to the 'Napster challenge.'

The arrival of Napster certainly brought a new sense of urgency to this field, and further shed some light on the old 'territorial' issue of distribution.

Traditionally independent labels have been dependent on having a deal with one of the majors and their extended distribution network to get their releases heard. "Here the tensions between indie and major companies do not so much involve conflicts of art versus commerce or democracy versus oligopoly(as sometimes portrayed) as distribution struggles-battles to get recordings to the public."(p.58.1999.Negus) This is a situation which informs both some sources of controversy between 'indies' and majors as well as the difficulty in categorizing actors.

Though the actors might move back and forth, or even linger(more or less) comfortably in the middle, between these two oppositions so much so that these oppositions might appear redundant, the idea of these very segregated worlds seems , whenever you talk to anyone with a relation to or an interest in the music industry, very much alive *in the minds* of people.

(some 'observations on the 'majors' courtesy of Dave Cawley, 'FatCat Records'; on the ramifications of the dissemination of new media, how will it affect independent labels; "a total advantage, it only threatens the majors and their grip on the whole show.." -on the Napster court-case; " it re-affirmed to me that the majors / corporate bands are only concerned with greed, nothing else.")

As long as this is the case I really cannot see how one can reject these distinctions on the grounds that it has proven less than fruitful to view this matter as an *absolute*. In the 'real world' the picture is more complex (than two clear 'opposite' cultures), whereas the image that guides the way actors act might be an entirely different one, and this 'image' is naturally just as 'real' and just as relevant for our story. It seems certainly to be the case that an entity like Napster does not fit neatly into either category, but as long as it is *interpreted* by other actors as belonging to one or the other this has wide spanning consequences.

It is certainly beyond the scope of this thesis to try and reach any conclusions regarding the 'outside'/'inside' dichotomy, or indeed about the relevance or scale of these attitudes regarding cultural 'discord,' but I do believe that the conflict 'sub-cultures vs. corporate culture' was at the core of the genesis of Napster as well as to "what happened next." It is a question of creation as 're-action' to unsatisfying routines within the corporate culture, and a 're-action' to an 'offer' made by available technology that was 'too good to refuse.'

One can naturally, especially in the technological realm, point out more than a few examples of innovative activity taking place *within* the corporate structure of the music industry. And, particularly, in relation to formats there has, historically, been a willingness to develop new technology.

This is just good business strategy, since the introduction of a new, 'superior' format allows the industry to 're-package' the back-catalogue of their artists and basically sell the 'same' product over again. In addition to this there is no existing 'watermarking' on CDs thus enabling uncontrolled copying of the product. The complexity of the 'control' issues involved with utilizing MP3 for online distribution, however, made the majors hesitant, and the companies that had the ready resources to develop a new field of communication and commerce through this technology weren't capitalizing on this opportunity, consequently the initiative came from the 'outside.'

Furthermore, as our story progresses we see how the 'Corporate'/'Counter'-culture 'image'(whether accurate or not) is placed very much in the forefront of negotiations. All the actors uses the idea of 'presentation' in the negotiations, to place themselves and Napster either in one or the other 'camp.'

And, the 'Napster entity' beautifully though awkwardly placed in 'the middle' of these oppositional/confronting forces poignantly illustrates the importance and the ambiguities of this 'image.'

How then is it relevant to claim that Napster occupies such a 'space'?

This question needs to be addressed with the notions of *force* and *motion* in mind, and the process of deterritorialization and reterritorialization might help explain.

Even though one could, through the negotiations involved, track a trajectory of Napster as moving from the *outside* to the *inside*, from being 'post-media-activity'(in "Pour une éthique des médias", Le Monde 6 nov. 1991. Guattari envisages this transition on the basis of four factors:

- i) foreseeable technological developments;
- ii) the necessary redefinition of the relations between producers and consumers;
- iii) the institution of new social practices and their interference with the development of media;
- iv) the development of information technologies.)

to becoming part of the 'corporate machine' it will not fully elucidate the processes occupied with the unfolding of this story.

A key aspect of Deleuze's and Guattari's little allegory of the wasp is that the wasp is 'becoming-orchid' and the orchid 'becoming-wasp.' As soon as some-thing or some-one is engrossed in this process one *becomes* some-thing/one 'new'-*attached to* another 'body.'

"Whenever a marginality, a minority becomes active, takes the word power (*puissance de verbe*), transforms itself into becoming, and not merely submitting to it, identical with its condition, but in active, processual becoming, it engenders a singular trajectory that is necessarily deterritorialising, because, precisely, it's a minority that begins to subvert a majority, a consensus, a great aggregate." (1985. Guattari in 'Pragmatic/Machinic.' C.Stivale)

This process is what Guattari names 'becoming minor' ('Becoming Minor' is a strategy of turning major technologies into 'minor machines' - 'Minor Media-Heterogenic Machines' - Andreas Broeckmann, <Nettime>, 1998.) 'Being minor' is, per definition, being marginalized, this is, however, the point at which an object "begins to proliferate, begins to amplify, to recompose something that is no longer a totality, but what makes a former totality shift, detotalises, deterritorialises an entity." (1985. Guattari)

Guattari was, obviously, concerned with the more transformational traits of the 'new media' in a rhizomatic environment as the internet might be viewed as. This might be construed as 'Utopianism' but one need to keep in mind that the 'flipside' of a deterritorialization is always reterritorialization as our case illustrates.

It is vital to note that the process of reterritorialization began before the law-suits('crisis'), and before the BMG involvement. In a sense, Napster had deterritorialized on a field of commerce, and opened up for lines of flight which created new rhizomes/networks, and as soon as Bay area investors became involved to turn Napster into a commercial body, the reterritorialization was well under way.

The dynamic of creation and appropriation, in the new media business world is addressed by Michael Lewis(2001. M.Lewis) through what he calls an algorithm of business change;

1)new technology allows for the bypassing of rules set by mainstream incumbents in particular professions;2) fringe companies attract venture capital since great profits are to be made underselling incumbents;3)chaos ensues;4) fringe players are threatened with lawsuits;5) incumbents co-opt the fringe, or the fringe becomes the new incumbents. Then back to step one. Though the Napster case exemplifies this 'algorithm' to a certain extent it has to be recognized that 'chaos' is still a part of the whole picture, and, that we have, throughout the story, tracked the trajectory of the artefact as a result of negotiations, and have no grounds to claim that this situation depicted here is *inevitable*. And, stage 5) is by no means settled, and there still remains an alternative to this either/or option, namely co-existence among the 'incumbents' and the 'fringe players.'

A transition from desert to jungle is certainly *un-natural*, and the speed of this development is truly characteristic of an 'information-era.'

An important lesson to learn from this story is not to attribute all these changes to one single entity *within* a network. It is, however, germane to draw attention to how the alignment of actants in this 'case' 'opened up' a territory which made possible 'escapes' as well as 'intrusions.' The MP3 'Revolution'(if that is the appropriate name for it) did not start with Napster. 1995 was the year that saw the arrival of 'RealAudio'(downloadable MP3-player), in -97 'MP3.com' was launched- a site that had its own legal battles to fight, and in -98 a fan site of the New York rap-act 'Beastie Boys' posted, with the blessings of the band, MP3s of live recordings of the band. Our story is beginning in the midst of process that had made record executives nervous for some time already precisely because of those possible 'escapes.'

The technology highlighted an alternative route for 'outsiders' to market and distribute products. Public Enemy's figurehead Chuck D has predicted that within two years there will be "a million record labels" thanks to the Internet.

Speaking at NME.COM's NetSounds conference in London (May 2-01), Chuck D outlined what he saw as a three-tier future for the music industry with countless small names providing a worldwide base, filtering up to independent label releases and then onto big league with major labels. "When the industry digitised in the 80s they let the genie out of the bottle," he said. "And the bottle has now shattered into millions and millions of little pieces."

But, the 'opening up' of a territory will naturally lead to new opportunities for expansion beyond it(for the most extensively 'connected' actors in the network as well.).

Small sites covering unsigned bands, like Vitaminic.com, have benefited from the attention from the media and music fans, and services who let unsigned bands upload their music and sell them to the public is the "germ of the new indie label."(Q, May-01)

"This is the technologicalization of A&R(= 'artist and repertoire,' the 'scouting' dept. of the record company.)," they can check these sites, and not only hear new bands, but also get to see how they rate with the users-market research for free!

But, as the network expands its stability might become more flimsy as well. And, "Napster's fundamental architecture has the potential to destabilize many of the accepted premises that underpin the Internet."(Napster's Real Importance By Bill Burnham, ZDNN

May 9, 2000) At least as regards to the notion of the net as one big market complying to the rules and regulations of any other market place.

"At its core, by independently connecting computers across the Internet, Napster enables the creation of a distributed, disembodied marketplace.

This marketplace has no center and no owner, just a shared group of participants."(B.

Burnham) Traditionally sites operated as centralized marketplaces such as MP3.com which stored the files customers downloaded. With the arrival of Napster this has all changed and a myriad of sites('pirate' or not..) have based their structure on Napster, most notably, perhaps;

Webnoize P2P Download Index - August 2001	
1. FastTrack	970 million
2. Audiogalaxy*	910 million
3. iMesh	640 million
4. Gnutella**	530 million

(Numbers from 'WebNoize Research') * = Audiogalaxy deals exclusively with music files** = The Gnutella network is accessible using BearShare, LimeWire and other applications

“In total, the top four file-sharing systems -- FastTrack, Audiogalaxy, iMesh and Gnutella -- were used to download 3.05 billion files during August. This was more than the 2.79 billion files downloaded using Napster in February 2001 -- the peak month for the once wildly popular file-sharing network.” (‘WebNoize’-06/09-01) So, Napster might have been ‘muted’ or equipped with a ‘muzzle,’ but the P2P technology in tandem with MP3 is still causing ‘waves.’ A huge challenge for any ‘agent of control’ in this era is that these sites operate without a central server(as Napster did) which further complicates the ‘control’ issue. The ‘open source’ program is open for ‘anyone’ to modify which means that even if the creators of the program would want to shut it down other programmers might develop it further. And, ‘WebNoize’ further suggest that "All the leading networks will grow strongly in coming months, helped in particular by the return of peer-to-peer's most active users -- college students." As with the rise of Napster this is an important user group with free, internet access and unlimited bandwidth and storage.

This development where broadband will become increasingly more available is what those that predict the end of the industry see as a main catalyst in tandem with P2P technology.

The present situation seems to indicate that the focus is on producing a ,primarily, technological answer to this challenge.

The ‘Softwar’ that was instigated by new demands to achieve control is, naturally, another example of the network expanding with new actors entering to offer the technical solutions.

An important lesson from this case is this, how growth and influence are ‘stimulated’ by extending the network and increasing the number of connections.

This does, however, complicate negotiations (larger number of allies to 'keep in line'), and underscores the necessity of seeing a 'network' as 'open' with lines of flight. In this case you have a large, seemingly completely segmented 'closed' network (of music production and distribution), but as the story unfolds one can observe how every network has a 'weakness,' and 'open door' or in the words of Deleuze and Guattari;

"Territorialities then are shot through with lines of flight testifying to the presence within them of movements of deterritorialization and reterritorialization." (TP, p.55)

-The more connected, the stronger the network?

"In some cases Napster's architecture fundamentally undermines one of the crown jewels of Internet stock valuation theory. This theory holds that Internet marketplaces generate network effects as they grow in size.

These effects in turn accelerate the growth of the marketplace and make it almost impossible for competitors to catch up." (Bill Burnham, ZDNN

May 9, 2000) This 'network' notion is naturally not of the rhizome kind, but a 'contained' network of players within a marketplace, but this could still be a theory which illustrates the pitfalls of regarding size as an absolute, and that growth could reach a momentum 'of its own' – a point of no return in which one is so connected that the chain is unbreakable.

"It takes an enormous amount of effort to determine how to offer music to consumers online in a way that meets their needs and grows the business.

Method of delivery, format, rights clearances, relationships with retailers, and price structure are but a few of the many issues to be worked out, as is negotiating for digital distribution rights where necessary with artists, songwriters, publishers, and their representative organizations in the US and abroad." (RIAA)

This shows the paradox facing actors becoming extensively connected in the network, the more connection the more influence, but it might also become increasingly more difficult to manoeuvre. And, for the record companies this ‘sophistication of the setting,’ not only in relation to the technical solutions around Napster, but also in relation to an expanding network presents the industry with substantial challenges regarding ‘keeping it together.’

Those actors involved in the more ‘traditional’ distribution of music, for example, might not be too pleased by the prospects of a future of ‘online distribution only.’ In –97, for instance, Capitol records wanted to release a Duran Duran (infamous English ‘New Romantics’ band) on the net before it was issued to the retailers who then threatened to boycott the recording, and Capitol backed out of the net release.

Throughout this story an emphasis has been put on identifying incentives and motives behind actions, the nature and the connections of a network, how it emerges and how it is shaped through negotiations. Two concepts of Actor Network Theory have been central in the telling of this story, *inscription* and *translation*. I would argue that to tell this story, as with any other story which involves networks, pivotal to understanding the questions concerning motivation and why certain versions of ‘the truth’ are chosen and not others (how the network evolves) involves descriptions of ‘power’, ‘strategy’ and ‘control.’

How these elements are represented through the concepts mentioned is crucial to understanding the case. We need to try and establish who is exercising power what are the strategies involved to achieve control of a territory.

The ‘theory’ of ‘radical symmetry’ (not distinguishing between human and non-human actors) and ‘New Literary Forms’ proposed by, primarily, Latour and Callon has been criticised on several accounts.

One being that even though “the language changes, the story remains the same.”(1992.

Collins/Yearley) I would, however, argue that whenever the language changes, so does the story. Telling a story, with a different point of view and a whole different ‘setting’ certainly makes it a different story even though the ending might go ‘unscathed.’

Furthermore, the ‘granting of agency to things’ is seen as “something of a conceit” since “the analyst remain in control the whole time,” and a symmetrical treatment between the ‘true’ and ‘false’ “requires a human-centered universe.”(sic)(1992.Collins/Yearley)

I think it is fair to say that ‘the universe’ will invariably be ‘human centred’ as long as the analyst is human! To “redistribute actantial roles” does *neither* lead to a ‘release’ of control on the part of the analyst, *nor* does it take “humans out of their pivotal role.”(1992.

Collin/Yearley) It is perhaps more of an attempt to allow more affects to “speak about one thing,”the more eyes, different eyes we can use to observe one thing, the more complete will our “concept” of this thing, our “objectivity,” be. (p.119.1967. F.Nietzsche)

I believe this case has illustrated the importance of not making any a-priori decisions about what *causes* a particular chain of events, and it does indeed appear that the *technical* took ‘everyone’ by surprise at times, even the designer who ‘happened’ to program the codes that led to all this controversy. At certain instances it does make sense to acknowledge the ability of the ‘technical’ to emerge to a particular position without being ‘driven’ there by ‘the social.’

When acknowledging the actor-network nature of an actant, whether human or non-human it is easier to avoid having to rely on, what C/Y claim are “technologists’ secondhand accounts”(1992.Collins/Yearley)or having to track every development back to ‘the social.’

It does, for instance, make it easier to reject rhetoric concerning ‘new technology’ which was a part of this translation process.

‘New technology’ does not, necessarily, pose a threat which warrants strict attention paid to control, nor does it need to be ‘protected’ against the forces of ‘the world.’ ‘New Technology’ is no-thing until it enters the interpretation process.

Seeing an artefact as a *text* among texts does , however, propose certain challenges, which may be due to the limitations of this individual scribe, but which nevertheless need to be addressed. In my point of view it is those situations when ANT is not 'actor-networky' enough that problem arises(as with certain before mentioned aspects of 'inscription,' 'configuring the user'.)

A critique by Silverstone and Haddon(1996.in Mansell/Silverstone)of Woolgar’s ideas concerning the ‘configuration of the user’ raises an important issue ; "...they fail to clarify the relations of determinacy and indeterminacy that the machine-text is supposed to have with respect to users." The relationship between the object and the user, despite the indeterminacy of the configuring process(as well documented by the case study in 'the Machine.')

turns into a form of "pseudo-determinacy" according to Silverstone/Haddon. The *effectiveness* of this process is questioned, as well one could do the strength of an *inscription*. They, further, draw attention to the fact that" users are not just technical users. I believe this study has indicated how the actor-network character of the designer needs to be well accounted for when describing the *inscription* process.

Furthermore, it illuminates the importance of seeing ‘the user’ as an actor-network as well. And, in our case these actor-networks of the ‘designer’ and ‘the user’ do indeed become, at certain points, inseparable.

So, it could seem that “if the whole subject matter is signs and representations, it is hard to know exactly how we should make the distinction between that which occurs naturally and that which is made.”(1992. Collins/Yearly) That ‘which occurs naturally’ is subject to a variety of interpretations as well, but there must be room to say that ‘things just happen’ without conscious *strategic* efforts.

“[O]ne finds all sorts of support mechanisms (unions of employers, chambers of commerce etc.) which invent, modify and re-adjust, according to the circumstances of the moment and the place -- so that you get a coherent, rational strategy, but one for which it is no longer possible to identify a person who conceived it.” (p. 203.1980 .’P/K’ Foucault)

These “clusters of relations’ -‘haeccities’ are both constitutive and organizing. “From within this intensive field or immanent relations, one is better able to envisage the possibility of self-organising, decentred strategies of power with no point of origin.” (1997. Mark Paterson)

To faithfully account for the forming of structure and systems, it seems vital to avoid ‘deterministic’ vocabulary. In this author’s experience the concepts of technology as *text*, *inscription* and *translation* go a long way in mapping out this type of ‘becoming’ though the emphasis on ‘strategy’ might appear overly Machiavellian.

Certainly ,’building a machine’(tying “the assembled forces to another”-1994. ’SIA’.Latour) involves ‘manipulative’ strategies, but it does often involve “anonymous” ones, and to say that users are ‘configured’ and that groups are ‘invented’ might grant the designer and consequently the artefact(since it is capable of ‘prolonging’ the actions inscribed) too much power.

Returning to the specifics of this case by paraphrasing John Law (1992.’Notes.’),

I will conclude that though the “masters of the universe” have ensured their foothold for now, their feet might still be of “clay.” I would argue that a network that involves ‘politics’ will be liable to have a ‘dominating’ force (most extensively connected), but just as networks expand the connections are under more ‘strain’ and since the power practiced “is never singular but exists in relation to other forces,” - “it passes through the hands of the mastered no less than through the hands of the masters.” (p. 1988. ‘F.’ Deleuze) This Foucauldian notion of power seems to be helpful to keep in mind when describing networks like this. There are certainly actors in this network that enjoy a *privileged position*, but this position needs to be confirmed continuously through negotiations, and this case has illuminated how this privilege might be challenged or even revoked by new actors or new constellations of actors in the network. So, power ‘travels’ then, and every relation in a network is by definition a power-relation. “These power-relations do not emanate from one “unique locus of sovereignty”-but is constantly on the move, from one point to another.

”They constitute a strategy, an exercise of the non-stratified, and these “*anonymous strategies*” are almost mute and blind, since they evade all stable forms of the visible and the articulable.” (my italics) (p.73.19 .’F.’ Deleuze)

Approaching the notions of power and strategy in such a manner has particular implications for how to present the concepts of *system* and *structure*.

John Law claims that “structure is not free-standing, like scaffolding on a building site, but a site of struggle, a relational effect that recursively generates and reproduces itself.”

(1992. Law)

This type of structure will never be a ‘Notre Dame,’ but rather a ‘Sagrada Familia’- experiencing periods of stagnation and periods of acceleration, but always influenced by contradictory forces.

“Any system approaching perfect operationality is approaching its own death.” It arrives simultaneously at “the point of complete power and total ridicule-in other words of probable immediate subversion. At this point it takes only a straw to collapse the whole system.”

(p.122.1988. ‘SW’ J.Baudrillard) This is, naturally, a paradox which applies to Napster as a system as well. As one builds the ‘automaton’ the complexity increases, and every step towards perfection might simultaneously be a step towards its demise.

"Connection" indicates the way in which decoded and deterr. flows boost one another, accelerate their shared escape, and augment or stoke their quanta; the "conjugation" of these same flows, on the other hand, indicates their relative stoppage, like point of accumulation that plugs or seals the lines of flight, performs a general retrerr., and brings the flows under the dominance of a single flow capable of overcoding them. But it is precisely the most deterr. flow, under the first aspect, that always brings about the accumulation or conjunction of the processes, determines the overcoding, and serves as the basis for the retrerr.”(P.220.1988. ’TP’D/G) So, ‘Connection’ and ‘Conjugation do not ‘operate’ alone, but always as part of the same ‘flow.’

It is a paradox that the ‘success’ of Napster(with users), the line of flight it created, ‘forced’ the Corporate structure to ‘re-act’ and that the ‘nature’ of its technological set-up might supply the industry with excellent new marketing ‘avenues’ and new access to market ‘intelligence.’

At the nucleus of our story is the idea of a *balance* of forces in the network. Napster has cogently illustrated the complexity of the corporate-/counter- culture conflict. It is easy to get ‘carried away’ by the idea of a more ‘democratic’ industry without dominating corporations; more ‘lines of flight’ less ‘stratification.’

Though Deleuze and Guattari claim that what we 'need' is a "maximum amount of deterritorialized flow and a minimum of strata." They also recognize that: "Outside the strata we no longer have forms or substances, organization or development, content or expression. "Distratification" will sometimes, therefore, end in chaos, the void and destruction, and sometimes lead us back into the strata, which become more rigid still, losing their degrees of diversity, differentiation, and mobility."(p.40.1977' AO.' Deleuze/Guattari)

Personally, I do not share the 'doomsday scenario' regarding the music industry, hopefully this story has shown that there might be an equal distribution of challenges and opportunities a head for the majors as well as for independent labels and artists.

The significance of signification has been pointed out(esp. regarding the 'inscription process'), which is why the CD is not 'dead' yet neither is vinyl, and which is a strong argument against free downloads 'wiping out' the industry.

These formats are not just 'vehicles' for transporting music they carry with them a 'cultural cargo'-particularly through the visual representation. Though new formats will probably pose new challenges to industry routines and artistic expression alike these might change *with* the changing formats without necessarily compromising on 'control.' From the artist point of view one could mention Björk who says, about her newly released album ;"Vespertine is inspired by my computer. I am inspired by people downloading my music. " She has even gone to lengths to make sure that the album sounds good through the PC speakers; "That's why I used a lot of acoustic instruments in my songs." (06/09/01.'Bjork.com')

The translation process does indicate that the most extensively connected actors(mainly the Major companies)have new avenues to explore and exploit as well-new formats, new

marketing opportunities, new ways to hook up with new talent etc., in addition to being faced with the challenge of keeping all allies ‘in line,’ especially the retailers might not welcome a further emphasis on net-distribution-

As for the artefact at the centre of our attention, the biggest challenge facing Napster, which contrary to what media reports seem to claim is not ‘dead’ either, is the situation that actors subscribed to a set of inscriptions and prescriptions etc., and through the reterritorialization process culminating in the rulings the artifact has been *de-inscribed* and new prescriptions added that are at odds with a few of the original ones. In the course of the discourse, translations and interpretations we have, in a sense, witnessed the death of two machines- the pirate machine and the liberator machine the two interpretations that made up the either/or relationship that the actors subscribed to. Or less dramatic; they have been dismantled to facilitate a re-structuring.

The artefact is now in the process of seeking a re-alignment, emerging as a new type of machine translating new actors into its fold as well as seeking a *re-subscription* from some of the old actors as well as abandoning some(the MP3 format). The technical set-up is still, though duly modified to accommodate new prescriptions, a factor that makes the artifact appealing to actors(*'it's there, it works'*) though what it will take for actors to re-subscribe is a most interesting question.

To approach a ‘story’ in this manner proposes its own set of challenges and to fully account for every development and transmutation in a network is not possible, and furthermore one is limited by the lack of access to the main protagonists within.

This is why I have chosen to give much weight to forces and processes to underline the uniqueness of the case while emerged in one certain dynamic.

To the best of my knowledge there is no existing case-study on a similar case, and being emerged in an ongoing process witnessing events unfold as they happen one does not have the benefit of hindsight or the opportunity to employ the ‘counterfactual method’ which is so common in previous ‘ANT-stories’ which often deal with the history of an unsuccessful ‘project’ (1996.Latour,1992 Law/Callon). This is, however, something which further diminishes the authority of the author, which is regarded as something to strive for in ANT-practice, and which more thoroughly emphasises the role of the author as another actor, which is necessary if the highest possible degree of polyvocality is to be achieved.

And, being conscious of the futility of such a goal, is probably the first step towards achieving it.

This story ends at the beginning, not at the end.

‘Napster’ has escalated a process of innovative activity in the music industry, and the continuous developments within this field regarding formats and structure should offer a wide variety of options for further studies within the field of ‘Society, Science and Technology.’

Analysis of data regarding user ‘behaviour,’ or case studies on actors involved with the innovative initiatives are just two suggestions to different approaches that would further contribute to the understanding of the processes and events within this network.

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Appendix 1

Transcript of the injunction against Napster

By CNET News.com Staff

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<http://news.cnet.com/news/0-1005-201-2426706-0.html?tag=prntfr>

Transcript of Judge Marilyn Hall Patel's ruling

Editor's note: Last week, U.S. District Judge Marilyn Hall Patel ruled that the popular online music-swapping site Napster must halt the distribution of copyrighted material by midnight PT Friday, July 28.

Faced with going out of business, Napster quickly filed an appeal with 9th U.S. Circuit Court of Appeals; with hours to spare, the company received a stay on the injunction.

This is a complete transcript of Patel's decision, which was issued orally, in which she explains the basis for granting the injunction. Because it marks one of the first times a judge has issued a decision in a case of online music-swapping, Patel's interpretation of the law is likely to be widely cited in subsequent cases and will be crucial to the Court of Appeals as it grapples with the case.

The court: Well, counsel. A lot of paper has been filed in this case and I suppose we could hear a lot more argument, and we could take a lot more time with this. And ultimately I will reduce the court's decision to writing, but I think it's time for there to be a decision on the preliminary injunction motion because you have been waiting for this and you have been through a round of motions earlier under the Digital Millennium Copyright Act. I think that plenty of time has been expended in preparing for the motion. Certainly plenty of paper has been expended as well, that the court is able to render a decision on the motion for preliminary injunction.

To prevail on a motion for preliminary injunction--and this is going to take a while because I'm going to go through the elements and the claims and defenses--but to prevail on a motion for a preliminary injunction, plaintiffs must demonstrate a combination of probable success on the merits--and possibility of irreparable harm or on the continuum scale of serious legal questions that are raised--and a balance of hardships tipping in the plaintiffs' favor. I think it's safer to stay with the first

of those; in other words, the higher end of the continuum.

In copyright cases the reasonable likelihood of success on the merits does create a presumption of irreparable harm. And don't everybody go bolting for the door, but I will tell you right now what my conclusion is on that and then go through the reasons for it.

I find that plaintiffs have shown not just a reasonable likelihood of success but a strong likelihood of success on the merits. First of all with respect to direct infringement, because in order to establish either contributory or vicarious liability, they must establish direct infringement by a third party, in this case the users of Napster.

And here the evidence establishes that a majority of Napster users use the service to download and upload copyrighted music. This, in fact, should come as no surprise to Napster, since that really--it's clear from the evidence in this case and the early records that were divulged in discovery--was the purpose of it.

And by doing that, it constitutes--the uses constitute--direct infringement of plaintiffs' musical compositions--recordings that are copyrighted. And it is pretty much acknowledged also by Napster that this is infringement unless they can fall back on an affirmative defense because of the warnings that are given to the users of the system that they may be infringing and by statements made in their own documents when this business was getting off the ground.

Also, according to the evidence before the court, as much as 87 percent of the music--and I think that's a fairly reasonable figure and fairly well supported in the evidence--87 percent of the music available on Napster may be copyrighted. Certainly a substantial amount of it is.

Now, defendants have raised the fair use defense. That is an affirmative defense. Defendants have the burden on that defense, and to rebut allegations of infringement, they have raised this based upon Sony and its progeny, but particularly Sony, where the Supreme Court stated that any individual may reproduce a copyrighted work for a fair use.

Sony also stands for the rule that a manufacturer is not liable for selling a staple article of commerce, and that's in quotes from the case, that is, quote, "capable of commercially significant noninfringing uses."

Fair use and substantial noninfringing use arguments are in fact affirmative defenses, and defendant, as I said, has the burden of showing that a given use constitutes a fair use.

The court finds that--and then I'll go through the elements of this--but the finding is that any of the potential noninfringing uses of the Napster service are minimal. Some of them seem to be thought of them afterward and after this litigation started; but the substantial or commercially significant use of the service was and continues to be copying popular music, most of which is copyrighted and for which no authorization has been obtained.

While it may be capable of some of these other things, that seems to--those uses seem to--pale by comparison to what Napster is used for, what it was promoted for, and what it continues to be used for.

Now, the court must consider, and the factors the court must consider, among others, is, the four that are specifically enumerated in Sony are: The purpose and characteristic of use, including whether it's of a commercial nature; the nature of the copyrighted work; the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and the effect of the use upon the potential market for value of the copyrighted work.

I think there's not much dispute with respect to the second and third factors. The copyrighted musical compositions and recordings certainly are the paradigmatic kinds of things for which copyrights are obtained. They're creative in nature. They constitute entertainment and also the third factor. They are, in fact, uploaded or downloaded, or at least can be and generally are, in their entirety. Certainly they're generally made available in their entirety.

As to the first factor, the court finds that although downloading and uploading MP3 music is not a paradigmatic commercial activity, it is not also typical of the personal use--that is, in the traditional sense. It may be what makes this case difficult--or any of the cases involving new technology--is that it is hard sometimes to make a neat fit.

The mere fact that, that fit is not an easy one does not mean that plaintiffs have to forego enforcing their rights under the copyright laws.

Plaintiffs have not shown that the majority of Napster users download the music for sale or for profit, and it would appear that they probably do not.

However, there is evidence that Napster anticipates proudly that more than 70 million users by the end of the year 2000 will be on Napster in some fashion or another.

Given the vast scale which Napster and the Internet can in fact access--numbers and numbers of users--and that the uses among anonymous individuals, not just a sharing among friends and typical of the more private use, that cases have seen at the very least a host user sending a file cannot be said to engage merely in the typical personal use when distributing the file to, in this case, many anonymous requesters.

Moreover, the fact that Napster users get for free something they ordinarily would have to pay for suggests that they reap--the users reap--an economic advantage from Napster use.

As to the fourth factor, plaintiffs have produced evidence that Napster use harms the market for the copyrighted work in at least two ways, and we've had a number of studies, and I will spell out in the order the problems with some of those studies. I don't think any of them are, you know, what you would call without flaw.

But selecting out college students, I don't think was inappropriate and, therefore, does not negate the entire study. What it makes clear to the court, however, is that it is only looking at college students and, therefore, we know that it's only looking at a segment of the market. Nonetheless, a segment that Napster itself has said it has targeted. And it gives us a snapshot, particularly for preliminary injunction purposes, of what is happening in a particular market.

I find that the Fader report is far less persuasive. First of all, he relies upon a number of studies that

were printed in The Wall Street Journal and Wired and New York Times, and so forth, which may be fine for marketing purposes and strategizing, but it doesn't do very much for a reliable survey for court purposes. I commend to you Judge Schwarzer's book in that respect.

But, in any event, even as to the evaluation of the Greenfield survey, I think there are a number of problems with the Greenfield survey. But we don't really have a breakdown other than that one sheet at the end, and it doesn't tell us very much at all about what the answers really were. At least in the Jay report we have the answers that were given to the questions in the questionnaire. So it's far greater use and more probative to the court than the Fader report.

Appendix 2. The Audio Home Recording Act of 1992

The Audio Home Recording Act is Congress's response to a controversy between the music industry and the consumer electronics industry regarding the introduction of digital audio recording technology into the domestic consumer market. The Act represents an effort to resolve that controversy through a carefully developed and finely balanced legislative compromise. See generally H.R. Rep. No. 873(I), 102d Cong., 2d Sess. 11-13 (1992) ("House Report"), reprinted in 1992 U.S. Code Cong. & Admin. News ("USCCAN") 3581-3583; S. Rep. No. 294, 102d Cong., 2d Sess. 30-45 (1992) ("Senate Report").

Beginning in the 1980s, consumer electronics firms began to develop tape recorders and other consumer recording devices that employ digital audio recording technology. Unlike traditional analog recording technology, which results in perceptible differences between the source material and the copy, digital recording technology permits consumers to make copies of recorded music that are identical to the original recording. Moreover, a digital copy can itself be copied without any degradation of sound quality, opening the door to so-called "serial copying"—making multiple generations of copies, each identical to the original source. The capability of digital audio recording technology to produce perfect copies of recorded music made the technology attractive to the consumer electronics industry, which anticipated substantial consumer demand for tape recorders and other recording devices equipped with digital recording technology. However, the same capability was a source of concern to the music industry, which feared that the introduction of digital audio recording technology would lead to a vast expansion of "home taping" of copyrighted sound recordings and a corresponding loss of sales. When digital audio recording technology first became available for the consumer market, the legality of home taping of copyrighted sound recordings was a subject of ongoing controversy between the music industry and the consumer electronics industry. See House Report at 11-12, reprinted in 1992 USCCAN at 3581-3582; Senate Report at 31. In *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984), the Supreme Court held that the use of VCR recording technology by consumers to make home copies of broadcast programs for viewing at another time

(“time-shifting”) constituted a non-infringing “fair use” of the copyrighted material. The consumer electronics industry, together with consumer groups, argued that *Sony* recognized a general right to engage in home taping of copyrighted materials for personal use; the music industry argued that *Sony* was decided on narrow grounds and did not give the Court’s general imprimatur to home taping.

In 1990, music publishers and songwriters filed a class action suit for copyright infringement against Sony Corporation, which had begun to market DAT (Digital Audio Tape) recorders. During the course of the litigation, negotiations were undertaken to develop a general non-judicial solution to the digital audio recording controversy. The recording industry, recording artists, songwriters, music publishers, the consumer electronics industry, and consumer groups all participated in the negotiations. Senate Report at 33 & n. 16.

The negotiations culminated in 1991 in a compromise agreement among the interested parties, which was presented to Congress as the basis for legislation. The AHRA embodies the essential terms of that compromise. See House Report at 13, reprinted in 1992 USCCAN at 3583; Senate Report at 33-34. The compromise involves a basic *quid pro quo* between the music industry on the one hand and the consumer electronics industry and consumers on the other.

The AHRA provides the music industry with two principal benefits relating to digital audio recording technology. First, the Act requires manufacturers of “digital audio recording devices” to incorporate circuitry that prevents serial copying. 17 U.S.C. §§ 1001(11), 1002. Second, the Act requires manufacturers of “digital audio recording devices” and “digital audio recording media” to pay prescribed royalties into a fund that is distributed to copyright holders. *Id.* §§ 1003-1007. The royalty payment system is administered by the Copyright Office. *Id.* §§ 1005, 1007. In exchange for these benefits, the AHRA provides manufacturers and consumers with prescribed statutory immunity from suits for copyright infringement. This immunity is contained in Section 1008 of the Act, 17 U.S.C. § 1008, which provides:

No action may be brought under this title alleging infringement of copyright [1] based on the manufacture, importation, or distribution of a digital audio recording device, a digital audio recording medium, an analog recording device, or an analog recording medium, or [2] based on the noncommercial use by a consumer of such a device or medium for making digital musical recordings or analog musical recordings.

By its terms, Section 1008 disallows two kinds of actions for copyright infringement. The first are actions “based on the manufacture, importation, or distribution” of the specified recording devices and recording media. The second are actions “based on the noncommercial use by a consumer of such a device or medium for making digital musical recordings or analog musical recordings.” Section 1008 bars any action for copyright infringement “under this title”—Title 17 of the United States Code—based on these activities.

B. The Present Litigation

In December 1999, the plaintiffs brought this action for copyright infringement against Napster in the Northern District of California. Napster is a centralized service that greatly simplifies and expands the ability of Internet users to copy MP3 music files from other persons’ computers. It does so by providing a “virtual

meeting place” where an individual user of the Napster system can find MP3 music files on the hard drive of other computers participating, at that moment, in the Napster “community.” Napster then facilitates the direct “peer-to-peer” copying and transfer of those files.

In general terms, the plaintiffs asserted that consumers who use Napster’s Internet-based service and software to exchange sound files containing copyrighted musical recordings are engaged in copyright infringement and that Napster is liable for contributory infringement and vicarious infringement.

Napster denied that its users are engaged in infringement or that its own actions make it liable for contributory or vicarious infringement. In addition, Napster asserted a number of affirmative defenses. Among those is a defense based on Section 1008 of the AHRA. Napster argued that the activities of its users are immunized by Section 1008 and that, as a consequence, Napster itself cannot be held liable for contributory or vicarious infringement.

On July 26, 2000, the district court issued an opinion and order granting a preliminary injunction against Napster.

The district court concluded, *inter alia*, that Napster’s users are engaged in extensive copyright infringement and that Napster is contributorily and vicariously liable for their actions. The district court dismissed Section 1008 as “irrelevant to the instant action” because the plaintiffs were not seeking relief under the AHRA. ER 04266 (Opinion p. 42 n.19).

SUMMARY OF ARGUMENT

Section 1008 of the Audio Home Recording Act does not protect Napster from the plaintiffs’ claims of copyright infringement. Section 1008 was adopted to address a very different phenomenon—the noncommercial consumer use of digital audio recording devices, such as DAT tape decks, to perform “home taping” of musical recordings. Napster’s effort to bring itself within the ambit of Section 1008 flouts the terms of the statute and conflicts with the basic policies of the Act.

1. Section 1008 prohibits actions for copyright infringement based on: (1) the manufacture, importation, or distribution of “a digital audio recording device, a digital audio recording medium, an analog recording device, or an analog recording medium”; or (2) “the noncommercial use by a consumer of such a device or medium for making digital musical recordings or analog musical recordings.”

Although Napster insists that the activities of its users are protected by Section 1008, and that it therefore cannot be held accountable for contributory or vicarious infringement based on those activities, Napster’s defense cannot possibly be squared with the actual terms of Section 1008.

First, it is undisputed that Napster’s users are not using any “device” or “medium” specified in Section 1008, and Section 1008 applies only to consumer use of “such a device or medium.” Second, when Napster’s users create and store copies of music files on their computers’ hard disks, they are not making “digital musical recordings or analog musical recordings” as those terms are defined in the Act. Third, Napster’s users are engaged not only in copying musical recordings, but also in distributing such recordings to the public, and Section 1008 immunizes only noncommercial copying (“noncommercial use * * * for making digital musical recordings or analog musical recordings”), not public distribution. Fourth, unlike such copyright provisions as the fair use provision (17 U.S.C. § 107), Section 1008

does not designate any use of copyrighted works as non-infringing; it merely bars “action[s] * * * alleging infringement” based on such uses. Assuming *arguendo* that Napster’s users are otherwise engaged in acts of copyright infringement, nothing in Section 1008 purports to render those actions non- infringing, and hence the claims against Napster for contributory and vicarious infringement would remain unaffected even if Section 1008 did apply to Napster’s users.

2. The AHRA was intended by Congress to embody a compromise between the music industry on the one hand and the consumer electronics industry and consumer groups on the other. At the heart of that compromise is a *quid pro quo*: in exchange for allowing noncommercial consumer use of digital audio recording technology (Section 1008), the music industry receives financial compensation (Sections 1003-1007) and protection against serial copying (Section 1002). Permitting Napster to shelter itself behind Section 1008 would defeat this basic statutory *quid pro quo*: Napster’s users would be permitted to engage in digital copying and public distribution of copyrighted works on a scale beggaring anything Congress could have imagined when it enacted the Act,

yet the music industry would receive nothing in return because the products used by Napster and its users (computers and hard drives) are unquestionably not subject to the Act’s royalty and serial copying provisions.

Napster asserts that, despite the precision of the language in Section 1008, Congress actually meant to provide immunity for all noncommercial consumer copying of music in digital or analog form, whether or not the copying fits within the terms of Section 1008. Nothing in the legislative history of the Act supports that argument. And nothing in *RIAA v. Diamond Multimedia Systems Inc.*, 180 F.3d 1072 (9th Cir. 1999), the decision on which Napster places principal reliance, supports the argument either. Section 1008 was not at issue in *Diamond Multimedia*, and nowhere does the case hold that Section 1008 provides the kind of omnibus immunity for digital copying that Napster invokes here.

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