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**MASHUP ARCHEOLOGY:
A CASE STUDY IN THE ROLE OF DIGITAL TECHNOLOGY
IN CULTURAL PRODUCTION**

A Dissertation Presented

by

ZACHARY MCDOWELL

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2016

Communication

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ZACHARY MCDOWELL

Approved as to style and content by:

Briankle Chang, Chair

Jarice Hanson, Member

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Erica Scharrer, Chair
Department of Communication

DEDICATION

To the CMOS 6502, my first microprocessor.

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ABSTRACT

**MASHUP ARCHEOLOGY: A CASE STUDY IN THE ROLE OF DIGITAL TECHNOLOGY
IN CULTURAL PRODUCTION**

MAY 2016

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Through examining the phenomena of the musical mashup against the backdrop of the contemporary American legal and economic situations, this work explores the complicated role of digital technology in contemporary cultural production and how it helps to constitute an agency of the contemporary digital subject, oriented towards participation and access. This research comes together in four parts, first weaving together against an understanding of the cultural and technical background as well as the legal and social backdrop that helped to birth the mashup, setting the stage for understanding the different powers at play. Secondly, through considering the construction and determination of culture and cultural production through media in the first instance this work puts those backgrounds into a framework of understanding how these different power structures influence culture. Third, through an understanding of how the mashup functions culturally via these power structures it begins to reveal some of the

influences and how they have begun to take hold. Finally, I question what it is that these experiences and technical media are doing within this larger framework that is already controlled through aging and outdated legal and economic frameworks, outlining a framework that helps to understand the architectural determination of the mashup within contemporary society and why this phenomena persists despite legal and economic pushback. Through this exploration I argue that these technologies are turning the subject against these legal systems and towards sharing cultures as the experience with digital technology undermines legal stipulations.

This work makes new contributions to understanding not only the role of digital technologies in cultural production, but also the role of digital technologies in the formation of the modern digital subject. Blending cybernetic theory, contemporary media studies, cultural studies, and continental philosophy, this work makes headway toward understanding the complexities of the modern cybernetic subject and how technology plays a role in determining the horizon of opportunities.

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CHAPTER 1

DIGITAL CULTURE AND ITS DISCONTENTS

If media do indeed 'determine our situation,' then they no doubt also determine, and hence configure, our intellectual operations. One could easily re-appropriate Derrida's much-deferred pronouncement [there is no outside of the text] and suggest that the fundamental premise of media discourse analysis is [there is no outside of media].

- Geoffrey Winthrop Young

Introduction

In Harvard Law Professor Lawrence Lessig's keynote at Educause in 2009, a conference for using technology in higher education, he suggested that we are "turning our children into pirates" through our inadequate understanding of creative process and the limitations of current copyright laws. Lessig was, of course, referring to the trend towards remixing as the form of creative expression in the age of the Internet. He was not just referring to the so-called "millennial" generation, but the rapid expansion so called "remix culture." The ease of remixing, collaboration, and sharing has influenced the trend towards digital cultural production, only requiring the most basic skills.

It is simple enough to acknowledge that digital technologies have become ubiquitous within modern society; smart phones, laptops, and a near-constant connection to the Internet is, for many, simply part of modern existence. What Lessig was referring in regards to digital technology not only suggests to digital technology's ubiquity, but also begins to turn towards the next question at hand: how are these technologies shaping our culture? Within this simple statement, he observed that not only is digital remixing is an important and ubiquitous form of

creative expression, but also that, because of our current legal climate, this form of creative expression (this form of culture-creation) is one that functions within a legally complex, and often suspicious, arena. Furthermore, this digital remixing is reliant on an ever-growing set of digital technologies, linking it with these particular technological interfaces which play a large role in the construction of these remixes.

Lessig's statement not only suggests that the issue of remixing is "simply" a cultural concern, comprising of intertwining determinations from market, legal, and social forces, but also an issue of media - not simply regarding media messages, but the medium of expression itself. This concern over "turning children into pirates" is more than just a battle between legal and cultural forces, but, as he suggests, it emerges from a limited understanding of creativity in the digital age. It would be a mistake, then, to ignore the technical media that shape creative endeavors when investigating the (ongoing) cultural event he refers to.

If, as Young suggests in the epigraph, media "determine our situation," and "configure our intellectual operations," it would not only be a mistake to ignore the technical media, but it places media at the forefront of this investigation. For example, although it would be a mistake when considering the history of the gramophone to forget its marketing and mass production, it is also a mistake to forget how it bent time, considering the advantages inherent within the form of the technical auditory machine (Kittler 1999, 35). Approaching technical media as both a form in which it appears, one which it is situated social-culturally, economically, and historically within, as well as the technical architecture of which it is comprised of is imperative to fully understanding the bigger picture of digitally mediated social

phenomenon. Investigating the "form" of technical media becomes increasingly more important the further away these technical systems drift from their analog predecessors as the architecture becomes increasingly hidden beneath layers of code, networks, and micro processing.

As there countless "forms" of remix utilizing a variety of technical media to combine video and audio overlays, photo-manipulation, and cut up other pieces of media, there are also countless systems that participate in fashioning remix. If remix has, at least according to Lessig (and possibly just plainly so), become the language of the Internet, and one of the dominant forms of cultural expression, then it is linked with a vast array of systems, processes, media histories, and other avenues ripe for investigation. The problem with analyzing "remix" in general is that it can be defined in a variety of ways, as all of these forms contain a myriad of different technical media. To streamline an analysis of the power of remix, I will limit this investigation to a particular type of remix: the audio mashup, which, although does not represent all variety of remix, functions similarly and acts as a representative for remix in general while limiting itself to technologies linked with audio production and distribution.

This dissertation proposes an archaeology of the audio mashup to uncover hidden determinants that lurk within digital cultural production. This archaeology will (1) lay out the cultural and technical background which constitutes the mashup within contemporary culture, (2) explore the audio mashup for what it contributes to contemporary theory building, (3) explore the cultural form of the mashup as it functions against current legal and economic limitations, and (4) inquire into how

these understandings of the mashup can help us understand the new media's architectural determination within contemporary society.

Numerous others have written about the mashup and remix, notably Lawrence Lessig, (2005, 2006, 2012) Kembrew McLeod, (2005, 2007) and David Gunkel (2008, 2012). This work makes two specific contributions to the understanding of the mashup and digital culture. First, this work situates the birth of and subsequent continuation of mashup popularity within a larger cultural context, understanding architectural, market, legal, and social determinants, teasing out the importance of digital architecture as it functions against technology. Secondly, and moving forward from the first impact, this work makes a significant impact in understanding how the mashup functions from a theoretical level, re-theorizing digital architecture as a primary concern for the production of subjectivity, and for cultural production. This theoretical understanding of the mashup, one both in conversation with a larger ecology of determinants, as well as in a second-order cybernetic relationship with digitally-determined subjects, offers a more comprehensive view not only of the role of the mashup, but a lens to view similar digital phenomena through.

The mashup is, quite simply, a "mashing-up" of various cultural phenomena, a recombination of pieces of something else into something new. Audio mashups, as are the focus here, are composed of cut up pieces of (often) popular audio (musical or otherwise) that are re-assembled into a new composition. Audio mashups may utilize a myriad of audio clips, from popular music, to television and movie audio snippets, and more, combining various pieces of culture into a newly created track,

or, as in the case of one of the most popular and famous mashup albums of all time, *The Grey Album*, "simply" a combination of two separate popular albums. Mashups, audio and otherwise, all follow a similar logic, pulling pieces of (often copyrighted) culture apart and then reassembling them into newly recombined cultural artifacts.

Mashups are interesting not only because they are popular, but (as will become evident) they also serve as an apt metaphor for cultural production and communication systems in general as well as how to rethink media's role within these systems. Although the mashup cannot truly represent the wide variety of ways in which a remix can be formulated, it can serve as a simplified and definable way to consider the constellation of cultural influences involved within "remix culture." Additionally, the mashup is an excellent form employ while inquiring about technical media because mashups, in general, tend to resist a "simple" textual analysis. Not that mashups could not be analyzed textually, of course, but each artistic decision limiting or reproducing particular clips in a particular fashion says more about a type of aesthetic and the technology used to produce it than it does about a particular audio track. Most individual mashup tracks are "uninteresting" from a textual point of view as they often say little with their particular embedded tracks. However, mashups do illuminate the potential for conversations between, for example, Jay-Z and The Beatles, as in the 2004 mashup album *The Grey Album*.

Cultural and Technical Background of Audio Mashups

Audio waves are, of course, physical. Although they may (for the most part) be "invisible" to the naked eye, audio is composed of physical waves and, of course,

has a physical effect. The first recordings created on wax cylinders were physical - translating audio waves through a vibrating needle onto the wax medium etched these audio waves into a "readable" format. These were "analog" recordings, from the Greek *análogos*, "proportionate." Analog recordings have a particular correspondence, from the needle's vibration or the magnetic encoding, which directly correspond to audio waves. Vinyl records are a particularly recognizable analogue audio technology, which, due to their high-fidelity remain valuable to audiophile consumers. Analogue media, whether vinyl records or magnetic tapes, have a particular architecture, and a particular interface which allows only a handful of options to the user, resisting excessive tampering and only allowing certain types of interaction. Analogue playback allows time dilation (playing faster or slower), reversal (playing backwards), and frequency isolation, but little more. Master recordings off of a multi-track recorder might, for example, be needed to isolate particular instrumental tracks (if at all they can be isolated). As evidenced by the Jamaican Dub from the 60's and the explosion of Hip Hop in the 80's, much can be done with turntables and a fader, but outside of those particular interactions, remixing required professional studios and high levels of skill. Even with a professional studio, this took an incredible amount of time and skill.

In the days of analogue recording and production, if one were to loop a short snippet of sound, it needed to be done in real time and with precision. On a most basic level, a loop is a piece of audio which is played over and over in a "loop," repeating the piece of audio, however long, a number of times. The "copy" and "paste" of magnetic material had to be done by hand, where one machine would

"play" the audio so the other could "record." If we were use a basic four-track recording device (which, depending on the model could have taken up an entire room), one would have to have both a master (for example, a record) and a recording device. Each iteration must be set up on both the record and the recording device, then played and recorded (simultaneously), and then both rewound, until the desired amount of loops for the track is achieved. To add to this difficulty, these machines "revved up" with their electric motors, meaning that each iteration must be skillfully "punched in," or synced a few seconds in advance to then engage the recording device at the right time. This takes quite a bit of precision and skill to even create a single "loop" on a single track. Most records recorded in this analog manner, before mastering to stereo, have between eight and 16 "tracks." Even more problematic and difficult, when working with the original "master" recording there is always a loss of fidelity, however seemingly insignificant, when copying one analog recording to another. Each subsequent transfer of material (from parent to child, and then from child to new child) continues to potentially lose additional fidelity. The ability for digital manipulation not only lowered the bar for entry significantly but also improved greatly on copying audio.

Digital recordings employ a much different logic, predicated on a much different architecture. Rather than utilizing an analogous system of compression and storage, such as the grooves on a record to store sound waves, digital recordings utilize a digital "file" of ones and zeros to store information, which is then translated by software and hardware to re-produce the sound waves. Depending on the compression algorithm, these files could be "lossy" (as in they

lose a lot of the original sound wave) or "lossless" (they capture as much as is possible of the sound wave) or anywhere in between. Although compression (and re-compression) can (much like analog transfer) lose fidelity in audio files, the difference is that all digital audio files, when copied, pasted, and transmitted, are exact duplicates of their copied or seeded files. Digital parents and their copied children are exact duplicates, and it no longer takes a "master" file to copy and transfer the exact, perfect, original; digital files, unlike analogue, can be infinitely replicated with absolute precision and accuracy. These files can be loaded on a myriad of editing software, which can represent the waveforms onto a screen of the author's choice (even mobile devices have the ability to edit digital files).

Rather than taking hours of time and precise editing skill, looping a piece of audio can be achieved with fantastically accurate results in moments using digital audio editing software. Potential remix artists can simply highlight a piece of an audio track (whether from another song, a television show, movie, or other audio recording), limiting its beginning and end, and "copy" this clip to the computer's clipboard. From this clipboard, the remixer can simply "paste" the clip once, or thousands of times. Each time this clip is pasted, it will be perfectly replicated, with no loss of fidelity from the other clips pasted. Every single clip is physically, and aurally, identical. Unlike analog audio architecture, the architecture of the digital contains within it the ease of reproducibility and replicability; ones and zeros are made to be perfectly copied, pasted, transmitted, and stored. This replicability, of course, exists within all digital architecture and not just audio files, but is easily understood in contrast to analog audio recordings and how amateurs and

professionals can use them alike. This ease-of-replicability translates not only into easy cutting and pasting snippets of audio, but also for sharing and mass distribution.

Mashups, are, as David Gunkel calls them "a bastard art form," made through "illegitimate appropriation, " guided by the logic of this digital architecture (2008, 490). Furthermore, Kembrew McLeod notes that mashups "could not have happened without the digital distribution power of the Internet," noting some of the original filesharing networks (Napster, Kazaa, or Limewire) "make it possible for mashups to circulate," but also the wide availability of "billions" of audio files are the "grist for creation" (2005, 79). This ease of distribution and overwhelming "grist" helps to frame how Pete Rojas (2002), in *Salon.com*, sees the mashup as constituting "the first genre of music that truly fulfills the 'anyone can do it' promises originally made by punk." Gunkel argues that they are "revolutionary" (2012, 84), due to their "illegal" appropriation that flies in the face of current copyright law, which, as will be argued throughout this dissertation, is a direct result of the digital architecture. The ubiquity of the personal computer and the spread of the Internet provided the material as well as the platform for the construction and distribution of the mashup, available for individuals in their home and cutting out the need for more professional studios and equipment, which helped to birth a legion of "laptop" remixers.

The "Ultimate Remix Record": The Grey Album

Although the mashup has become immensely popular in recent years, it has not been without legal and economic pushback. DJ Danger Mouse's *The Grey Album* (2004) (a mashup between Jay-Z's 2003 *The Black Album* and the Beatles' 1968 *The White Album*), was considered the "apex of the mash-up revolution," (Gunkel 2008, 490) and hailed by Rolling Stone as "the ultimate remix record" (Giltlin 2004).

The Boston Globe remarked that *The Grey Album* "brought the Beatles into the hip-hop generation," and "through its boundary-breaking musical philosophy may have helped pave the way for the free-flowing deconstructionism of rap music" (Graham 2004). With 35 years in between the two source albums, Brian Burton aka "Danger Mouse" crafted *The Grey album* through "over one hundred hours" of "chopping up" and re-assembling instrumental and vocal snippets from the Beatles *White Album* and coordinating them with the rapped vocals from Jay-Z's *The Black Album* (McLeod 2007, 153). This album, upon its underground release and subsequent hailing by numerous publications, was met with a cease-and-desist letters from EMI, the owner of the rights to the Beatles' *The White Album*, sparking the subsequent online protest against these takedown notices on February 24, 2004, known as "Grey Tuesday."

The particulars of the cease-and-desist letters are not as helpful in understanding this phenomenon as this type of legal response had become more and more prevalent in recent years. However the online "sit in" response, known as "Grey Tuesday," which coordinated hundreds of Internet sites in support of *The Grey*

Album marked something new. Charles Fairchild, in *Danger Mouse's The Grey Album*, remarks: "within its very form and content, it came to represent the struggles over tectonic shifts in the production, distribution, and consumption of music" (2014, 6). What started out as only a handful of pressings that found their digital reproductions distributed through the Internet, became a rallying cry for activists. Fairchild notes: "without necessarily meaning to, he brought into focus a new paradigm in the constant, scuffling contests between those trying to exploit new sound manipulation technologies and those trying to corral them" (Ibid.).

Dubbed "An Online Protest for Copyright Reform," nearly 170 sites hosted *The Grey Album* for download, despite persistent takedown notices. Over 100,000 copies were downloaded on "Grey Tuesday" alone. No charges were ever filed, despite pestering by the rights holders. These "declarations" of civil disobedience "were part of a larger culture that was dreaming up new ways to connect with the world," (Ibid., 7) by subjects that were continuously told that their method of connecting was, in a word, illegal.

Of course, the authors of the music did not send these takedown letters, but instead by "rights holders." Sir Paul McCartney did not have a problem *The Grey Album*, stating in the BBC documentary *The Beatles & Black Music* that "I did not mind when something like that happened with the Grey Album," adding that "the record company minded. They put up a fuss. But it was like, 'Take it easy guys, it's a tribute.'" McCartney even recognized the Beatles' own techniques of cultural appropriation in the form of the mashup, stating "It's exactly what we did in the

beginning - introducing black soul music to a mass white audience. It's come full circle. It's well cool. When you hear a riff similar to your own your first feeling is 'rip-off'. After you've got over it you think, 'look at that, someone's noticed that riff.'" The "grist" for the vocals, Jay-Z, was also a fan of *The Grey Album*, telling Terry Gross of NPR's *Fresh Air* "I think it was a really strong album. I champion any form of creativity. And that was a genius idea to do, and it sparked so many others like it. It's really good. ... I was honored someone took the time to mash those records up with Beatles records. I was honored to be on quote-unquote the same song with The Beatles."

The Grey Album is not just composed of bits and pieces of different tracks and albums, cut up and reassembled into something new, but it also composed of the architectural and technological, legal, market, and social climate that brought it into existence, and then later distributed it through an other architectural and technological, legal, market, and social climate. Rather than "the apex," we might consider *The Grey Album* as a marker of a still-emerging phenomenon, one evident in the artistic practice of the mashup and all of its determinations, as well as those of its circulation. As Lawrence Lessig notes, cutting up two albums into an audio mashup was just the beginning: "the equivalent today is something like the work of Girl Talk, who synthesizes up to 280 different songs together into one particular song" (2012, 159). If a two-album mashup was with enough legal backlash and subsequent social outcry and (online) civil disobedience, the potential for legal trouble can only increase with more source material.

To skirt around these legal issues, mashup albums have been relegated to "free" (either centralized, decentralized, or both) or "pay-what-you-want" distribution methods. Girl Talk's (stage name for Greg Gillis) albums have all employed these methods to escape potential serious legal consequences, generating income from touring and merchandise sales rather than album sales. The mashup locates an interesting contention surrounding digitally mediated cultural production and circulation, and can help to probe not only what is the formulation and circulation of the mashup, the determinations in play that help to compose and distribute the discrete mashup track or video, but what is at work in the mashup that creates such contention between those who seek to produce, distribute, and consume mashups, and those who seek to control the components of the mashup. Not only is Girl Talk's music *illegal* in the eyes of current copyright law, but also even if Gillis *attempted* to pay license his work to pay royalties, the juridical wrangling required to make just one of his mashup songs *legal* would cost more than most pop albums ever generate. For example, artist Mark Vidler's attempt to authorize, to *legalize*, his mashup album *Mashed* was, according to him, "a clearance process of biblical proportions" (Gunkel 2008, citing Vidler's press release from 2007). The current state of copyright affairs ensures that authorization of this form of music is simply is not feasible by anyone but the largest and most well-funded artists with armies of lawyers to secure the rights to each component in their works. These legal issues create vexing issues not only for creation, but also artists can distribute and circulate their creations, leaving the mashup not only an interesting study in how technical media systems operate on a variety of levels, but also an

excellent case study of an alternate media production and distribution model, one that decentralized and decoupled from traditional contemporary media companies (if, by nothing else, out of necessity).

Not only have alternate economic models arisen to support the mashup artists (such as donations rather than album "sales") but, exemplified by "Grey Tuesday," the mashup has helped to mobilize a community of activists to not only defend its right to exist, but to raise awareness of copyright law's position against them. The mashup raises a series of questions about not only authorship and intellectual property, but also about the decentralization of media production and distribution, and the ramifications of these alternative modes of production and distribution. This decentralization is dependent on the utilization of digital technologies, from the software used to produce them, to the networks used to circulate and distribute them, so the questions raised about the mashup are also questions about the ramifications of digitally mediated production and distribution. This dissertation will explore the questions raised by the mashup through exploring its decentralized, digitally mediated production and distribution to better understand the role of digital mediation in the production and distribution of the mashup and how it helped to formulate alternate economic models and mobilize communities.

Through understanding the structure of these digital technologies in regards to the mashup, this dissertation will illustrate not only that digital technologies play an important role in the mediation of the production and circulation of the mashup,

but they also that interactions with digital technologies determine the messages circulated with the mashup, specifically messages about access, participation, and agency, that not only helped to spark "Grey Tuesday" but also more contemporary protests and activism in regards to copyright monopolies. These messages circulate against current economic and (particularly) legal limitations, weaving a complicated social, legal, and economic situation that acts against assumptions using traditional ways of approaching media. This situation, however, cannot be understood outside of a more thorough overview of the legal system in place during the emergence of the mashup.

Legal and Social Backdrop

Sir Issac Newton famously remarked, "If I have seen further it is by standing on shoulders of giants" (Newton 1959, 416). Newton, of course, was in good company as George Herbert wrote "A dwarf on a giant's shoulders sees farther of the two," (Herbert 1902, 222) and Bernard de Chartres notably said "that we are like dwarfs on the shoulders of giants, so that we can see more than they, at things at a greater distance, not by virtue of any sharpness of sight on our part, or any physical distinction, but because we are carried high and raised up by their giant size" (Bishop of Chartres 1955, 167). More recently Lawrence Lessig has declared, simply, "creativity and innovation always builds upon the past," (2002) a slightly less prosaic but nonetheless equivalent sentiment: where we are remains possible only through those that have come before us.

Although when said out loud it seems little more than common sense, a brief examination of the media landscape will enlighten a different angle, one that seems to forget the giants of history and present beneath our dwarven feet. Rather than allowing an acknowledgement of past accomplishments which we have built upon, it seems that the current modus operandi is to take credit for, or at least dismiss, all of the historical foundations which in the creation of contemporary media artifacts, forgetting the long history and present machinations which existed before and exist around the creation of each artifact. A history filled with copying, remixing, reusing, and building upon the past, which legal structures attempt to claim rights to indefinitely through the copyrighting of the "new" without acknowledgement of the structures which prepared the grounds for creation, is a history whose power is being ignored. This is simple to see when we consider the notion of the "copy" as something that simply takes one thing and reproduces it, and not as natural and transformative moments within human culture.

Anyone who has seen a child learn can easily understand that copying is natural. Whether through earlier reproduction of sounds to imitate the language around them, later experimenting with drawing reproductions of what is around them, to memorizing words and songs, children, and all humans, copy as part of natural human existence. Only since the introduction of modern printing technologies has there been such a concern over mass reproduction in relation to copying, as these copies are reproductions rather than direct interaction and reflections with the source material, always transformed through the subject's interaction. Copying is by its very nature transformative, as it is remakes the

whatever into the "now" of the copied, re-inscribing and bringing anew into memory in a new place, in a new time, each artifact or piece of artifact that copyright law has the right to fix "in a tangible medium of expression." Each instance of the copy, the re-production of the whatever, must always be something of a renewal or transformation, as each instance of the copy makes for a new experience. This "copy" does not, of course, need to be the exact replication, but, as evidenced by a recent court ruling against Robin Thicke and Pharrel Williams, a mere resemblance of another artist's work can be grounds for legal action (Sisario and Smith 2015).

Remix, and therefore mashups, are, if nothing else honest about their copying. Not to say that innovation is dishonest, but the lineage of the innovation can become lost - the predecessor may become dislocated. Remixing does not just carry a resemblance, it identifies the clips it uses openly. However, remixing, much like other artistic endeavors standing on "the shoulders of giants," also innovates, much like they way *The Grey Album* bringing Jay-Z and The Beatles together, joining two disparate genres and 35 years separating albums. The remix identifies as well as destroys the original at the same time, innovating while conserving, as its audible wrangling transforms what is identifiable and locatable into something both familiar and foreign at the same time. Mashups are no different of course, employing a specific form of overlaying, cutting, splicing, and remixing to form an assemblage of auditory cues that both innovate and conserve. There are more than just technological components at work here, of course, as technology, like all participants in human history, must be understood within historical contexts. The

mashup, like many remixes, is often an "illegal" conglomeration - splicing two or more "owned," "controlled," or otherwise legally restricted compositions into a peculiarly grey-area-level violation of these laws. Not to say that people should not be able to monetize their creations through some sort of rights protections, but simply noting that each copy and re-use is something, even if just a little bit, "new." An understanding of the nature of the copy helps frame understandings of "copyright" in a way that can be helpful to understand why an event such as "Grey Tuesday" came about.

To better prepare an analysis of what the mashup does and the determinations at work that created the space to bring it about, the system under which these information systems are being analyzed needs to be understood more clearly. The legal and social systems prevalent within this power structure set the stage for understanding the agency of the information systems. This will help to outline how these legal pressures have participated in created the space where mashups have emerged.

A brief history of copyright

Lessig (2005) argues that the most unbalanced regulatory constraint in cultural production today is from law. The law he refers to is, for the most part, laws regarding copyright / intellectual property (IP), specifically those in the United States, but more recently have been "adopted" in other countries as well. This, of course, is not a new thing as cultural production has for quite a long time been

regulated heavily by copyright law. Before the player piano, tape cassettes, or VHS, tension has existed between participants in culture and those who seek to control the copy. Until recently, the law of copyright remained limited and balanced with the rights of the people to, eventually, produce derivatives of former work, building upon the past. The present state of copyright not only grants rights to works for seventy years plus the life of the author, but also allows for rights-holders to automate both searching and distribution of legal “take-down” notices to remix artists for algorithmically-determined potential copyright infringement, leaving the public surrounded by cultural artifacts that, in most cases, will never become public in their lifetimes. Media content released into the public, intended for consumption by the masses, can be locked down so that re-use, remixing, of copyrighted material remains a punishable offense content without expressed consent to the holder of the copyright, often restricting the potential to “see further” from the giant's shoulders. Ideas, “fixed in a tangible medium,” can now be “owned” nearly indefinitely, but it was not always like this.

The law associated with the “origin” of the modern notion of copyright, the Statute of Anne, was passed in 1709 in Great Britain, ensuring author's rights to manuscripts and preventing publishers from owning perpetual monopolies on printed work. This was an important law, ensuring that not only authors can profit from their labor, but also to allow these works to be released into the public for the common good. The Constitution of United States (Article 1, Section 8, Clause 8) echoes this sentiment, seeking “To Promote the Progress of Science and useful Arts, by securing for *limited times* to Authors and Inventors the exclusive Right to their

respective Writings and Discoveries." The Copyright Act of 1790 was implemented by the First Congress, granting authors and inventors the rights to publish their work for a period of fourteen years, with renewal for another fourteen. Intended as incentive to authors, artists, and inventors to create original works by providing them with protection, it also limited their monopoly in order to increase access to works in the public domain. This was changed many times over the years, in 1831, 1909, 1976, and 1998.

In 1831, the Copyright Act was revised to extend rights to twenty-eight years with a possibility of a fourteen-year extension. This granted American creators the same level of rights offered in Europe. In 1909, the Copyright Act was revised once again, extending the extension to twenty-eight years, and expanded the scope of categories included under protection to all works of authorship. In 1976, rights were extended to life of the author plus fifty years, as well as introduced the first sale doctrine, as well as codifying fair use, which I will discuss further below. Finally, in 1998, there were two major acts passed into law, the Sonny Bono Copyright Term Extension Act (CTEA) and the Digital Millennium Copyright Act (DMCA). The CTEA extended the 1976 rights even further to seventy years plus the life of the author (Copyright Law of the United States). The DMCA was arguably created as a stop-gap measure to deal with the rise of new media, established at a time where copyright law was beginning to fail modern transmission and business models by allowing for digital distribution methods, rights management over digital material, and establishing safe harbors so that services like YouTube could host potentially

uploaded infringing material so long as they continued to take it down when found to be problematic.

Original copyright law seemed to be created with the intent of both protecting authors time investments as well as advancing knowledge and culture, creating a system which both honors the unique perspective and discoveries that authors and inventors bring, as well as honoring the "giants" of history and culture they rode on to achieve that perspective. The current copyright laws of the United States, however, have changed dramatically from this original sentiment, as contemporary US copyright law that seems to favor only the publishers of work, granting extensive, nearly perpetual, monopolies over the copyrighted material's use. Rather than ensuring the public's access to the material, as was the original intent, copyright law seems to only to alienate the public from the benefit of the work, seemingly forever charging them to access, to engage with, and to re-use the work, or worse – denying access to the work at all. It seems that these laws were, if nothing else, created for a specific type of work, one that is physical in nature.

The balance between the rights of the masses to these "works of authorship" were balanced with protecting the rights of businesses to their work by limiting control of the work and its subsidiaries to a certain amount of time. Copyright in 1790 promised to protect the rights only for fourteen years, but then the works were freed into public domain and anyone could redistribute or tinker with them the way they saw fit. Businesses were allowed to profit from their works without fear of theft, and the public was allowed to tinker with and remix works. For the

most part the history of copyright has been along this vein, with the means of production (of the copy) located in factories.

Digital technology, however, allows for quick and easy (and perfect) duplication of materials in the home. Networked technologies allow for incredibly easy distribution of these copies. What was intended a series of laws intended to protect artists and businesses from other businesses using their intellectual property to create “knock-off” products was now aimed at the home user, as the home became the place of instantaneous duplication and circulation of potentially infringing materials. The home was not a site of investigation, of dominion, by copyright law. Copyright law intended to regulate businesses and protect and encourage authorship. Printing presses, the majority of the concern, were not small (even garage-sized) machines, they needed enormous amounts of space and capital to set up and run. Books were incredibly popular. In this time the notion of *theft* was more along the lines of *a physical reproduction*, as if I took your book and physically set up a printing press to make numerous copies to sell without giving the copyright owner any profits. In the cases of theft there was physical good that the thief sold to generate revenue that did not belong to them. The theft of works had a *physical* attribute; the works generated profit through physical manifestation of product. This persists even today, as the Copyright Act of 1976 allows for "original works of authorship fixed in any tangible medium of expression." However, things became more complicated with the advent of the digital copy, locating the copy outside of a physical domain, and often in the home. Much like the greater efficiency of creating a sampled "loop" using digital technologies, the digital copy is much more readily

created, distributed, and stored. This traditional notion of property is rightly concerned with physical theft, as each individual physical object is finite. Intellectual property, on the other hand, is a bit trickier to wrangle into this model:

Part of what makes intellectual property so complicated is its relatively high fluidity in comparison to physical property. The latter can be mass produced, but not actually duplicated: you can't photocopy the toaster in your kitchen and create a second, fully functional appliance suitable for preparing bagels or giving to your cousin Dana as a wedding gift. Nor can physical property be shared without reducing its availability and value to its owner: if you let a friend borrow your car, you can't both drive it at once.... Intellectual property, on the other hand, can be copied, shared, and distributed without diminishing its value at all. In fact, the worth of intellectual property / measured economically, culturally, politically, and/or socially / is often dramatically enhanced by the extent to which it circulates (Rodman and Vanderdonck 2006, 247-248).

The film and music industries have been the most vocal in recent copyright issues. As representatives of the big business of holding rights for media, they have the most to lose from an awakening to new (or a regression to earlier) practices. The RIAA (Recording Industry Association of America) and the MPAA (Motion Picture Association of America) have launched dozens of lawsuits and issued hundreds of thousands of takedown and infringement notices on Internet file-sharing sites, as well as in the duplication of other physical objects. YouTube videos, and remix artists. EMI's takedown notices of *The Grey Album* in particular were numerous (although they did little good in controlling the distribution of the album), including one to Kembrew McLeod (2005, 80). No one really knows how many cease and desist letters were sent out, but at least one was sent to DJ Danger Mouse after the initial small pressing of *The Grey Album*, one was sent to the organizers of "Grey Tuesday," and most likely one was sent to each of the 170 sites hosting the album.

In the battle over the distribution of the copy, many artists on remain caught in the crossfire and are not as lucky to have a large coalition to stand up for them. Due to the copyright holder's rights to control all of the *uses* of their works (no matter how small - even a single drum sample), not just the reproduction in whole and sale, many mashup artist's works are currently considered illegal by current notions of copyright law. Despite the fact that many of these remixed and mashed-up works could fall under "fair use," the law still supports the rights holders, even when they employ coercive tactics to convince artists not to use their fair use rights. This is because fair use rights are merely defensive, and often a defense that individual producers are responsible to mount against mega-conglomerate corporate lawyers pending massive fines and court fees if they wish to their rights to be recognized.

Fair use was considered common law for many years beforehand, but it was finally outlined in the Copyright Act of 1976 as a way to allow use of copyrighted work without the liabilities of infringement. However, "Fair Use," is not specifically defined as much as it is outlined as a way to determine how "fair" a use is utilizing four factors: 1) purpose and character, 2) nature of copyrighted work, 3) amount of the portion related to the whole work, and 4) the effect of the use upon the potential market value (17 U.S.C. § 107). Due to this four-factor approach, utilizing "Fair Use" has often been illustrated as difficult to understand and best to avoid, particularly in "YouTube Copyright School" where the "Happy Tree Friends" cartoon explains to authors that "Fair Use" is unwieldy and should be avoided (YouTube Spotlight). YouTube's stance against utilizing a fair use defense becomes more problematic as not only does it threaten a permanent ban on the user's account if they find the user

in violation of copyright three times, but it does so through automated process. This puts authors in a terrible predicament, as automated DMCA takedown notices spewing out of corporate servers troll through countless audio files looking for offending material; Authors are expected to not only understand this complex legal argument, but also respond to machine-automated requests in order to exercise their rights. To top all of this off, due to the nature of DMCA takedown requests, potential offenders who host or otherwise share offending material from their computers can be threatened by losing Internet access rights from their provider.

Only now, for the briefest moment in the history of western culture, has property been thought of in this manner: the production of creative works can be restricted - forever. Intangible, infinite, and restrictive, current copyright law seems not to balance the intent of the original copyright law: to ensure progress. Balancing the needs of the authors to generate profit from their creations with the ability to build on past discoveries remains key toward scientific and social progress. Not only just mashup artists, but also all of the “public” who were promised access are in the midst of war. Not a war between thieves and authors, as one might believe when witnessed on television, but a war over control of the future of ideas, of sharing, and collaboration. It appears to come from a flawed philosophy, one that the mashup stands directly against:

...such a philosophy is based on the flawed assumption that culture is a privately owned, commerce-driven phenomenon, rather than something ordinary, ubiquitous, and shared in common. It's a philosophy that denies us the right to make use of the most prevalent aspects of our surrounding environment in anything but the most narrowly circumscribed ways. It's a philosophy that infringes on the most basic practices of creativity and criticism by prohibiting us from using (or even referring to) cultural texts

without first securing formal permission from (and often paying hefty fees to) the corporate 'owners' of those texts. It's a philosophy that stifles our emotional and personal lives by inhibiting our ability to share affectively charged texts / musical and otherwise / with friends, lovers, and families. And so, in the end, it's a philosophy that does extraordinary damage to the fabric of contemporary culture (Rodman and Vanderdonckt 2006, 259).

This is the space where the mashup was born, against a seemingly insurmountable legal situation. The mashup tears cultural texts without permission, relying on the hopes of "fair use" and in hopes of connecting culture together through creative practice. The mashup, of course, is evidence of a different and competing philosophy, which, through the variety of forms of remix, it continues to flourish. The mashup spreads this philosophy, not through legal pressures, but through the manner in which it functions against such pressures. To understand more about how this happens, I will explore what the mashup offers when it comes to contemporary media theory and our understanding of the role of digital media in cultural production.

CHAPTER 2

MASHUP MEDIA THEORY

If you believe that your thoughts originate inside your brain, do you also believe that television shows are made inside your television set?

- Warren Ellis (paraphrasing Terence McKenna)

Rethinking Media and Culture

The basis of this exploration of media theory can be considered through two incredibly short assertions. First, Friedrich Nietzsche remarked briefly that, regarding the use of a typewriter, "our writing tools are also working on our thoughts" (quoted in Kittler 1999, XXIX). The second assertion is the deceptively simple statement by Marshall McLuhan that "the medium is the message" (McLuhan 1994). In combination with McLuhan's other famous statement, "the medium is the message" (McLuhan 2001), a more accurate description of media starts to form: media are both the systems through which messages flow, as well as determinant of the message itself. Taken this way we could read McLuhan's statements together as "the message of the medium is the manner of its message." Combined with Nietzsche's statement, we can start to think about how the tools with which we create, recombine, and circulate messages are implements of inscription and re-inscription and follow this principle.

With reference to McLuhan's simple message, this understanding of technical media will draw upon a variety of different theoretical frameworks to help ground an awareness of systems and information and an understanding of what role they play in the creation of culture. This interwoven understanding of media theory will

build a framework of what has been referred to by some as a "media archaeology" to set the landscape for understanding the phenomenon of the mashup, and how we can understand the mashup for what it contributes to contemporary theory building.

This "archaeology" is interdisciplinary by nature, and weaving an approach will rely on a variety of theoretical trajectories. According to Parikka, author of *What is Media Archaeology*, "media archaeology is a traveling discipline, based on a mobile set of concepts," (2012, 15) and as such I will investigate the mashup by intertwining a series of seemingly disparate theories together and propose a new framework of thinking about new media and digital archaeology.

This investigation will assess media as a complex system, but in contrast to some of the traditional conceptualizations of "media ecology," we will not look at technology simply as a "tool" that humans "just" use, but instead frame them as "extensions" that are intrinsically connected to humans. Rather than taking McLuhan's famous subtitle, that media are "extensions of man," at face value, it is better to assess these extensions as cybernetic (a closed feedback system) that mediate the messages circulated through them, effecting not only the message itself but the consciousness of those engaged within these mediations.

From these theoretical trajectories this dissertation approaches media as an environment (that is, a series of determinations that encourage, dissuade, or otherwise mutate, messages), understand it as a network, or "relay" between mediating "technologies and institutions" that is inter-active, and trace its structuring history by understanding its effects on discursive formulations. This

orientation allows a certain perspective on media systems that allows analysis of media systems in conversation as well as attempts to locate their hidden systems governing discursive formulations. To accomplish this, I will first provide an overview of traditional cultural studies to understand how it engages cultural phenomena via determination and power, then tease out a history of media theory that, when read in a certain way, will illuminate a way of understanding media, and then combine them together towards the project of "mashup archeology."

Determination before the "first" instance

Although this work is about media and forms of media, it is first and foremost about culture and the factors at work determining cultural production. To understand the mashup, it is important to tease out media's effects and that understanding can add to a more holistic understanding of cultural production, particularly in digitally mediate cultural production. This is a complicated situation, of course, as the traditional "cultural studies" consideration of "media," for the most part, remains focused on media messages and the political economy of the media, which, although still important, fail to evaluate the hidden role of technical media in shifting the messages and shaping culture. To best understand what effects digital tools have on cultural production, it is important to integrate understandings of relations of production and economic factors into new understandings of technical architecture. Incorporating these seemingly disparate approaches remains key to formulating a more thorough understanding of contemporary cultural production with regard to media. The two main schools of theoretical engagement I will first try

to reconcile are "British Cultural Studies" and "German Media Theory," which, although historically separate, tend to blend well under the right conditions.

Geoffrey Winthrop-Young, in "Cultural Studies and German Media Theory" (2006), outlines some of the challenges and opportunities facing contemporary "German Media Theory" and "British cultural studies." According to Winthrop-Young, the reason for a lack of integration between the two fields is due to a been a lack of interest among German theorists in general, as "the Germans, after all, never cared much for cultural studies," blaming the Frankfurt School's schizophrenic attempt to both blame the culture industry for "consciousness-shaping" while being unable to dismiss "any approach that valorized the critical agency to decode incoming media messages subversively" (88, 2006), and, of course, British cultural studies' alignment with this tradition. This approach to media and "the culture industry" continues to pervade the notion of media throughout British cultural studies.

British cultural studies' notion of media focuses, for the most part, on "mass media" and remains generally aligned on a relatively straightforward definition of what mass media is, what it does, and how it functions. Mass media in this view is often limited to print, radio, and television. One obvious reason for this is that the dominant media in the hey-day of British Cultural Studies was all mass-transmission, and not interactive or capable of digital manipulation, and thus their model for understanding media has quickly become outdated. This is not the case within contemporary "German Media Theory," as Winthrop-Young points out, "there is no general agreement on what terms like 'medium' or 'media' refer to"

(2006, 90), leaving many to battle out over what "media" might refer to, as well as how it might function. Theorists like Niklas Luhmann, Friedrich Kittler, Harmut Winkler, and Vilém Flusser all approach media in radically different ways (Ibid.). Much of this "style" of "media theory" remains in flux, particularly in regards to an approach that aligns itself with cultural studies, and, as Winthrop-Young continues, "as a result, theoretical connections or cross-fertilisations that could result in a generally more acceptable definition of media are both rare and difficult" (Ibid.). Writing in the age of digital media, Winthrop-Young points out that understandings of "media" have come to represent more than particular technologies (radio, film, television, and their industries) and their political economy (as the majority of British Cultural Studies has approached them). Thinking broadly, these more contemporary conceptualizations reconsider the notion of "media" as "mediation" rather than particular instances.

As Grossberg mentions in Cultural Studies in the Future Tense, cultural studies is not just about culture but "always contexts and conjunctures" (2010, 167). Although many of the "contexts and conjunctures" in regards to mashups are rooted within more traditional avenues of cultural studies (examining legal, historical, and economic issues), the conceptualization of "media" within cultural studies does not yet articulate the complexities of technical media and the way in which they influence and determine culture. However, an understanding of the legal, historical, and economic backdrop allows a space so that the operations of technical media can be unpacked, so that an exploration of how they operate can be explored in regards to mashups. For example, just as it is important to understand the history of The

Grey Album and its subsequent online protests, it is just important to understand the way in which the album was both created through a uniquely digital process and then subsequently distributed in a manner that could only exist through digital technologies. Setting the stage then, with Cultural Studies, is necessary to better understand how to frame an approach to technical media phenomena.

Through a reconsideration of Stuart Hall's approach to Marx and Althusser, and how he opens up cultural studies from the beginning through rethinking determination, Cultural Studies can be more closely linked with a more contemporary notion of technical media, and how technical media participate within what Hall refers to as "determination in the first instance" (1996, 45). Winthrop-Young refers to this blended approach, roughly, as "posthuman cultural studies" (2006, 93), which will begin to ground cultural history within an understanding of media-technological influences. This will help to an approach to technical media, in particular the case of mashups, and understanding the role they play in cultural production.

Rethinking Cultural Studies

The traditional notion of base and superstructure is that the base, consisting of relations of production, economic, factors, determines ("in the last instance") the superstructure: society's activities, and "ideological forms." Of course, this relationship is reciprocal, but determination in this strict in that, in the "last instance" (in classical Marxism) economic factors are considered primary within the determination of society's activities.

Stuart Hall, however, upended the classical notion of determination in the "last instance," which laid the groundwork for modern Cultural Studies, when he rethought determination in the "first" instance, hoping to open up an area from where to begin. For Hall, Marx's notion of the "determination in the last instance" was eschatological as "it represents the end of the process of theorizing," a death of theory, shutting down the possibility for not only theorizing, but also the project, the heritage, of Marx. Hall's intent was that theorizing could continue to develop and refine, "capable still of engaging and grasping something of the truth about new historical realities" (Hall 1977, 45). Hall asserts that "'determination in the last instance' has long been the repository of the lost dream or illusion of theoretical certainty," which, for Hall, is uncomfortable, as it shut down possibilities for approaching this ever-changing topic we call "culture." However, rather than throwing the proverbial baby out with the bathwater, Hall turns Marx's determination on its head, reading Marx post-Marx, as "it would be preferable" to think Marxism "in terms of 'determination by the economic in the first instance'" opening up the future of theorizing to engage "something of the truth" (1996, 45).

This rethinking does not necessarily change Marx's theories, tossing them aside and starting over, but instead recalculates possible trajectories for the future of thinking with Marx, or possibly a preliminary re-conceptualizing of Marx, which will allow a future in which we can understand him in the age of digital media. Hall saw a problem in the traditional view of Marx's determination, and found it complicated from the start, as Marx himself "had established that the economy is determinant in the last instant, but that the superstructures had their own

'effectivity' which could not simply be reduced to their base" (1977, 53). So when Hall re-thinks this model of determination and relation (and relation of determination) by re-situating determination and its factors (the base), he does it in regards to Marx and (mostly) through Marx.

By situating economic determination in the first instance, Hall shifts the base-superstructure metaphor around, thinking through the base as the opening of theorizing. Determination first assesses these factors problematically – the relations of production and its components open up a place to theorize in regards to the constitution of ideology. Of course, "the relations of production" are not just merely economic, but social production as well, and, as I will discuss later, all of these relations are a priori media-technologically influenced. This becomes more obvious when "media" forms change from "one-way" communication to interactive, or digitally manipulated communication.

Hall complicates Marx's preface to Critique of Political Economy past a merely economic determination, because "the 'corresponding' social relations are given – definite, indispensable and independent of men's will", these are "objective conditions" that form the "real foundation" (1977, 48). This complication was the inclusion of all the social relations, that, when included with economic factors, co-constitute the base, the 'real foundation' of determination. Only through this co-constitution "correspond theoretical productions and definite forms of social consciousness" (Ibid., 48). From this, Hall calls the "simply economic" into question, linking it intrinsically with a myriad of other forces so that the "mode of production is already conceptualized as consisting... as a combination of relations – productive

forces, social relations of production" (Ibid., 51). The base becomes "relations of production" in conditions of social forces, as constitutive and therefore constituted by ideological forces. When Hall re-thinks the base-superstructure relationship in this manner he allows the Marxist project to infinitely complicate itself, seeping into every manner of social relationship, into what we call "culture." Understanding how this relationship functions allows space here to consider (in the first instance) media-technological determination, as bringing media theory into Cultural Studies "backwards" allows to finely tune an understanding of cultural production through a new understanding of media.

Finally, one of the most important contributions to Critical Cultural studies is the notion of overdetermination, which Hall borrowed from Althusser. Linking into Marx's notion of determination, Althusser sees overdetermination as an "accumulation of effective determinations" (2005, 113). Althusser contributes to critical cultural studies, as Hall puts it, "by enabling us to think about different levels and different kinds of determination," (Hall 1986, 94). This gives us "the ability to theorize about real historical events, or particular texts" (Ibid., 94), rather than grand narrative theory. Again, Hall's formulation of Cultural Studies fits well to begin including mediation into "different levels and different kinds of determination," so as to better "theorize about real historical events," (Ibid.) which opens up a way to add in potential ways to think about media among the constellation of determinants.

The notions of overdetermination, ideology, and simply rethinking the notion of determination and its determinants, transforms Marxist thought from a study of

the "classic" economics, to that of entire systems of representation that form what we understand as culture. Hall, through Althusser, understood these ideologies to "hail" or "summon" us, and we are therefore situated, "recruited as their 'authors,'" (Ibid., 102) necessarily so that we help constitute ideology; ideology speaks to us, and then we speak ideology, "without which no signification of ideological meaning would be possible" (Ibid.). Hall describes ideology as a "work of fixing meaning through establishing, by selection and combination, a chain of equivalences," (Ibid., 93) that, as before, is in conversation with us. However, and furthermore, in this entire system is, as Althusser notes, "essentially founded on unconscious structures" and, because of its unconscious nature "we are not ourselves aware of the rules and systems of classification of an ideology" (Ibid., 106) when we "speak" ideology. Althusser's contribution to critical cultural studies situates where the questioning, the interjection of critical cultural studies lies: on the unconscious fixing of meaning, constituting ideology. In particular this concept links to the manifestation of "technical" media. This relates well to Foucault's "archaeology" (1982), as understanding technical media will help to uncover the determination of "unconscious structures" through understanding the hidden rules and systems that influence both the concept of cultural production, as well as cultural production itself.

Media as the First Instance

Geoffrey Winthrop-Young, in his introduction to Kittler's Gramophone, Film, Typewriter lays out three "simple" steps which help to frame why "determination in the first instance" might be better served by understanding technical media:

Step 1: We recognize that we are spoken by language. Step 2: We understand that language is not some nebulous entity but appears in the shape of historically limited discursive practices. Step 3: We finally perceive that these practices depend on media (Kittler 1999, XX).

He continues, "media then are (at) the end of theory because in practice they were already there to begin with" (Ibid.). As this statement implies its own inverse, we can understand the implication that media is at the beginning of theorizing about culture, and, if Winthrop-Young is correct, must be considered "before" more traditional Cultural Studies discussions of determination usually begin. In what follows I will argue that not only should media be considered "before" other discussions of determination take place, but that it must also be considered retroactively vis-à-vis the backdrop of a litany of other determinations, or as Winthrop-Young posits, that "media are the alpha and omega of theory" (Ibid.).

In the tradition of cultural studies, this investigation examines the "event" of mashups, as well as the objects and technologies that comprise this event. However, unlike traditional cultural studies' investigations, this investigation will not only consider the historical (economic and social) conditions, but it will instead begin with the "technological-medial a priori," (Spren 1998, translated from German by and quoted in Winthrop-Young 2006, 97) to understand how the "technological-medial" participates within the construction of the event. Before *The Grey Album*

there were the technologies that, as I will argue, not only enabled but also encouraged its construction, distribution, and instigation to participate within the social uprising against coercive copyright systems. These technologies preceded the "event" of the mashup through their making-possible all the other parts of this event. This is not to say that the content of mediated messages or political economy are not important, but that before the message exists (and even before there is media ownership to consider), the technical aspects of media (architecture, and its manipulation) must be considered as part of "the determination in the first instance."

Roots of Media Theory

Media theory has deep roots, dating back as far as ancient Greece, if not further. Plato's *The Phaedrus* presents what may be considered to be the first theory of mediation, with regard to the first "technology" of communication, writing. In *The Phaedrus*, Socrates and Phaedrus discuss questions regarding the technology of writing in opposition to the spoken word. Plato argues, among other things, that writing is external to the human, and that writing starts to supplement mneme (memory) with hypomnesis (externalized memory, particularly in regards to forgetting), which transports anamnesis (recollection) from a pure, internal, place, to somewhere outside the self. In essence, Plato was the first to argue that writing is transformative of memory as it is the first to supplement "remembering" something from within, as this hypomnesis externalizes memory.

Plato's is concerned about this externalization as he argues that memory can be distorted through external storage, bending and twisting what was once just purely internal to the will of the externalized system. Memory became subject to outside systems as soon as external media sources were introduced.. Socrates went so far as to refer to written texts as a drug, a pharmakon, enjoying the use of the textual "drugs" as a way to supplement his addiction to knowledge that usually kept him fixed to the city (among other people and memories). This word, pharmakon, is interesting for a few reasons, first as Derrida points out in Plato's Pharmacy, the pharmakon holds dual meaning, "both remedy and poison" (Derrida 1981, 70), but also because this "drug" is something external that must be systemically absorbed (e.g.: taken internally) for the desired effect to take place.

...even though writing is external to (internal) memory, even though hypomnesia is not itself memory, it affects memory and hypnotizes it in its very inside. That is the effect of this pharmakon. If it were purely external, writing would leave the intimacy or integrity of psychic memory untouched... Plato maintains both the exteriority of writing and its power of maleficent penetration, its ability to affect or infect what lies deepest inside (Ibid., 110).

For Derrida, writing is a "supplement" to spoken language – not, of course, something "artificial" but something that fills an originary lack – and therefore contains what is already needed. Much like taking a multivitamin, we have whatever is being supplemented in us, yet we take more to fill the lack between what we have and what we wish to achieve, and, much like the vitamins, writing is something both natural (we have these compounds) and artificial (they are created externally). Derrida explains, "writing is the supplement par excellence since it proposes itself as the supplement of the supplement, sign of a sign, taking the place of a speech

already significant" (Ibid., 281). Writing, here for Derrida is doubly removed from memory, as writing signifies the spoken language, which in turn signifies meaning.

However, the line between memory and its externalization is, as Derrida points out, "more than subtle; it is hardly perceptible... it is a question of repetition" (Ibid., 111). All memory is, of course, a re-collection, a re-processing, and a re-addressing of signs, with each re-processing of the re-collection, a re-remembering of these signs. This re-collection happens externally and internally – it is not something that is separate and therefore mneme and hypomnesis can be seen as something that is both outside and inside the self. Externalized memory, written or otherwise, becomes part of the basic structure of memory – it is not just something that can be separated from our understanding of memory. In essence, a purely internalized understanding of mneme is problematic, as memory has always had an external component to its internal considerations. Humans have utilized "artificial" external cues since as far as we have been able to tell – scratches on bones, nicks on trees, or stacking cairns to tell us where we've been. Either to recollect or to collect, memory can rely outside signs and signals. This is not just for physical objects though, but for all types of signs – sensory input can both trigger recollection as well as create memory.

The creation of these external cues moves from what was mnemotechnique (finding something to spur memory recollection) towards mnemotechnology (creating something to spur memory recollection). Although there is a difference between message representation through stacked rocks and a networked computer system, the continuum of difference (the differences between the categories we

might construct to define these differences) is that which is infinitely nuanced, and can ultimately be deferred by other categories and other meanings. The written word, a technological medium, is one that transforms messages through its particular "systematic treatment" (from the Greek *tekhnologia*). Each of these technologies is a treatment, then, which transform messages into this stored and transmittable medium. These mnemotechnological transformations persist from the first medium of writing all the way through, as McLuhan reminds us, "the content of a new medium is always that of an old medium" (McLuhan 1994, 8), so it is helpful to keep in consideration Plato's concerns with writing, as they are not only still valid, but they continue to resonate within modern information systems, as the medium of writing (and therefore all of the its transformative effects) is still contained within all of our "new" technological mediums. This is to say that the mnemotechnology of networked computer systems are built on the mnemotechnology of writing, and the concerns about writing that Plato had not only remain relevant while considering the complicated storage and retrieval systems, but found the basis for critiquing media systems. When we take in the external memory it does not simply stay external – we change it when we interact with it. Insofar as media is taken in, it is transformed to something internal.

Writing, the first "exterior" medium of communication, not only has the power to change messages, but the medium changes us, opening up a new set of possibilities for storage and replication of knowledge. Externalized memory may seem simple now, in the age of handheld supercomputers, but still are "working on our thoughts." Derrida's supplement further helps understanding in how these

things are never purely external, and always taking something internally that was both natural and also lacking, filling that lack, that space, to assist in the subject's formulation. However, the dissolution of the line between internal and external when it comes to media technologies is only the first step in understanding the complexities of interacting with media.

Cybernetic Media Theory

While the term "cybernetic" was first applied in 1948 by Norbert Wiener in Cybernetics: Or Control and Communication in the Animal and the Machine, cybernetic theory has been applied to a variety of disciplines, including engineering, biology, philosophy, and a variety of social science disciplines. Though originally referring to the application of engineering discourse, Wiener's use of the term refers simply to communication within systems. Wiener summarizes the name choice: "We have decided to call the entire field of control and communication theory, whether in the machine or the animal, by the same name cybernetics" (Wiener 1961, 11). Even in its infancy, the notion of control was already linked inextricably to that of communication and technology.

Theorist Claude Shannon, an early cyberneticist, created a communication model published in "A Mathematical Theory of Communication" that is still used to this day by information and communication theorists for a variety of applications (Shannon 1948). Shannon published this model again in 1949 in the book The Mathematical Theory of Communication along with coauthor Warren Weaver, (Shannon and Weaver 1949). The Shannon and Weaver transmission model of

communication incorporates a series of communication systems elements within its rather simple design - information source, transmitter, channel, noise, reception, destination, feedback (and more, depending on which discipline it is used by).

Shannon and Weaver's Transmission Model of Communication

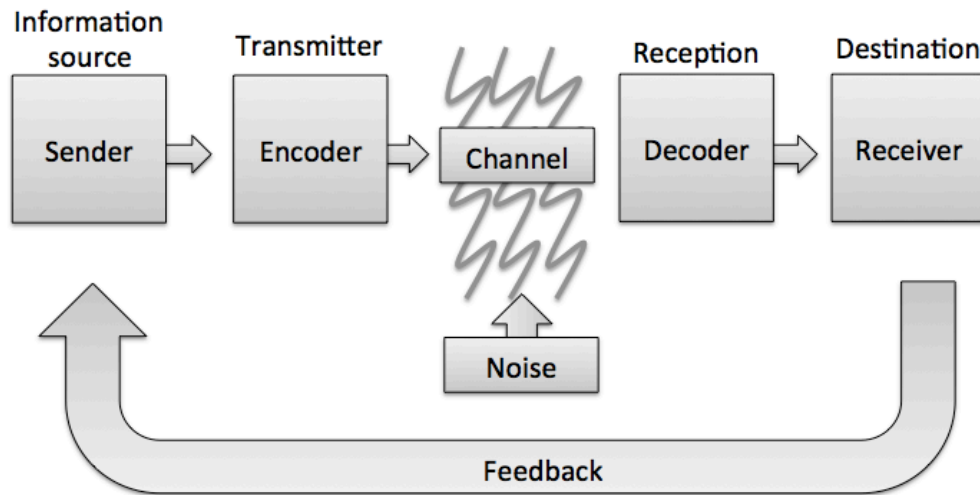


Figure 1: Shannon and Weaver Transmission Model of Communication

(Shannon 1948, 381)

On a basic level, this model approaches communication as something that happens between two or more independent systems, which interact through transmitting and receiving messages. These systems either 'understand' each other or, due to some noise within the process of transmission, mis-understand each other. Commonplace understandings of this model assume that mis-understanding or distortion of meaning emerges from the "channel" through "noise." This is the first (or at least the most famous within the study of communication) model that presupposes that the channel, or as Shannon and Weaver explain, "the medium used

to transmit the signal from transmitter to receiver" (Shannon and Weaver 1949, 33), is of utmost importance to message transmission, and is particularly important when considering message mutation or other interference. Furthermore, Shannon and Weaver argued that "any limitations discovered in the theory at level A necessarily apply to levels B and C," noting that the medium was not only primary importance to all other levels of abstraction, but as "the theory of level A is, at least to a significant degree, a theory of levels B and C," each level of message mutation theory in communication was, at the very least, inextricably intertwined in medium theory (Shannon and Weaver 1949, 6), echoing McLuhan when he noted "the content of a new medium is always that of an old medium" (McLuhan 1994, 8).

Although Shannon and Weaver (both mathematicians, which comprised the bulk of cyberneticists at the time), were focused on assessing communication from a mathematical perspective, their model had great impact on a myriad of communication theorists. Marshal McLuhan, whether meaning to or not, echoed Shannon and Weaver's model into his own theory of communication, most notably with his famous statements that bookend this research framework, "the medium is the message" and "the medium is the massage." Nicholas Gane notes that "McLuhan drops Shannon and Weaver's focus on the mathematics of information, but at the same time follows the basic line of their argument by prioritizing analysis of the technology of message transmission over interpretation of its content... In this way, McLuhan's famous declaration that the 'medium is the message' develops the thinking of Shannon and Weaver... by asserting the role of the channel (which

Weaver also calls a medium) in shaping the content of what is transmitted (rather than vice versa)" (2005, 25).

For McLuhan, the power of the medium to transform messages became the object of analysis rather than the messages themselves. The "medium" carried all the same aspects of Shannon and Weaver's "noise," and more. McLuhan writes: "What they call 'NOISE,' I call the medium--that is, all the side-effects, all the unintended patterns and changes" (quoted in Cavell 1999, 350). Although Weiner, Shannon and Weaver, and McLuhan were all investigating the *channels* of communication, it was evident even in these early models that there was more going on than simply transmission. Their transmission models included a feedback loop, as illustrated in Figure 2, which recognized the interaction between sender and receiver, influencing the messages the sender generates. The model becomes much more complex when overlaying multiple senders and receivers, particularly when each has their own and participates in each other's agency.

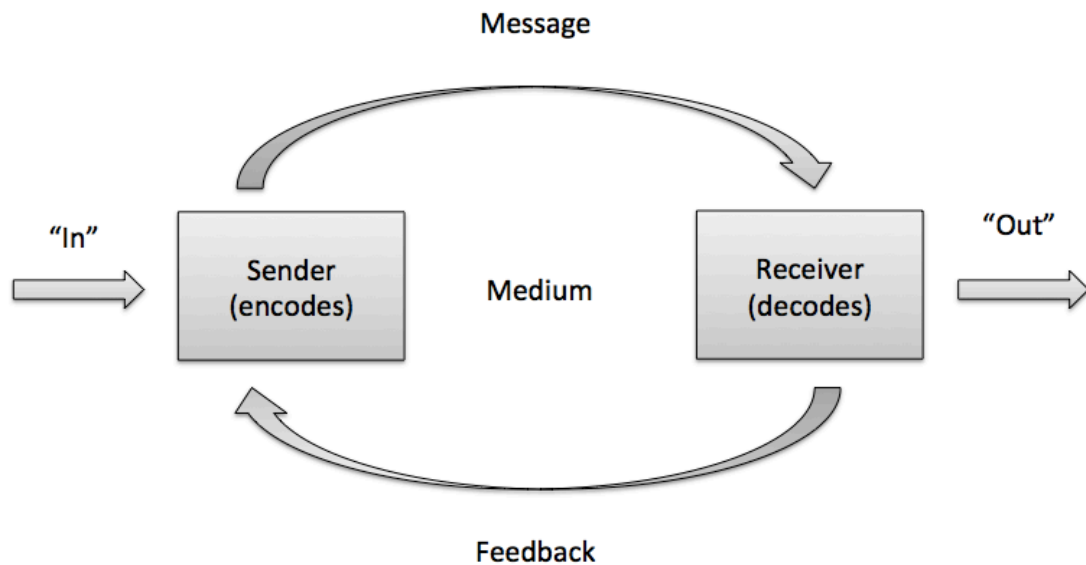


Figure 2: Simplified Diagram of McLuhan's Model of Communication
(author's interpretation of Cavell 1999, 350)

The Cybernetic Subject

The term "cyborg" was coined in 1960 in an article by Manfred Clynes and Nathan S. Kline about the advantages of self-regulating human-machine systems in outer space, entitled, appropriately, "Cyborgs and Space" (Clynes and Kline 1960). The term is a portmanteau of "Cybernetic" and "Organism," identifying and locating the relationship between the biological and the mechanical/technical. In popular culture the term has been used in reference to organic-machine hybrids, or even simply robots, like in *Terminator*, but refers more generally to organisms in relationship to technology. I use the term "relationship" here as although some refer to cyborgs in general as organisms with technologically enhanced abilities, this commonplace notion of a cyborg abstracts the most important aspect of utilizing the

cyborg metaphor: the relationship between biological organism and technology is one of communicative exchange, and of feedback. As hinted with Weiner's title, this communicative exchange is one of control, where the feedback has an effect on the subject, determining the horizon of opportunities.

More recently, Donna Haraway's "A Cyborg Manifesto" refers to the cyborg as "text, machine, body, and metaphor-all theorized and engaged in practice in terms of communication" (Haraway 1991, 212). Considered this way, communication is not merely an operation of the cyborg, but the operation that is constitutive of "cyborg." For Haraway, without communication there cannot be cyborg, and through communication the cyborg emerges as itself through communication within a feedback system. The feedback systems here do not need to be purely technological in the strictest sense, but that which the subject communicates with or through and receives feedback from. These systems could be purely architectural or "natural," determining paths of travel, not only those which we attempt to send proper "messages" to other subjects. In the simplest sense, the cyborg is a subject that is engaged in communicative feedback exchanges. Haraway moved beyond the popularized *Terminator* concept, noting that "we are [already] cyborgs" (1991). Cyborgs are not just "technologically enhanced" human beings, but instead a way of thinking about humanity by eroding the artificially imposed boundaries between the natural and artificial, and noting that all humans engage in this communicative feedback loop that is both, as noted by Derrida, supplementary and both internal and external. Cybernetic systems, and therefore any discussion of control and the cyborg are composed of more than just a binary biological and

mechanical/technical. This feedback system can be linked with the notion of determination and overdetermination, and involve a variety of economic, biological, social, architectural, and technical relays and feedback systems. These determinations, though, as seen through the framework of the cyborg, become transformed into a larger system of feedback where the cyborg subject begins to affect that which has an effect on itself.

David Gunkel's "We are Borg: Cyborgs and the Subject of Communication" makes this observation explicit in a tip of the hat to Star Trek: "We are already Borg" (Gunkel 2000, 340).

...the cyborg does not constitute a subject in the Western metaphysical sense of the term. It is not a self-determined, autonomous, and active agent. Rather, cyborg subjectivities, always in the plural and always in flux, are initially formed in and by the flow of information. Cyborg subjects, therefore, tend to be relational, variable, and essentially insubstantial.... The cyborg, therefore, does not constitute the mere destruction or annihilation of the subject but delimits a postmodern subjectivity that deconstructs the presumptuous, sovereign individual of modernity without resolving into either naive objectivism or simple relativism (Gunkel 2000, 342-344).

If we are all cyborgs, or, as Gunkel notes, "Borg," then it is not that we are not (usually) zombie slaves to a collective, but instead that we are complex subjects that rely on a vast array of organic and inorganic feedback systems, technologies, and mediums that shift horizons of possibility and participate in controlling (and determining) our existence. It is not that we need to destroy the concept of subjectivity in general, but rather delimit a "postmodern subjectivity that deconstructs the presumptuous, sovereign individual of modernity" (Ibid., 344), transforming "simple" subjectivity into something more complex and nuanced, recognizing the impact that various determinants have on culture, communities, and

individuals. Although the idea of the cyborg subject opens up a new way to consider feedback loops in the constitution of subjectivity, it still does not highlight the primacy of the media within this complex feedback loop system, one that, in consideration of this, is constitutive of the entire process.

Technical Media as Constitutive of Being, Consciousness, and Meaning

Moving forward from a cybernetic understanding of co-determined subjectivity, we can start to see how different relationships between subjects, objects, and technologies begin to reveal themselves. The concern over technological interface goes beyond the typical understanding of "mediation," where something just "gets in the way" and starts to form an intricate constellation of communicative determination. Not all determinations are equal, of course, as the "technical-medial a priori" functions on a more primal level, that which constitutes a fundamental part of the subject's being.

Heidegger's *Being and Time*, not often brought into conversations in regards to discussions on media, contributes to an important understanding of subjectivity in the complex web of technological mediation. Thinking through Heidegger's ontology, there is an explicit link to technology and world that, according to Heidegger, constitutes our being. It is fundamental to *Dasein*,¹ Heidegger's term for the type of being that, in Heidegger's mind, human subjects possess. Like aforementioned Haraway, Heidegger disposes of the Cartesian subjectivity,

¹ Heidegger's term *Dasein* "is ontically distinguished by the fact that, in its very Being, that Being is an issue for it" (Heidegger 1962, 32), so although it often is used in reference to humans, it is intentionally open, much like Wiener's cybernetics, to any type of organism in this manner. The difference for *Dasein*, of course, is that the only organisms we are currently aware that "Being" is an issue for are Humans.

relegating it to a constructed myth. However, it seems that in light of Haraway and other more recent theorists, Heidegger can offer additional assistance in furthering this complicated narrative of determined subjectivity:

...because, in general, the distinction between an inner and an outer is constructive and continually gives occasion for further constructions, we shall in the future no longer speak of a subject, of a subjective sphere, but shall understand the being to whom intentional compartments belong as Dasein... The idea of a subject which has intentional experiences inside its own sphere and is not yet outside it but encapsulated within itself is an absurdity which misconstrues the basic ontological structure of the being that we ourselves are (Heidegger 1988, 64).

Heidegger does not deny that Dasein is not conscious, or does things on purpose, but "merely" complicates the simplistic notion of the autonomous Cartesian subject. He refers to this notion of the subject as "absurd," and that it "misconstrues" the basic notions of our being consists of. Heidegger does this by referring to Dasein as "Being-in-the-world" (Heidegger 1962, 65), that the world "assails" us (Ibid., 100), providing an uninvited engagement that we cannot escape. Heidegger's uses the term "thrown" which, as a metaphor, sounds more like defenestration than determination, but nevertheless, when we are "thrown" into the world (into an epoch, an era, etc.), the "worldhood of the world" has its way with who we "are," with our "Being" (Ibid., 114). Heidegger's concept here, whether defenestrative or determining, is one that is easily understood despite his often circular language, as Heidegger merely means that when you are born, you are overdetermined in a variety of manners that you have no control over. Heidegger slowly builds this picture of how the Dasein/subject comes to "be" within an understanding of the world's architecture, climate, guardians and teachers, and socially constructed

norms, rules, and regulations. Of course, Heidegger's Dasein also experiences the world in a way that has possibilities for use, and receives feedback on that.

Heidegger continues along this line of logic, observing that Dasein interprets and understands the world in terms of possibilities, and therefore since Dasein is linked as "being-in-the-world," Dasein understands itself in terms of those possibilities. As the world is comprised of objects, Dasein also understands itself in regards to those objects, and the possibilities regarding those objects. Heidegger refers to the use-ability of those objects, or the understanding of the use-ability of those objects as "ready-to-hand-ness," as we are able to use the objects without theorizing about them (Ibid., 98). The example that Heidegger utilizes repeatedly is the hammer, as we use hammers for "hammering" without "theorizing." If the hammer is ready-to-hand it is because it is understood in terms of its possibilities, just as all equipment, objects, and technologies are understood. Even if we "theorize" about the objects, when found that their usefulness is not for what we had hoped for, they no longer exist as ready-to-hand. Simply put, objects, tools, and technologies, for Heidegger at least, are understood as the potential for use that we find within them. This is where Heidegger becomes even more useful to thinking about technical media, as thinking of media along with Derrida's concept of supplement (linked with Heidegger's understanding of "ready-to-hand" technology), these extensions become less "separate" from humanity, but instead are ingested, and become (as well as their effects) part of "man."

Rethinking Heidegger's hammer with Derrida's supplement allows a reorientation of Heidegger's ontology to something that can be blended better with

this media theory. As I do not need to have a hammer "in hand" to understand what a hammer "does" or what it looks like, or the possibilities of hammering, the hammer does not have to be actually "present" to be ready-to-hand, it is only the manner in which Dasein approaches the world "with" hammer. The hammer, like writing, is a supplement. The hammer seems to never leaves its ready-to-handedness when an individual puts the hammer down, as it is always carried as ready-to-hand, shifting possibilities, shifting the way Dasein interprets and understands the world, and therefore itself. It is reasonable then to suggest that the "ready-to-hand-ness" of technology shifts Dasein's interpretation of the world, and itself, in terms of "possibilities." In other words, according to this version of Heidegger, technology influences the way that we understand the world and ourself, due to the way it influences the possibilities open to us. This Heidegger, of course, would not be interested in the questions at hand here, nor would Derrida for that matter but for other reasons, as the questions at hand within understanding the role of technical media in cultural production are of a different set of projects than Heidegger or Derrida had. However, understanding that our being, from an ontological perspective, is tied up with technology, brings us to understanding that subjectivity is also intrinsically linked on an ontic level with technologies, and the possibilities they present to us, whether consciously or unconsciously. Wrangling Heidegger via Derrida's supplement this way shifts Heidegger's ontology into something more resembling cybernetic theory – complicating and enhancing the understanding of cybernetics through re-situating the technical-medial cyborg self as the "natural" mode of being. Rethinking the presence of technology, and therefore

technical media, beyond our direct engagement with it, as we carry the presence of its possibilities or limitations with us, assists in building a more thorough model of the cybernetic self, one that, at a primary level, interacts with, and is influenced by tools, including technical media tools. That being said, if technical media influences the constitution of the cybernetic self, what influences the constitution of technical media? Understanding how the actual cybernetic feedback system operates, and how different parties participate is imperative to understanding the intricacies of the cyborg subject in relation with technical media.

Second-Order Cybernetics

Despite the theoretical frameworks pointing in a similar direction, there is an underlying concern that "we live in communication while theorizing about it" (Krippendorff 1996, 312), so we must be careful when attempting to isolate and understand the individual subject in communication research. Krippendorff explains:

Neither can we understand a You as an isolated individual and from a detached observer's position nor can we compose a You from known parts the way engineers design systems from existing components, precisely because I and You as well as the particular relation between them evolve in processes of mutual adjustment (Ibid., 319).

Krippendorff's "second-order cybernetics" is helpful here with all levels of communication research, as each component is understood as connected, not just humans in communication, but different components of each communication system, as well as "the particular relations between them." Understanding human-

technical systems are tricky, and must be understood as a series of relationships that co-constitute each element within the system.

Conceptions of You and I are always complementary. A mother does not exist without a child. There can be no buyer without a seller. Actors and audiences require each Other... Complementarity must not be confused with equality, however... It simply suggests that roles somehow fit like hand in glove (not like hand in hand) and the difference between them is constitutive of a particular relationship (Ibid., 318).

Brianke Chang helps to lay out components within this constitutive system, which is particularly appropriate when introducing the human element to a technical interface system. Communication, according to Chang, is an "interplay between self and other, between that which stays the same and which appears to the former as different" (Chang 1996, 44), effectively defining communication as the exchange between two or more elements that are attempting to make sense of something other than themselves. In this perspective, the subject considers itself as a self (and therefore familiar), and considers the other as different and not understood. Communication therefore does not simply send and receive messages, but attempts to domesticate "the alien into the customary" (47); it brings things closer and helps make them familiar. Chang's concept here works both for a system of two independent subjects, but also helps craft a more robust understanding of technical-human communication, as the subject continuously attempts to make familiar these new technical systems. Chang continues:

As long as the subject of communication is predefined as a self-enclosed, unconnected source of meaning and intention, communication [...] must be viewed essentially as a sending (envoi), an event of giving oneself over, during which a representative of subject, something representing or standing for the subject, is dispatched to another party, another subject (Chang 1996, 46).

Chang sees this communication as a type of "giving oneself over," rather than messages sent from one to an other. The "simple" sending of messages makes sense for telecommunication, but not when people become involved, as, obviously, people do not share the same systems as machines (they do not necessarily speak the same language, know how to interface, etcetera) or even other humans (lack of shared experience, differences in language, or other issues create breakdowns in communication). Chang argues that this communicative system is outside of us, yet shared by us, and therefore we must instead give our communicative tasks over to something in between us and other. Communication does not happen (just) between two, as the common-sense narrative supposes, but instead communication is itself a (non technical) medium by which we exchange messages. Although a bit circular in thinking, this helps to consider how media can communicate with us, provide feedback, and understand how subjects can receive these relays from media themselves.

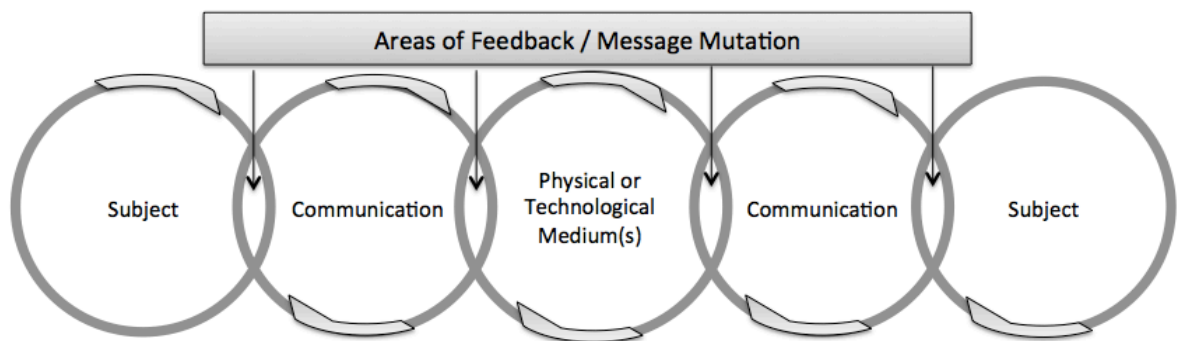


Figure 3: Simplified Model Incorporating Chang and Krippendorff (Author's interpretation of Chang 1996 and Krippendorff 1996)

Chang's "postal principle" suggests that all communication happens through postal circulation, as messages passed from sender to receiver must be circulated through a system that we can only give ourselves over to in hopes of a delivery. The postal system is a series of nodes, of postal mediations, where we can conceptualize transmission and reception (feedback); a series of determinants that modify, mutate, multiply, return, and quite possibly successfully "deliver" messages through a series of postal relays, a "postal" media discourse. Of course, all postal exchange is, at its basic level, a "sharing." The giving over of messages to a relay is not simply a gift, but a sharing with relay, as messages that enter into the postal system are always in circulation (once a message is given over it always remains in circulation). Chang's concept here complicates not only McLuhan (and Shannon and Weaver) but also Socrates' original theory, as "communication" itself becomes the first medium for which the messages to mutate.

Digital technologies help to complicate the understanding of postal relays, effecting and mutating the media due to their architectural makeup - interacting, and determining subjects through their deliveries. Chang's model assists Krippendorff's understanding of the co-constitution of relationships by incorporating more explicit notions of feedback and co-constituency. Rather than simply looking at individuals or mass communication in traditional frameworks, the application of this conceptualization of cybernetics as complex feedback systems to lays out a better framework of how technical-human communication systems circulate and mutate messages and meaning an always-connected society. The conceptualization of the human-as-cyborg moves beyond the "simple" cybernetic

notion of feedback loops and influences among those lines and starts to highlight the more technical and more "robotic" aspects of the cyborg through understanding how technical media assists in constituting a horizon of possibilities through these technically mediated relationships. This framework helps to think about what mashups represent for that horizon: dividing, collecting, distributing, and multiplying digital snippets of culture against the prevailing economic and legal norms. Understanding these components as a massively entangled and co-constitutive constellation of relationships frames the basis for understanding a more complex study of culture and cultural production in a digitally mediated world. Now that this framework has been fleshed out more, turning back to technical media to understand how individual pieces operate will help to ground an understanding of what particular technical media, such as the mashup, are doing in these relationships.

The Interface Effect of Technical Media

There are at least two points of possible mutation when it comes to technical media. The first being in the media itself, within its architecture, but the second lies with its interface. The notion of "interface" can be understood in multiple ways. At its most basic level, an interface is the point at which two (or more) systems meet, whether it be subjects, technological systems, organizations, or a mix between them. There are human/technology interfaces, as well as interfaces between two or more technical systems. As the point at which these systems meet, this interface is a medium, a mediator, between the systems. This interface is not merely a direct translation

from one system to another, but an interpretation that has limitations, requires specific types of input, and, as a medium, actively interacts with the systems that it engages with. Although often more concerned about human/technology interface, there is often an entire "stack" of technical media (such as a Web "stack," the collection of hardware and software which powers Internet servers, in which components pass messages to each other without human interaction) and how each technical media component's interface with each other can relate back to the human subject.

Heidegger's hammer is a type of "simple" human/technology interface, where the two "systems" meet - the self and the hammer, co-constituting and transforming each other. There is a physical requirement to pick up, and operate the hammer, one that depends on an ability to hold the hammer in a particular way, which constitutes the physical attributes and architecture of the interface, and there is a way in which the hammer allows and encourages a particular type of action, which are a particular "effect" of the interface, which allow this transformation and co-constitution (for the hammer is only hammer when it performs its task, otherwise it might be a paperweight). The media system itself can transform messages, but the interface of systems requires a particular type of interaction; to engage with these systems, subjects must bend to the interface.

The hammer seems simple enough, but others (for example, Facebook's interface) require more specialized knowledge, and particular contexts for engagement. Often the messages that are allowed through the interface are limited, requiring message construction to bend to the interface. A keyboard, for example, is

required to input data into a field, and possibly that field, for example on Twitter, has character limitations. Due to this contortion, systems not only change the messages, but also force the subjects sending those messages to change. Interfaces are, then, boundaries and places of crisis - where shifts and comportment take place, restricting, limiting, and effecting both message and subject. Alexander Galloway asserts that interface should not be conceived as "thing" but instead as an "effect" which contains an ethic (Galloway 2013, 23). It is an effect only insofar as this is the only way we might notice it - because interface is meant to be inconspicuous, or, as in the case of Twitter's character limitation, the acknowledged parameters of the form become normalized. This effect has a particular ethic; an ethic that is not "good or bad" but also is not "neutral," as its effect makes or causes change. An intrusive interface is, by design standards, a bad interface, so most interfaces go unnoticed, as do their effects. Interface is usually only visible to those who are frustrated by it, unable to understand or interact with it - unable to negotiate the multiple communicative elements of the interface. Thinking about the "ethic" of the media, and how the subject's interaction with the media changes both the subject and the horizon of possibilities for the subject's media transmission, interaction, and creation reframes the way that each media system and interface can be approached to understand the intricacies of the media itself. Thinking about mashups, it is important to consider the vast array of interfaces that accompanied *The Grey Album*: the interfaces that created the mashup album itself, the interfaces that allowed its quick duplication and spread across the internet, and the interface of the mashup that helped to counteract the legal threats and spark the subsequent online "sit in"

protest "Grey Tuesday" all played different parts in mutating these messages with their own "ethics," as well as illuminating an overall ethic which pervades through the form of the mashup. These interfaces are, of course, simply just representations of computer code and hardware, which are, despite their seemingly ephemeral nature, quite physical in both nature and how they "feel" to the cybernetic subject.

Code as Architecture

If the interface has an effect, it is one that is hidden within the architecture. In *Code, and Other Laws of Cyberspace* (2006), Lawrence Lessig argues that "code is law," regulating activities and behaviors similarly to law. However, Lessig's conceptualization of code as "law," (he is, of course, a lawyer) seems to fall short when considering that, outside of having access to root code, most people cannot "break" code - one can only function within the parameters of what that code allows. He categorizes it this way because code is always created by individuals, and never found in nature. However, buildings are never found either, and are constantly remodeled. Finally, due to the fact that the legal system spends quite a lot of time punishing those "breaking the law," it seems that "code" might be better considered as "architecture" as it forces the user to interact in a specific way, rather than coercion through fear of punishment. Although code is not found in nature, thinking about "code as architecture" seems more appropriate when thinking about the effect of media and how it functions, whereas "law" seems to restrict the movement within an architectural system even further (for example a speed trap on a straight, flat, freeway road). With this in mind, Lessig lays out a series of determinants (he

refers to them as “regulators”) on individuals, activities, and behaviors (components of cultural production”) that roughly fall into four categories: social norms, architectural, market, and legal. Referred to as the "pathetic dot" theory, individuals are represented as this dot, while these "regulators" set out the regulations and constrains on the behavior of the individuals. Although these categories are never mutually exclusive (cultural production is never only determined through a single category) separating them conceptually makes it easier to conceptualize the type of labor they perform.

Simply put, social determinants are the (often unspoken) practices and precepts that govern social behavior. Terms like “social norms,” “ethics,” and “morals” (although morality overlaps easily with law) fit the concept of social determinants. These rules are often changed collectively, if not individually: one can choose to participate in a myriad of activities, but one cannot choose how society (or others) perceives them. Social determinants are often unseen, participating at the level of ideology, shifting behavior and pre-determining actions. For message circulation, social determinants will mediate what types of messages are allowed to circulate (and to where), change how the “phrasing” of the message is relayed, or force the subject to comport themselves in a different way to send that message. Social determinants often nudge messages or hide the potential for messages to circulate, and can shift over time.

Unlike social, architectural determinants mediate through "physical" means (ones and zeros, while incredibly small, are still physical). Architectural determinants can copy and redirect messages, or only allow certain types of

messages to circulate. They can also create difficulty to circulate messages effectively, or quite the opposite: they can open up messages to circulate widely and encourage the sending of messages. Code, and therefore all software, is a type of architecture that shapes digital “space,” constituting physical determinations on what can be done in a particular area. Code influences physically, much like a road that has large speed bumps, causing physical feedback to the driver.

If speed bumps are architectural determinants, legal determinants are the police officers that patrol (and often hide in the bushes alongside) the road: sometimes they are there to enforce the law, and other times they are there to encourage concern about the law. Like social determinants, legal determinants nudge or hide potential ways for messages to circulate, but also stop messages from circulation, but only if the offending messages are caught. Due to the problematic nature of the mashup as a transgressive cultural product, when I refer to any market determinants, it will be in conversation with legal determinants (such as the extension of copyright or the “illegal” nature of marketing certain cultural productions due to the legal/market determinations). The market determinations of the mashup are intrinsically linked with the legal determinants: as long as the mashup remains illegal, the market value of the mashup is, effectively, zero. Additionally, legal determinants often change, but often they are changed through either a conversation between social and legal, or market and legal determinants.

Lessig's "pathetic dot" is a vastly simplified way to consider social pressure than the complicated networks of cybernetic relationships. However, this cybernetic network of relationships always looms in the background, informing how each of

these understandings can be more thoroughly illuminated. This more simplified framework can be occasionally helpful to work from with the caveats that this larger "structure" of determination and regulation is always in play, and always this "pathetic dot" is only one of billions, and the dots as a larger collection of subjects is always in their own series of second-order cybernetic relationships with each of these determinant factors, influencing, changing, and evolving. These determinants are merely components in the larger network of systems, asserting their force in varying degrees and participating in determining the mediating effect on the messages. Unlike Lessig's concept of "code" as *law*, understanding code as *architecture* helps to frame a "social-medial a-priori" with media determination *in the first instance*, as these architectural roads and pathways are experienced as a type of "worldhood" that is natural, normal, and part of the experience of information. Media architecture of this type is hidden, much like the interface, regulating and determining outcomes and actions before conscious interaction. With the understanding of code-as-architecture, and how these architectural systems are, more often than not, "hidden" (sometimes in plain sight) the ultimate goal of an archaeology of the determining power of these systems becomes clear.

Towards an Archaeology of Technical Media

The premise of archaeology, in Foucault's terminology, is that discursive formations are governed by rules, beyond those of grammar and logic, and they operate beneath the consciousness of individual subjects, defining a system of conceptual possibilities that determine the boundaries of thought in a given domain and period

(See Foucault 1982). These are "hidden" systems of conditions and relations, secretly influencing discursive practices. These systems need to be excavated, so to speak, to both understand how they operate, as well as to enlighten those affected by the systems. As already discussed, the architecture of media operates in a similar, hidden way, as they function through naturalized interactions and interfaces, encouraging and limiting conceptual possibilities.

Kittler helps rethink Foucault's noble investigative process along these technical media lines, reminding us that "Even writing itself, before it ends up in libraries, is a communication medium, the technology which the archeologist [Foucault] simply forgot." (Kittler 1999, 5) Kittler's predilection for bombastic rhetoric aside, he helps to shift a conceptualization of Foucault's process of archaeology towards an engagement with a different, and arguably more primary piece of the historical puzzle, technical media.

Kittler begins his theorization of media in *Gramophone, Film, Typewriter* with the nebulous line "Media determine our situation" (Ibid., xxxix). Kittler's translator, Geoffrey Winthrop-Young, in his introduction to the same book, elaborates a bit more on Kittler's opening words:

If media do indeed 'determine our situation,' then they no doubt also determine, and hence configure, our intellectual operations. One could easily re-appropriate Derrida's much-deferred pronouncement [there is no outside of the text] and suggest that the fundamental premise of media discourse analysis is [there is no outside of media] (Ibid., XX).

Rather than stopping, or even beginning at discourse, it is best to conceptualize that all discursive practices are dependent on media, and therefore media is the place to investigate first. Kittler notes that media "are (at) the end of theory because in

practice they were already there to begin with," which, if we follow the same logic of Hall's cultural studies approach to determination, media are also at the beginning of theory (Kittler 1999, XX). Putting these together, this particular goal of "media archaeology" is to uncover the hidden ways in which mediums influence the messages that are circulated through and by them by placing media in "the first instance."

An investigation of these "natural" media systems that circulate and disseminate messages allows us to ask questions not only about what is going on, but how these systems have become naturalized, allowing for a better assessment of the current situation. Parikka notes that "archaeology is always, implicitly or explicitly, about the present: what is our present moment in its objects, discourses and practices, and how did it become to be perceived as reality" (Parikka 2012, 10), and that media archaeology is an important focus because media "are the new architectures of power," and "power becomes hardwired to technology" (Ibid., 82), even though this power remains hidden.

Unlike Foucault's archaeology, media archaeological investigations are not as concerned with particular "spatial places and institutions" or "practices of languages," but instead on "switches and relays, software and hardware, protocols and circuits of which our technical media systems are made" (Ibid., 70). These are hidden not only due to their naturalization, but physically hidden, either in deep within the circuitry of a handheld device, or in the literal "black box" of a computer, whether it exist in a desktop or in the "cloud" of large, hidden, server racks in the belly of warehouses spread across the world.

Thinking along these lines, media archaeology orients an investigation that begins with the "materiality of the informatics machines... commands, addresses, and data," which participate in a different type of ontology, a different type of "nature" which the subject is also "thrown" into. The influence of random access memory, of microprocessors, of the "stack" of intersecting technologies that form each node within the vast networked construction we call "The Internet," is not simply just another aspect of determination, but constitutive of "the worldhood of the world," of the natural experience of the technical cybernetic subject.

An archaeology of the mashup, then, is a re-orientation of how to think about the mashup in a way that forefronts the influences of modern technical media. Assessing the mashup both as a constellation of media systems and as a form that emerged under particular legal, social, and economic conditions begins to illuminate not only the hidden determinants in the form of the mashup, but the determinants hidden within components of the mashup, and therefore threads of larger systems of digitally mediated cultural production. Understanding the cybernetic subject through this investigation of the mashup will help to illuminate more about current digitally mediated cultural production and enlighten potential futures that are hidden within these architectures of power.

CHAPTER 3

THE MASHUP AS CULTURAL STRUGGLE

This mutation we call monstrous: as such, at least, and where "it's changing," it has no model and no norm to reproduce. Nevertheless, we know and we can say that what is changing the face of everything on the face of the world in this way is but a little fraction of a fraction of a second in a history which has been transforming the relationship of the living organism to itself and its environment

- Jacques Derrida, *Paper Machine*

Mashups and Social Mutations

Technical media are complex, intricate systems that not only cannot be adequately understood outside of their particular historical, socio-cultural, legal, and economic situations. However, technical media also exhibit multiple types of "form," both social-structural as well as technical-architectural, as they have multiple ways they express themselves. Both the social-structural and the technical-architectural bleed into each other, manifesting their influences in a myriad of ways; Their effects and areas of investigation are intertwined, yet each side function differently. The technical-architectural may influence the social-structural, but often the technical-architectural remains hidden within the recesses of the circuitry, registers, and busses of technological avenues. Reading different parts of this constellation helps to tease out these various hidden systems as they function together. As the first chapter began to understand "what" the mashup is as far as a conglomeration of digital media components, the second chapter explored what the mashup offers us theoretically by the way of "mashing up" cultural studies and media theory, reorienting analysis of determination through the lens of technical media.

The mashup here will help to frame examinations of authorship and cultural production, teasing out some of the assumptions that underpin contemporary notions in order to contrast them with the lived reality of interaction with mashup media. Culture always has built upon the past, and continues to recombine and reconfigure messages through mediating systems. Whether this recombining takes the form of Led Zeppelin's "Whole lotta love" (taken nearly wholesale from Muddy Water's recording of Willie Dixon's "You need love") or DJ Danger Mouse's *The Grey Album*, the end result is a matter of style, technique, and form of authorship and cultural production. The mashup here starts to reorient a way of seeing notions that seem simple and impermeable, but in the face of the mashup begin to unravel, mutate, and give up their hidden power that perpetuates their existence.

Mashing up Authorship

Modern copyright law is less concerned with creativity and access and more about asserting "the property rights and moral authority of the legal author" (Gunkel, 2008). However, the way that copyright situates the author (if the copyright is held by the author, which, often it is not, only complicating this issue further) is one, by definition, of authoritarian position. The author supposedly controls the copy, even after it leaves the author's hands. Even the Platonic notion of authority over creation complicates this commonly held belief, as Socrates describes the written (and thus recorded) word as children that the father (creator) attributes a quality that they can never have (Plato, 1982). Copyright, as the control of rights, attempts to reconstitute the paternal authority of the "legal author," although the offspring has

already ran away from its father. The recorded, the authored, already has grown up and become something other than the father may have intended. As any parent (or any former child) knows, the attempt to control a child in this manner is not only potentially harmful to the child, but an exercise in futility. Much like children who have grown up and begun to spread their wings, digital files are hard to retrieve, and harder to control. As evidenced by *The Grey Album's* distribution, retrieval of every copy is as impossible a feat as can be conceptualized. When these copies evade collection, it is because they have multiplied, each spreading in different directions. Like cell division, the digital file replicates endlessly, spreading everywhere and seeking out further multiplication and distribution. Locating whole copies is hard enough, but in their multiplication they often mutate. Although digital duplication is supposed to be perfect, their architectural ability for remix-ability offers opportunities to quickly change. Remixed, mutated, and mashed-up into new forms, it becomes quite difficult to consider the parental authority of the mutated monster, especially when that monster is the equivalent of a pollinating genetic donor.

Walter Benjamin's famous essay "The Work of Art in the Age of Mechanical Reproduction" (1969), also questions the notion of the cutting off of parental authority, and therefore of ownership, restriction, and authenticity. He suggests the copy frees the work of art from place and restriction. "Even the most perfect reproduction of a work of art," Benjamin writes, "is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be" (220). Benjamin's concern for the copy seems to echo the Platonic privileging of the

spoken word. The logic that it follows is that of the forms - we are cut off from the "authentic." Not to privilege a certain form of art, speech, or otherwise, but that when we realize that retroactively the copy, that which has left the "authentic" place, becomes something else, something unbridled from a paternal authority, locating authenticity and authority becomes infinitely more problematic. To briefly address this - first of all, if authenticity must be located in "time," then it can always be said to not be, as a location of time (*chronos*) must always be past or future. Presence, chronologically speaking, is always passing. It can only be located in absence of presence, in the passing. Secondly, the passing of this authentic moment must remove it from authority, from this paternal - from any "originator." Not that presence, words or actions, cannot be traced, or pointed at, but when we speak, it is immediately that we release (or in the Platonic metaphor, birth) an idea, a thought. This thought, this idea, can never be located authentically and authoritatively - as the author has been removed already. The location of the idea exists only in the capturing of the idea, not in the birth. Following this, the location of time for authenticity follows a *kairologic*, that of timeliness. The "aura" that Benjamin refers to, that which "points beyond the realm of art," is a referent to that which cannot be located (Ibid., 221). It is purely discursive, locating the timeliness of the authentic within a framework of shifting and moving possibilities. This timeliness is never located with simple *chronos* time, but one that refers to the "now" of the time, with each iteration of remixing and reuse bringing forth a new "now" with the *kairologic* of cultural production. This is all based within this larger constellation of copying, remixing, and re-use.

The founder of Apple Computers, Steve Jobs, once said "good artists copy; great artists steal," (*Triumph of the Nerds* 1996) and it has never been truer than within the music industry. Some of the most famous court cases have included Vanilla Ice's "stealing" David Bowie and Queen's beat from "Under Pressure," and George Harrison "stealing" the melody to the Chiffon's "He's so Fine." In early 2015 the heirs of the Marvin Gaye estate successfully sued Pharrel Williams and Robin Thicke for \$7.4 million in damages for Williams and Thicke's song "Blurred Lines" infringing on Gaye's "Got to Give Up" after an extended court case spanning two years. (Sisario and Smith 2015) Blues and folk music, however, had been riffing off of previous versions of music for decades, with lawsuits emerging only recently amongst artists that have simply followed a time honored tradition to be inspired by, learn from, and use previous artist's work as the "grist" for their own. As mentioned before, the lyrics for Led Zeppelin's "Whole Lotta Love" were plagiarized from Muddy Waters' recording of "You Need Love" without credit, only changing the musical accompaniment. The Rolling Stones also partook in this re-assembling of previous songs, recording (without credit) a version of "This May Be The Last Time," a traditional folk song recorded by The Staple Singers in 1959, as "The Last Time." The latter example was particularly famous because the Rolling sued The Verve for their (licensed, but then argued successfully that the license was not sufficient, obtaining 100% of the royalties) use of the Rolling Stones riff in "Bittersweet Symphony" (McLeod 2005, 100).

This tradition of musical evolution originally found their voice through re-imagining traditional songs that, while never recorded into a physical medium, had been around for years, if not decades. This has not gone unnoticed to consumers of modern musical culture, or consumers of culture in general. Jennifer Nelson, an independent filmmaker, recently sued Warner/Chappell, the owner of the copyright to "Happy Birthday to You," challenging their ownership and claiming that the song should be public domain. This single song was estimated to bring in \$2 million in revenues *per year* to the owners of the copyright. The song, which has been called "the most popular song in the English language," was claimed under copyright because it was sung to the tune of "Good Morning to All," written in 1893 (Sisario 2015). The judge ruled in her (and our) favor, recognizing that Warner/Chappell never secured the rights and, because of this, the song should be considered public domain. The suit also asked Warner/Chappell to return fees dating back to at least 2009 (Ibid.). Not only do companies sue artists both big and small, but they also coerce others into paying fees for intellectual property that they *do not fairly own the rights to*, despite copyright law falling heavily on the side of owners.

This type of copying and re-imagining has obviously gone on for as long as there has been music, but only recently has the industry run amok with lawsuits and takedown notices. More traditional musical "stealing" were riffing off of one another, using older material to re-imagine or inspire. Mashups, by definition, also unabashedly steal, but in a more obvious way - simply snipping pieces from each of the constellation of ideas that formulate the final track. In a way, mashups are slightly more honest about their influences - they wear their influences proudly,

identifying each influence openly while also remixing them together, creating something new. Although there might be a question over the influence of Marvin Gaye on "Blurred Lines," there is no question where the grist for *The Grey Album* came from. Even if it was not announced so plainly, The Beatles and Jay-Z remain conspicuously evident on *The Grey Album* to anyone even remotely familiar with their music. Often still within the "fair use" bubble of safety, this honest location of musical ingredients remains transformative in its use. The mashup helps to reconsider notions of authorship here by illuminating the pathways of remixing, copying, and distribution that are simplified and streamlined into a "natural" technically mediated act. This "new" notion of authorship, of course, is not new, but instead simply clarifies something that was always there, something obfuscated by competing determinations, ones that have fairly clear roots.

The word "author" is from the Old French *autor*, which means "originate," and is commonly referred to as the place of origin. This commonly held understanding of the concept of author invites us to locate origin, to point towards intent, to praise genius, to lay blame, to instill a place and time, etcetera. Our production of culture (both now and before) by borrowing, stealing, and re-using various pieces of other culture spins a tangled web when trying to tease out the notion of genuine origin. Even though we cannot locate the authority of the author at *author*, this tracing of idea to some origination still concerns the production of creative works.

It seems improbable, even at the most basic level, locate sovereign origin among the landscape of creative products today. Origin, the location of "time and

place" remains displaced from the idea. A more careful investigation of empirical facts might start to locate the genealogy of creative works, but it is doubtful that any specific "origin" may be found. Origin is perpetually displaced, as creative works are indebted to their past. Not just "past" as a chronology of creative work in a time passed, but the recognition of the movement, the shifting of horizons, a past that is always just locating of a larger constellation of ideas, creations, social pressures, and technologies. Creative works locate themselves at the intersection of a kairological "time," a trace that marks the absence of any absolute presence but instead is "fashioned" within this constellation (Agamben, 2009). This presence, this "origin" of creative work is not originary (as in a place of pure origin) but the location of a birth, marked only by the absence of an absolute authorship, and instead by the "whatever" of the kairology. As Derrida notes in *Limited, Inc*, the author is "divided, multiplied, conjugated, shared," and never whole, never a singular entity that can claim a sovereign originally place (1988, 31). Even the author's parental lineage is questionable, at best, as there is an impossible array of indebtedness that locates the place of authorship. Authorship is the location at the intersection of a symbolic array, each determination playing its part in construction of the creative work, but never can there be a location of a singular origin. A corporeal hand may hold the pen, but the offspring remains something that no paternity test can fully ascertain. This indebtedness, to history, to society, to media, and a variety of other factors, whether acknowledged or not, always accompanies authorship. This is not to disband the production of thought, the supposed "forward" movement or progression of thinking, as indebted creative works often advance previous ones,

but to affirm the location of creative works within a system of entanglement and debt that cannot be unfolded in a linear fashion but instead is located in a sort of pleating of time, only located through an impossible conglomeration and folding that makes no sense under *chrono*-logic, only under the logic of *kairos*.

The indebtedness of creative work does not just attach the work to the passed, past, or whenever, but also locates a debt to the future, as they are responsible both for the representing the past, being within the present, and creating the ground for the future. Authorship is not, within this framework, simply a penning of a particular work, but the remixing of history through interaction with "Archive." Archive is the place, as Derrida says of "the commencement and the commandment," (1998, 1) where author merely plays a role in the borrowing, renaming, and reshaping. It is more than just "history" but instead a ripe metaphor for thinking of human culture and knowledge in general. Archive is, according to Derrida, the "coordination" of "two principles... the principle according to nature or history, there where things commence - physical, historical, or ontological principle - but also the principle according to the law, there where men and gods command, there where authority, social order are exercised, in this place from which order is given - nomological principle" (Ibid.). The entirety of possibility within human knowledge, culture, and history cannot simply be a summary but instead is this place where things are available to be catalogued, used, and named - always anew, a re-naming through remixing. To name is to summon, it is marked by decision, and a re-naming is a violence that cuts into a history and rips it apart. Naming is a natural phenomenon; however, it still restricts, orders, and controls the pieces of the past

into something new. There is always a cutting away (and cutting a-way) that is necessary for the manifestation of a new commanding, a new constitution that helps to form the horizon of the future. From this commencement and commandment the newly "authored" work is birthed, and, can "call into question the coming of the future," through the way it seeks to control the past and future of Archive (1998, 33). The author, who is supposedly located before at the top of a metaphorical and ideological pyramid with minions of derivatives spreading out below, must lose this privileged place of origin, acknowledging the de-centered nature of authorship in a system of relations, merely a player in an interconnected web of impossible debt. The author commences and commands, shifting the possibilities of futures. The author names and creates, but once the naming and creation takes place, that instance is then merely part of archive again, ready to be commenced and commanded again; The author midwifes these archival spawns, but then must release them into the offing. We have always called forth from Archive to create, as we are tinkerers that utilize what is at hand to create.

Claude Lévi-Strauss coined the term *bricolage*, from the French *bricoler*, "fiddle, tinker," or to make use of materials at hand, to describe the creation of mythological thought (see Lévi-Strauss, 1968). To fiddle or tinker infers space, a place where movement occurs, we can assume that the ability to fiddle or tinker requires a structure of meaning that is incomplete, and therefore it must always have the ability to shift. Derrida pushes this a few steps further and asserts, "if one calls bricolage the necessity of borrowing one's concept from the text of a heritage which is more or less coherent or ruined, it must be said that every discourse is

bricoleur" (Derrida, 1978). Derrida's explanation of bricolage is that of re-mixing culture, re-using of the past and present to create new. This is the way which culture has been formed for thousands of years, only recently have we thought of creative works as property to lock down and stop people from utilizing. In the mashup, the discourse is composed of various music rearranged into new compositions. Mashups are a locating, a kaiology, of authenticity and authorship at the intersection that it creates. The mashup pieces and overlaps together multiple songs to formulate a new conversation. The mashup is an exposition, a making clear and audible of bricolage. These mashup artists are "borrowing" from texts, tapping into a heritage, to create a new discourse. The intentional confusing of authorship through the mashup creates an intersection that plays with the location of authenticity and authority. The mashup highlights the space for re-signifying and stripping away the attempted totalization of signification of the texts it tinkers with.

The Grey Album allows a conversation across 35 years of music between Jay-Z and The Beatles, allowing Brian Burton to do as Sir Paul McCartney noted, "exactly what we did," (Beatles and Black music) when genres were bent to new audiences. More recently, in Girl Talk's *Like This*, a conversation between Beyoncé, LL Cool J, a young Michael Jackson in the Jackson 5, Nine Inch Nails, Gwen Stefani, and the Carpenters (and many more) takes place, none the same for it and never conceived before. These conversations, of course, are simply the exposition of the mobility of the discursive – the interplay of symbols, connected to form a new expression. Like words in a sentence, they follow a grammar (a beat, notes, etcetera – cacophony would simply not be listenable), but the meaning is never fully formed, there must

always be understanding of what the words, the notes, mean so that they make sense within a given context. The located creative works in citation here are merely referent, not fully formed expositions of creative work. Through the constellation of these citations emerges the work of the mashup - both citational and referent, but most importantly it is located only in its dislocation. Copyrightable works must be located in a fixed medium, and therefore locatable - they must be able to be clearly seen and recognized. However apparent Jay-Z's voice might be within *The Grey Album*, it is still also not his, as his voice no longer appears in the fixated location that it was originally in the same form it originally arrived in (not just the Compact Disk, but location as in concert with other pieces of his music). What Danger Mouse and other mashup artists specialize in is dis-locating the audible referent from the fixed location, and re-locating this referent amongst other dislocated referents. Mashup artists play with signs to form new constellations, new conversations that speak in a new voice, unlike any of those that it might also refer to. However, what remains true of these conversations is that they are of questionable legality, and always carry that legal struggle within their context, echoing this subversive conversation with each remixed utterance.

These mashups not only "question and undermine authority" (Gunkel 2008, 13) of copyright law, but they undermine the authority of the fixed location of creative works, the sacred institution of authorship. Through the digital re-issuing, re-constituting, re-mixing, and re-locating creative works, the system of authorial dictatorship is undermined by the same game that the authorial dictators forgot they played. These dictators participated in this forgetting by creating "new" works

that functioned on those of the past while demanding their rights trump any previous rights. Any artist will gladly rattle off their list of favorite citations - ones that they find comfort in and inspiration from, but the dictators of copyright still persist in their ownership of all that is fixed in their tangible medium. The mashup artist just wears their citations on their chest; these citations are an advertisement of how the mashup artist feels about certain works by the mixing style they have offered them, all the while spreading this message of remix-ability.

The conceptualization of authorship that is necessary to justify the legal rights afforded by United States copyright law falls into a suspicious place when confronted with the experience of the mashup. The experience of the mashup is one of multiplying, of sharing, and of recombination. This experience is "normal" not just because of the mashup, but because that has been the history of culture and cultural production through all of human history, only briefly now interrupted by other determinations. The mashup, however, brings the experience of archival borrowing and re-filing back to a normalized system of experience. The listening to, sharing, and production of mashup tracks and albums function as normal cybernetic processes for the subject, part of their experience as just "being" human. For the technical cyborg subject, these experiences are as not only normal, they are part of how, as Fairchild notes, this cyborg subject tries to "connect with the world" (2012, 7). The normalization of the experience of something that, legally and economically, has been determined otherwise as illegal, improper, and abnormal, puts the mashup in direct confrontation with the cyborg subject's experience of the world, forcing a re-thinking of what is "normal." The experience of this newly turned around

conceptualization of ownership and authorship is spread through the experience of the mashup interface, in the way it is engaged with, and shapes the horizon of possibilities.

Mashup Interface

Remixes used to require much more expensive technical tools as well as difficult skills to produce. The barrier to participation was incredibly high. These days most everyone with access to the Internet and a (mostly) modern computer has access to the software and capability to cut up, recombine, and produce their own remix tracks. Computers have become "normalized" amongst the majority of modern society, and with it the tools that they have spawned. These tools significantly lower the cost of participation in the production of the mashup, not only in a monetary sense but also the cost of time, experience, and physical space. Cultural production always takes place in a space, and that space is constituted by the architecture that frames it. Whether or not they are designed on purpose or whether they are co-constituted through social, economic, and legal pressures, a space's design promotes or inhibits a particular function, a function that speaks worlds about what that space "does," or what ethic inhabits and populates, constitutes, that particular space. This can be seen everywhere in building and landscape architecture, where spaces are designed to allow certain types of inhabitation, predetermining certain types of interactions, and allowing both planned and unplanned uses.

Galloway argues that the computer, or computerized system, is much like these particular spaces, and contains "an ethic." Not that it is ethical as in a machine personification sort of way, but that computers do things with processes and calculations. Just like spaces "do" things, the things that computers do, then, are representative of that ethic. Digging through the things that they do we can start to piece together that ethic, piecing together what sort of narrative that ethic might tell, or what the goal of the calculus is. Galloway refers to the computer's "interface effect" here as "a process or active threshold mediating two states" (2013, 23), neither an object nor a creator of objects. This interface is "simply" a medium.

With every interaction with a medium there is an interface, a reaction; each interaction requires compartment and twisting that we must undergo to engage with it. Whether we fixate on a television screen or utilize a touch pad, or a keyboard and a mouse. We must bend ourselves through a series of these gymnastic exercises – just sending a simple email takes not only hardware and software, but an endless system of networks and services that you pay for (or trade your privacy for), as well as laws and regulations governing these networks and services. Whether or not we consider them, these systems have an effect on the way we get feedback from the interaction with the medium. Not only about the messages we circulate through it, but about the possibilities, the horizon of opportunities. There is a series of (often unregistered) determinants are already in place when you go to send an email, mediating that message, not only effecting the message itself, but also effecting, as I mentioned before, the possibilities that determine the boundaries of thought. When we interact with a medium, it changes the way we understand the

world. It changes the way we "are" in the world. The medium mediates even when we are no longer in contact with it; it becomes part of us, part of our consciousness.

The effect of the interface with the mashup is one that we get from the interaction - through creation, listening, or duplication of the mashup. The ease of clicking the hyperlink, the download, or the YouTube video informs our experience, as does the comprehension of the sonic dismembering that the mashup fundamentally operates on. This experience is one of simplicity - there was no moral quandary like some advertisements would have you believe - this is not stealing a car, or stealing goods from a store. We have become accustomed to this like walking, or driving a car. It is part of the very basic function of the World Wide Web. The digital already is that which is composed of ones and zeros. Digital technology itself is created to be infinitely, and perfectly replicable. This ethic, the one of simplicity of download and listening, of sonic manipulation, is one of sharing and of legal questioning. This experience is one that shapes the boundaries of what is thought possible - not that you must give something away to a friend, like lending a physical book, but you simply "make a copy" so that they, as well as you, can have whatever you wish to share. This ethic reinforces what we already know: copying is natural. Copying is the way in which we learn, the way we share, and part of an ethic that has been eclipsed by copyright law. More importantly to fair use, copying is, by its very nature, transformative. Copying is the always the "now" of whatever: It is re-inscribed, renamed, and brought forth again, tearing apart the temporal location of the artifact thought to be "fixed in a tangible medium of expression."

The Mashup is citational: it tears the musical tracks, dislocating them from any chronology or coherent and sovereign origination, rearranging them as an ensemble of voices conversing anew. Yet, this simple act of remixing is, according to popular conceptualizations of the law, illegal, and the creator is considered by many to be a "pirate." The mashup breaks down the idea of "one's own" or the individuality of the utterance, tearing it apart, and recombines it utilizing these principles. When this is performed again and again on these in-dividual pieces, they become dividualized. Divided. Segmented. The underlying assumption of the law of copyright is that the work can be fixed in a medium, but what the interface of the mashup does is invert that notion of fixation, rearticulating the individual pieces at will. Although the ethic of the mashup might say "share" and "multiply," the law responds "only if it is fair use." The ethic of the mashup is the ethic of "fair use," without complicating what, legally, counts as "fair."

However, the legal notion of "fair use" is more concerned with what is "fair" for us to use, to remix, to borrow, and to copy, rather than what is fair for others to copyright. When we employ our "fair use" to create a medium for transmitting re-articulated copyrighted material such as a mashup, it undermines the very foundation of the notion of copyright by questioning the individuation of the unique copyrighted tracks. Fair use exposed a chink in copyright's legal armor. What was construed as a way to reconsider limitations of copyright also became a way to illustrate the over-reaching of copyright in general. The mashup's embodiment of fair use illustrated a weak spot, one that, once exploited, forces a pause, reconsidering the entire system. The mashup is predicated on, even constituted by

the assumption of "fair use," not the legal proclamation of fair use, but the assumption that culture is ours to tinker with, and that it is "one's own." This can mostly clearly be seen in "Grey Tuesday," the protests following the takedown notices directed at *The Grey Album*. Something had to give, as copyright had taken too much.

We now live in a perfectly copyable world and we "hang out" in areas that perpetually save all of our data. This is a "normal" experience now, as natural as a conversation in a coffee shop. However, when the culture that surrounds us is copyrighted and we do what we've always done (copy, remix, and disseminate) things become more complicated. If mashups were created by a couple of people getting together and singing songs that were not recorded, most individuals would not have experienced them. The reason most Internet subjects have experienced a mashup (or at least a similar type of remix) is because of this interface of "being" online, and online we share, create bonds, and "connect to the world." When we start to think about more complex systems of mediations, mediations can be seen in the form of relays. Each separate medium affects the "postal" message, carried open like a post card, modified along the way by the systems in place, allowing certain types of inhabitation, predetermining certain types of interactions, and allowing both planned and unplanned uses.

What makes the practice of remix interesting is that, even though it is a simple recombination of popular culture, it also questions and undermines authority, a direct affront to those who seek to control the use of cultural property. The mashup is not a "new" ability in the sense that we have always tinkered with

culture and always had various interfaces for musical creation, writing, and spaces that encourage or limit certain behaviors. However, now that the formerly elite tools of remixing and sharing are now so commonplace that they have helped, as Walter Ong suggests, shape the consciousness of what is possible (1982). This consciousness, however, goes against the status quo and has created a tension among participants and those who wish to control the copy, influencing a community of individuals to participate together within these spaces we now occupy.

Mashup Community

The current form of copyright in the United States assumes the sovereignty of creative works or else must release the creative works within a reasonable amount of time so that creative works can function within the system of debt they were created from. Keeping creative works fixed within a system that excludes the participation in the debt system threatens the ecosystem from which the idea was born - therefore threatening the future of creative works. The mashup, as a site of contention for those controlling copyright, exposes this system of play and debt, shifting, even relocating, media outside of authorship and all its assumptions.

Pierre Lévy wrote in *Collective Intelligence* of "a society that explicitly acknowledges the principles of an economy of human qualities" and hoped that this society "will recognize, encourage, and maintain those qualities, even those that do not play a direct role in the system of commodity production" (1997, 34). Collective

intelligence can only emerge if allowed to freely happen, to be open to the future, to the possibility of the future. Otherwise the creators of culture "might forget" their place "and be transformed into a pillar of salt" (Ibid., 24). This is what the current system of copyright does when it allows lawsuits against the bricoluers. Copyright law attempts to colonize the empty square, the place of signification, so that the already-signified cannot be re-signified without permission. This attempt at totalizing the system is a violence, a violence against future potential and a cutting down of possibilities. This overt attempt at control is the force of hegemony at best, but possibly an attempt at fascism - the attempt of meaning enforced by the state, puppeteered by the businesses holding copyright.

Derrida suggests that "a new economy is being put in place," that we are bringing "into coexistence, in a mobile way, a multiplicity of models, and of modes of archiving and accumulation" (2005, 17). Pierre Lévy seems to continue this thought by stating that "the economy will center, as it does already, on that which can never be fully automated, on that which is irreducible: the production of the social bond, the relational" (1997, 31). This economy is, like all economies, a mode of relations. Yet rather than a relation regarding a debt of capital, the economy is instead centered on the debt of the knowledge. This new economy is not merely "being put into place" but has always already been put into place, and will continue to be put into place. It is clear that this new economy, focused not on the production of wealth for the individual but instead on the production of knowledge, stands at odds with our current notion of economy. From the Greek *oikonomia*, "household management," our notion of economy seems to be linked to the notion of the home.

The home, at least in this sense, is comprised of multiple individuals bonded socially (if for nothing else, that they live together), and the management of the household looks over the greater good of those individuals. The production of knowledge, indebted to other knowledge before and after, cannot focus on the sovereignty of the idea else this production grinds to a halt. How then, can we manage the household that cannot continue to produce? It seems, to me at least, that a full household, unable to create, move, and produce, quickly becomes one that is terrifying to live in. This "new" economy, focused on the social bond, allows for this room, this "play" that is necessary in any structure.

As mentioned before, Fairchild notes that the protesters involved in "Grey Tuesday" "were part of a larger culture that was dreaming up new ways to connect with the world" (2014, 7). The events surrounding *The Grey Album* were not sparked just from a few music collectors, but instead by a subset of a larger population of individuals who, through this naturalized digital experience, were finding new ways to connect, to form social bonds, and to interact with the world. Kembrew McLeod writes in "Confessions of an Intellectual (Property)" about his own experiences during "Grey Tuesday":

It was kind of a virtual sit-in... I risked a lawsuit because I felt a responsibility to show that fair use exists in practice, not just in theory. For me, it would have been ethically wrong to act as a detached academic while others took the fall, because if anyone could make a fair use case, it's me... It was in the spirit of promoting conversation and debate about an illegal artwork (and a broken copyright regime) that I engaged in this act of copyright civil disobedience (2005, 80).

McLeod goes on to explain that not only does it require licensing to sample even the tiniest part of a song, but it requires permission first, one that can be difficult to

receive, even though anyone can "cover" (re-record the song in its whole, even badly) a song simply by paying the fees. This was bothersome to McLeod, and bothersome to numerous others, not only those who participated in "Grey Tuesday" but others involved in remixing culture and community. Fast forwarding from *The Grey Album* in 2004, the Internet has become awash in remixing and mashups. Lessig noted in 2009 that remixing was the "language" of the Internet, but it has become more than just the Internet's language, spreading out to more "traditional" media models. Even the famous (albeit legally contested) "Hope" poster of Barack Obama was a blatant remix of another piece of copyrighted material. The Internet continues to leak into television too, as morning shows and news programs discuss and participate in meme-making on a regular basis. As discussed before, this has always been more than the language of the Internet, but it is the Internet that "re-normalized" the experience of remix without boundaries. The ease of spreading and quick remix-ability of digital media re-inscribed this ethic that, through competing determinations, had been under fire.

There are multiple, evolving economies at stake here, not only in fostering the social bond, but also in re-thinking how a more traditional economy might emerge without such restrictive chains on the past. The transmission method for *The Grey Album* was a coordinated effort of sharing, seeding, and hosting the digital files for others to do the same. More recently Girl Talk's *All Day* utilized a "pay what you want" model requesting donations to support the artist rather than charging for the album itself, circumventing traditional models of economic reimbursement (mostly in the name of staying within "fair use"). A majority of mashup tracks and

albums are ostensibly given away for "free" under various creative commons licenses, and circulated through YouTube, SoundCloud, BandCamp, or a variety of other streaming or hosting means. These economies trade in "likes," "loves," and interaction with the material's creators and other listeners. These "new economies" have been split due to the influence of the law here, as similar intertwining economies function well to supplement, and even drive commercial music economies (see McDowell and Soha, 2016). These economies trade in different types of value that are often interchangeable. However, in the case of the mashup, the commercial economy is excessively hindered by the strong arm of the law, limiting the possibilities for growth outside of the social economy.

Mashup artists build fanbases much like other artists, but instead of charging for their work, they make it accessible for everyone to listen, share, and remix. These are systems that have begun to function outside of these more restrictive systems, harkening back to older systems of artist patronage (often crowd funded instead of funded by royalty) which allow an alternative to the restrictive systems currently dominating the industry. These economies are forced to exist strictly outside of traditional modes when they are restricted from mass market. Sharing economies of many types have popped up to support a variety of grey-area or illicit downloading.

Although some mashup downloads are "hosted" by personal servers, requesting donations to help with expensive server upkeep, mashup consumers often download their music on peer-to-peer networks, requiring a good ratio of "seeding" (uploading to the torrent matrix) to "leeching" (downloading). Peer-to-

peer technologies like BitTorrent function on a distributed system of hosting and downloading, where exact copies of files and file systems exist in multiple areas. A "torrent" file does not contain the material that the user seeks to download, but instead acts as an address book of where these files exist across a distributed array. The BitTorrent software client takes this information and connects to this larger network to locate the file or files in multiple places at once, breaking up the files into smaller pieces to transfer pieces from an array of locations within the network. What is important to note about these peer-to-peer protocols is that the "downloader" is not, like in traditional models, simply one who only "leeches" because in these distributed networks of mass dispersal both leeching and seeding to a distributed network happen simultaneously. The leecher becomes the seeder instantaneously, from the very first byte leeches. This type of network can eat up a significant amount of bandwidth quickly, requiring enthusiasts to sometimes invest in better Internet infrastructure for their private systems, creating a more professionalized distribution system. Some "private" (invitation only) distributed networks even require a high "ratio" of uploading to downloading to remain part of the community, making explicit the implicit: sharing is mandatory to participate in the community. The traditional lines between "downloading" and "uploading" dissolve here, and sharing become represented in the "ratio" of data, where higher ratios (more "seeding" than "leeching") are lauded and lower ratios are dismissed from the community. Selfishness in leeching is shunned, and mocked openly. These are new types of sharing communities that had to evolve not only against the current legal and economic systems, but also, it seems, in spite of them.

Entire communities have been built around this new idea of sharing without ever losing. Not just files, but the entirety of "Web 2.0" and "social media" is built upon the idea that digital manifestations are perfectly replicable and spreadable. The normalization of infinite replicability has helped to bring about this ethic of sharing, that it is good, and should be encouraged. The mashup simply was brewed in this digital architecture and with this ethic, using the grist from the shared cultural artifacts, whether legal or not. The more legally dubious of these communities, such as the peer to peer file sharing network "The Pirate Bay," arguably the grandchild of the aforementioned Napster and Kazaa, are constantly popping up and reforming in new ways to skirt legal action and culpability, but they persist in the face of daunting legal circumstances. All of these communities, legal or not, are, of course, always in flux and always evolving, changing, and finding new ways to operate, or, as Derrida notes, *coming*.

The coming, what Derrida refers to as *avenir*, depends on the mobility, the undecidability of the future. If the future has already been pre-constituted as a violation of law there are only two choices - either that we become a "pillar of salt", immovable in the face of the force of law, or to transgress the law. This places us at a site of contention that must be reconciled. The mashup is only a recent exposition of this site of contention, the site that battles between the "new" economy and the "recent" economy of creative works as property. What the mashup allows us to see is that this new economy (similar to the older economy), with the aid of computational powers of storage, copy, and archive, strives to continue the future of knowledge, of sharing, of creativity, and of cultural production. This free play of

creative works, intermixing and functioning within the debt-game, "plays" within the debt-game rules, acknowledging and participating – paying back the impossible debt.

Our new methods for archiving, accumulation, and production have become de-centered in this game. We no longer can locate the center of authorship, or even often the individual files within a system, although we continue to pretend that we do. Our current notion of copyright not only criminalizes children for play (play both as movement, as the space in which creative works can move about in the structure, but also the play of remix and imagination, and the play inherent in sharing) but threatens the very future of knowledge and therefore the future itself. The coming should not be which is easily predictable, but instead that must always remain mystery and open to different futures, otherwise the future remains a fixed horizon. From our previous vantage point we might think this decentering to be strange and disorienting, unable to locate and orient an origin. This re-orientation of concept will soon see origin a particulate of sand in a sea of time, un-locatable and indistinguishable from every other instance.

Our impressions upon the world, digital or otherwise, speak for us. Individually and collectively we have a choice ahead of us. When looking out upon the Internet there is an obvious tendency to see droves of narcissistic exhibitionists and legions of voyeuristic trolls that comprise the majority of digital space. However, a new center has grown in other communities that focus around the collaboration and not the subject-centered universe. A remix community that shares their work, not just to consume through the senses but to use in the creation of

other work. Will the early days of the Internet be remembered for the prima donnas of MySpace, Facebook, or other social networking sites that situate the user at the center of the universe or its communities of collaboration, its bringing-together of humanity, the affirmation of the social bond? The answer to this will undoubtedly rest in how we consider the notions of authorship, of property, and of the progression of creative works. Thankfully, there is at least a possibility of futures where sharing, remixing, and mashups continue to spread.

CHAPTER 4

THE PIRATE TURN

Yo ho, yo ho, a pirate's life for me
- Pirates of the Caribbean (George Burns)

Architectural Digital Determinations

Through these layers of interconnected understandings the area of which the mashup occupies and influences becomes more clear: mashups are changing the way we think about, create, and disseminate culture, particularly culture that has been "fixed" by a system of copyright. First, understanding the cultural and technical background as well as the legal and social backdrop of the mashup sets the stage for understanding the different powers at play. Next, considering the construction and determination of culture and cultural production through media in the first instance puts those backgrounds into a framework of understanding how these different power structures influence culture. Then, understanding how the mashup functions culturally via these power structures begins to reveal some of the influences and how they have begun to take hold. These backdrops help to frame different parts of this constellation: The form of the digital architecture and its technical components, the way in which these technical media operate cybernetically and symbiotically, and the framework of social, legal, and economic pressures which these digital technical components resist.

In this chapter, I will inquire into how these understandings of the mashup can help us understand architectural determinations embedded within new media and how they help to determine contemporary society by returning to the beginning

again and re-thinking the mashup through the lenses that this constellation has formed. What has the mashup, as architectural digital determination, done to contemporary society? To engage this question, it is important to consider all of the pieces within society that take part in the mashup, understanding the ecology of lenses that function together within the "event" of the mashup.

Mashups in an Ecology

Media is always a system, a composition of parts. Individual pieces may be technical, but media are interactive with a variety of individuals and systems. Media are, as Kittler notes in *Discourse Networks*, "in discourse," and part of a system of interaction and evolution. Kittler refers to these discourse networks as "network[s] of technologies and institutions that allow a given culture to select, store, and produce relevant data" (Kittler 1992, 347), or, more simply, these media(ting) networks are the space in which we experience, and build, culture. Media are not just constitutive of our environment, but also connected within larger ecologies and networks in discourse.

Each aspect, whether the "new economies" and participants in sharing communities, digital technologies of production and distribution, or DJs and physical club space, all interact and assist in co-determination of possibilities for the mashup media ecology. Fuller's *Media Ecologies* (2007) assists in situating and complicating the notion of media ecologies as interplays of the informational, architectural, and physical, composed of different layers of technological and social mediators. Like Kittler's discourse networks, media ecologies are complex systems

in discourse that comprise the larger constellation of the event of cultural production. Fuller uses the example of a London-based pirate radio to illuminate the interplay of media systems such as transmitters, microphones, and microwave links, with the system of clubs (and their clientele), DJs, posters, and legal determinants as system of cultural production, interrogating the system and its message circulation (Ibid., 13). Fuller's example is apt here, exploring a legally suspect (if not wholly illegal) musical entertainment system that is self-reinforcing and evolving. Media do not operate simply individually; media operate in collaboration with one another, as well as within a historical situation comprised of legal, economic, and social forces. Fuller's example of pirate radio outlines a way to contextualize the historical and social landscape under which these mediums are operating, so as to make sense of why what they do is so important, as well as understand the greater interplay of determining factors within the cultural landscape. This more traditional model of distribution (radio broadcast) seems at first glance like it may be easier to locate a center on which to focus, but instead is re-configured through analysis as a large constellation of players within the pirate radio ecology.

Mashups, of course, are a composition of parts - not only within individual mashups, but also as a form of music that exist within a greater ecology, with each piece interdependent and circulating within the larger system. The ecology of the mashup is composed of a network of technologies, individuals, cultural systems, legal pressures, and other intersecting media systems, all which participate in a variety of media ecologies.

The various technologies that allow the creation of the mashup creation (various digital audio editing software, codecs for compression, etc) not only spread particular messages of remix-ability, ease of use, and participation within musical production, but also participate in a variety of musical ecologies. Not only do these technologies allow easier access to more "traditional" forms, but also allow more traditional artists to circulate their music to be remixed. Nine Inch Nails, for example, released multi track files for *Garageband*, a music editor that not only is distributed for "free" along with Apple's OS X operating system but includes the same UX and ease-of-use oriented approach to musical manipulation that Apple had come to be known for. Nine Inch Nails circulated multiple hit songs not only for free, but also in full multi track format, encouraging a new generation of laptop artists to remix, share, and participate in these overlapping ecologies.

The technologies that participate in the distribution of the mashup are also involved in multiple and intertwining ecologies. Nine Inch Nails aforementioned *Garageband* files were distributed through BitTorrent peer-to-peer networking technologies, and then encouraged remixed tracks to be uploaded and shared onto Nine Inch Nails' hosting servers for further sharing. The different distribution technologies that allow the distribution of the mashup also enable the entirety of the Internet, as well as distribution of any number of digital files, whether through web stack technologies, or "sneaker net" sharing through USB or other internal network technologies. Each of these different media technologies, as mentioned before, participates in distributing the same types of messages that helped to inform the creation of the mashup across a variety of ecologies. Of course, these peer-to-peer

networks also helped, as McLeod mentioned before, helped to provide the large volume of original songs, the "grist" for the mashup, however illegal they may have been.

Other pieces of this mashup ecology have included music critics and their respective magazines or publications, the clubs that host events, and DJs that play them live, as well as the posters and advertisements for the events. Each one of these components participate in a variety of intermixing and intertwined ecologies, all with their own legal, economic, and social pressures that go along with each of the components.

The Grey Album is a fantastic contemporary case study of mashup ecology. *The Grey Album* is ostensibly an album 35 years in the making, crossing generational, thematic, and genre boundaries, and linking multiple, more traditional, musical ecologies. Praised both by the incorporated artists as well as critics, *The Grey Album* participated in underground as well as mainstream news press. Danger Mouse's skill in digital audio editing not only created *The Grey Album* but, as a relatively unknown industry professional at the time, helped to solidify his rise in stardom as a music producer after its release, soon working with the Gorillaz, the Black Keys, Norah Jones, and The Red Hot Chili Peppers, among others. The same author, the same skills, and the same technology that created the "ultimate remix" also participate in a variety of other musical ecologies. This now-superstar of contemporary popular music's creation was at the time threatened by copyright infringement by the companies that later hired him to work on other albums. Finally, the circulation of *The Grey Album*, distributed by thousands through various

networking technologies, relies on both the same technologies as the circulation of illegal files, but also the same technologies that circulate numerous other files, including artists participating within these "new" economies of sharing.

The ecology of the mashup is evolving and maturing, composed of an array of components in discourse, shifting and mutating each other into new forms but under the same ethic: information should be free to access, participation with information and the community should be encouraged, and subjects should regain their agency from competing determinant practices. Similar to the message circulated with pirate radio, the mashup circulates a normalization of an ethic that is otherwise determined as illegal, and participating in acts that are pre-determined as piracy.

Turning us all into pirates

As mentioned in the introduction, Lawrence Lessig suggests that we are "turning our children into pirates" through our inadequate understanding of creative process and the limitations of current copyright laws (2009). After consideration of the background, the mediation, and cultural understandings of the mashup, returning to Lessig helps to bookend the conversation around mashups and what they are "doing," both in their contemporary cultural determinations and, in a broader spectrum, how to consider this "case study" within the larger context of contemporary culture. I will start this by first unpacking Lessig's statement, and then considering those implications and how this can be understood more broadly.

When Lessig refers to "children" he is, of course, generalizing the people who take part in file sharing, mashup creation, and other practices that have come under legal fire recently. Lessig's reference is not only to the so-called "Millennial" generation, but the rapid expansion of those who have the access and time to edit, share, and consume these remixed cultural expressions. This group is expanding quickly both due to the ease of access of the technology but also because the group spreads its media around - its reproducibility is viral. With the rapid expansion of Internet memes in mainstream media and culture, the line has faded even more, and will continue to erode. Therefore the "children" here are not only, of course, the future generation but include everyone else that participate in contemporary digital culture. One way or another, this includes nearly everyone.

The "turning into" that Lessig expresses concern over, is twofold: The turning that seems to come from *law*, and the turning that comes from technical media. The turning that comes from law is both determinating in Hall's notion of determination, but also in a nomological sense. It names the pirate. This naming arises from the *force of law*, which *creates* its own force, a force that is apparently self-propelled (it works under the logic that its force is the force that constitutes its own force - it has no force without our recognition of force - See Derrida, 1990); Copyright *law*, as it is an instantiation of state power, is a hegemonic practice. The law *determines*, it "weighs with all its might, even before the object is known, and without ever its object becoming exactly known" (Deleuze 1990, 49), *forcing, pre-determining, shaping*, "our children" (and thus *us*) into pirates as it is *our only option*,

as the horizon of opportunities, the space for movement, has been determined, "without ever its object becoming exactly known," *as piracy*.

However, the turning that comes from technical media is not *simply* determinant in the traditional sense of Stuart Hall's notion, or even in Lessig's notion of regulators. The turning that comes from technical media a cybernetic one that is in conversation and discourse with the determinant media. Digital media turn us into cyborgs, yes, but to paraphrase both Haraway and Gunkel, "we have always been [cy]borg," so this cybernetic metaphor is not a new framework (Gunkel 2000, 340). Cyborgs, of course, are in conversation and these conversations can mutate the pieces within this larger cybernetic postal system. Different types of feedback loops that come from technical media change, evolve, and have different *effects* as they themselves evolve. As discussed before, Heidegger's hammer changes the consciousness of what is possible for the subject, which also informs the subject about the future of possible tools. The rock might have begat the hammer through its relationship with the subject, and, eventually through a long history of relationships, begat the nail-gun. Technical media work in a similar way, where those creating our tools are also functioning within this larger postal system of mediating messages.

This turning from law is one that functions in its own postal relationship with technical media. These messages work against each other but also in combination, the law seeking to prevent an action through this pirate-determination and naming, and the technical-media mashup working against it through the normalization of actions and cultural practices that are now referred to as *piracy*. Despite the

supposed intent of preventing a series of actions, the power of the technical media mashup is one that identifies this legal determination as suspicious and unnatural to the cybernetic subject.

These cyborg *pirates* are not only determined and named by the force of the law, but the pirate-ization of the (always-already) cyborg also comes from the continuing cyborg-ization of the subject, evolving its horizon of opportunities through the interaction with digital media sharing, creation, and ingestion. Of course, these two "turnings" happen at the same time, and are continuously in flux and in cycle within this cybernetic postal exchange within the mashup ecology. Each interaction changes the cybernetic subject's various components that form the cybernetic relationships constitutive of the cyborg, as well as its pirate indoctrination. These exchanges of messages happen through at least three modes of interaction:

First of all, the cyborg interacts with the simplicity of digital circulation. Whether through a click of the mouse or finger on a share, send, download, or upload button, this requires the subject to comport themselves to a particular interface. This interface requires an assumption that the message is something that can be circulated, and does not violate (or at least that the subject does not believe they will be located as a recipient of punishment) laws or social norms. The ease of circulation of messages, of passing along pieces of perfectly copied data, sends its own message to the subject, one that helps to inform the subject about the further circulation of messages: access to this circulation is free and easy, and should remain so to continue this circulation for others.

Secondly, the construction of the mashup message carries with it the structure of the mashup: snippets and shreds of recognizable culture that have been pulled apart, tinkered with, and reassembled. This message identifies itself to the subject as one that is constructed from various pieces of culture, carrying the possibility of its own construction. This might seem minuscule, but against the narrative of "piracy" this simple intersection carries with it a message regarding the nature of culture: we can actively participate in the rethinking and remixing, the formulation, of culture. This is a physical interaction between a subject that is informed that what is whole is owned, and a message that audibly destroys the notion of owned fixation. The cyborg pirate here now not only shares freely, but understands use of copyrighted cultural artifacts as "fair."

Finally, through participation in these digitally mediated communities, whether as a "lurker" or an active conspirator, the subject becomes the recipient of the circulating message addressing the subject as participant, and in that addressing carry with them narratives of agency. Whether agency manifests as the ability to learn new interfaces and remix new messages in a mashup or, as with Wikipedia, in the collaborative effort to produce a free encyclopedia, the narratives insist that many determinations of culture (such as the economic and legal determinations suggesting that mashups not legally and economically viable) are often just spectral presences that can be easily dismissed. This cyborg pirate has a different outlook on the possibilities at hand, encouraged to participate in a variety of forms on a variety of projects.

As the cyborg pirate becomes more frequently (re)assembled, it becomes necessary to re-think what is meant when we use the term *pirate* as we are referring to works and culture, and consider who is being *determined* as pirate, as well as what being a *pirate* entails. This pirate term, in the way it is used, is suspicious. On the one hand, piracy infers an assault. From the Latin *pirata* or Greek *peirates*, "to attempt, attack." The rhetorical twist espoused by the defenders of excessive copyright law is meant to demonize a particular mode of cultural production so the law may define it as *an attack*. A more modern definition might be an appropriation or reproduction work of another without permission, however both can be useful in re-conceptualizing piracy vis-à-vis the current situation that rhetorically press-gangs "children" into sailing the digital seas looking for treasure. Naming kids, or anyone for that matter, "pirate" can be problematic, especially when we continue to call them this, as Lessig points out in *Remix*, "they come to believe it... they come to like life as a 'pirate'" (2008, 283). The age old question remains: what are we teaching our children (and by extension, each other)? Treating a creative endeavor as a criminal one transforms the manner which people approach their world. In this case, transforming the way that we understand how digital media is possessed, shared, and distributed.

Of course, discussion about Jolly Rogers and nautical adventures remains a little tongue-in-cheek, because if it is the case that these "children" are, according to the law, "pirates," then the "pirate" must mean something other than a swashbuckling, grog-swilling thief. Instead it seems to be the case that this type of cyborg pirate, as the individual (or the type of piracy assumed of remix artists) that

takes works and re-using them, is one that is not simply a thief, but instead can be seen more clearly as simply a bricoleur - a tinkerer. The cyborg-pirate-bricoleur's traces are numerous, evident in every interface for production, consumption, and sharing of modern media.

The historical grog-swilling pirate can also be located through its traces, as the absence of the pirate leaves certain traces. The historical pirate's absence can be seen either physically by reinforced walls, extra guards, or cannons on the walls. Piracy can also be conceptualized abstractly as it represents the presence of a space outside the State, of independent governing and sovereignty. It may be that the pirate's most dangerous attribute was not the barrage of cannon fire or ruthless cutthroat banditry, but that piracy itself signifies of a lack in the State's totality, and calls into question the absolutism behind the force of the law. Modern media portrayals of piracy are rarely sentimental for the combatant of naval piracy, but instead romanticize both the pirate and "the pirate life." The pirate has become not only the star of stage and screen, but also the "hero" (albeit anti-hero, but a hero nonetheless) of the post-modern film. Those who stand against the pirates are portrayed as oafs - barely able to stand against the dashing pirates as they race in to save the day (and the treasure). The absurdity of the wealth-hoarding Governor, the "evildoer" within many swashbuckling tales, serve as warnings to unchecked power, where the oppressed attack their oppressors. The pirate represents here what Deleuze refers to as "a supernumerary and non-situated given - an unknown, an occupant without a place" (1990, 50), that is, on the one hand, present by its absence inside the structure, the state, the place where law reigns, and on the other

hand absent from the presence of the state, from the force of the law, and from where it is as given. The supernumerary is an element that then belongs nowhere, and yet both inside and outside. It is the place where, in relation, it has the ability of mobility. The nautical pirate is not alone, however, as the mashup also exists in a place in-between. Copyright law's incredible increase in power over the years has become a beacon of unchecked power, attracting much attention from various types of pirates, particularly the "fair use pirates" which exist in the space both within and outside of the law.

Thinking about the pirate as both inside and outside the structure of the state and law, the mashup's cyborg-pirate also functions in this in-between space. The mashup exists both in a place outside legality, as it is actively utilizing unlicensed sound clips (violating copyright law), but also within it, exercising "Fair Use" in its methods of composition and distribution. The mashup here represents something far more subversive than simply a violation of the law, it violates from within legal protection, illuminating the faulty logic of the legal system itself hides within. The mashup is "an occupant without a place," existing in a place that, by the very definition of "fair use," is perpetually in a state of indecision. This legally strange place is the place where the mashup allows a space to question the seemingly "architectural" place of law, showing itself to be more permeable than code. When the cyborg pirate sees the law, particularly intellectual property law, as something that is something to challenge and question, new horizons of opportunity start to take shape.

Copyright law still seems to take a conventional physical-property approach to intellectual property when naming the pirate. However, the infinite replicability of digital files has shifted the paradigm of what counts as "property." The former naval pirates might have had their treasure "hoards," but the "pirate" of today not only hoards but shares - sharing without losing anything. The cyborg pirate does not need to *battle* other pirates for property, but simply copies their loot and shares it with others. The more pirates that share, the more that they all have. Piracy has become a communal activity. Mashup and remix artists share their work, multiplying the slices, the snippets, of copyrighted material across the web. The mashup was brewed from the "grist" provided by these "pirate" file sharing rings like Napster and Kazaa. Now, rather than just a single song in its fixed form, these works are from multiple sources, all mixed up and repackaged into a different form. Current copyright laws, however, do not recognize this different form in a continuous idealization of the purity of "property." Copyright holders continuously attempt to extend this property to all representations of it, all snippets, and, as far as they can muster, all resemblances. Current copyright law seems to follow the notion of *propietas*: "one's own", that which is "proper", "particular"; What is inferred in the idealization of property is this particularity of property, its uniqueness, its sovereignty. Of course, as Lessig points out, "if 'piracy' means using the creative property of others without their permission, then every important sector of "big media" today-- film, records, radio, and cable TV -- was born of a kind of piracy so defined. The consistent story has been how last generation's pirates join this generation's country clubs" (Lessig 2005, 53). Mashups seem to both forsake the

notion of the sovereignty but also, due their occupying this legally grey-area, seem to also want to forsake the country club. Mashups are then both, "revolutionary" as well as "evolutionary" as they are part of the ongoing "cyberneticization" of the subject through advancing digital media systems that have had to find alternative manners to function within their horizon of opportunities. However, there is more at play within this system that threatens to undermine the revolution of the cyber-pirate.

Participation, access, and agency

However utopian the messages of the mashup might be, they come with an important caveat that is often overlooked: participation is only "open" in a very limited sense. First of all, those who are encouraged to participate require access, access to high speed Internet, some level of digital literacy, and the willingness to participate at all. Furthermore, the skills necessary to cut up, reassemble, and produce a mashup audio track or video are much different than the skills to click and download, or forward the track. Mashups are easy to circulate, much like re-tweeting calls for revolution are easy, but active participation in the production requires an investment that many do not care enough about, have the patience for, have the artistic ability for, or simply have the time for. *The Grey Album*, for example, required over 100 hours of skilled audio editing to produce - a luxury not available to the everyday user. Additionally, with the increased volume of circulated messages, it becomes much more difficult to circulate messages with any effect. However, these messages continue to circulate about access, participation, and

agency, whether or not the messages reflect the actuality of the media system. The cyborg-pirate has been encouraged, but finds that the promise might not match the reality. This, however, has not gone unnoticed, and many pirates are hard at work at increasing participation.

As the original utopian promises of equal access for all met the reality of walled gardens and high barriers for participation, many individuals and organizations have turned their attention toward access. This has a long history within computing, even personal computing - simply comparing the interface for the 1977 Apple II and the first Macintosh in 1984 showed a quantum leap in accessibility and attention to the user experience. The Apple II itself was itself a quantum leap over many of the computing systems available at the time, not only costing a fraction of what others cost but also in comparison to previous generations it was incredibly accessible. The interface of the 1974 Altair 8800 for example, much like many of the computers at the time, was a series of toggle switches and LED lights. On top of this strange interface, the Altair 8800 was sold as a kit-of-parts, relying on the ability of users to assemble complicated electronics. The 1976 Apple I was also quite inaccessible from a modern perspective, sold simply as a circuit board, requiring users to assemble the case and keyboard. Despite feeling old and dated, the ability for a user to purchase a fully functioning Apple II computer in 1977 was groundbreaking, and 1984's introduction of a monochrome graphical user interface (GUI) and mouse was nothing short of revolutionary.

Fast forward to more contemporary computers where Apple's *Garageband* is pre-installed on every Macintosh computer, these software and hardware

combinations continuously lower the bar for these "laptop musicians" to create music using either the pre-packaged samples, or their own sampled loops and clips. Accessibility has become a key feature of these new technical media systems, promoting ease-of-use with each new hardware model and software upgrade striving to erase the aggravation of previous interfaces while simultaneously increasing the power of the digital manipulation tools. Modern tablet computing is a prime example of this interface simplification, bringing the screen and input together into one device, allowing the user to "touch" their remixes.

Invitations to participating in various forms of remix are numerous in contemporary digital culture, where simple forms and clicks can create new memes, share or fork (split off to create a new version based off the previous) entire software packages, or manipulate video or musical tracks in various manners from the comfort of your favorite browser. There are active discussions in numerous groups about how to increase participation levels through redesigning interfaces and rules and how to combat systemic biases in participation levels. That being said, while much of the participation still happens by a small group, and probably will continue to, it is not always because everyone wants to participate at the same level - some people just like to lurk, and that is still, as discussed before, participating in the circulation of these technical media messages. Whether or not participants are active creators has little effect on the fact that these participants continue to receive and circulate these same messages of access, agency, and the invitation to participate.

This turn (the cyborg pirate turn) is more than just a turn that just spreads messages. This turn is has multiple interlocking parts, a second-order cybernetic relationship where this turn towards access, agency, and participation also influences the future of the proverbial glove it continues to influence the proverbial hand. This mutation is one that not only just circulates messages but circulates messages to those who create and upgrade the circulation machines, instructing the new machines to circulate messages better, more efficiently, and more openly inviting to the next wave of cyborg pirates. This is ongoing, continuous, and potentially exponential in growth and influence. When Nietzsche said, "our writing tools are also working on our thoughts" (Quoted in Kittler 1999, XXIX), the implication was always there: the machines that we made, that are working on our thoughts, are influencing the thoughts we have when we are making the next writing machines. Those who are already worked-on will design the next machines, and those machines will be working on our already-worked on thoughts. Of course, McLuhan hinted at this when he discussed how "the content of a new medium is always that of an old medium" (McLuhan 1994, 8), as each new technological tool that has worked on our thoughts continues to perpetuate the "whatever" of this techno-logic. These new machines, however, are more than just mechanical systems of gears and levers, and digital media packages remain constituted by this digital enclosure - they all are constituted by ones and zeros, and, of course, by code.

Returning to Lessig's "pathetic dot" (2006) which he uses to map out the "regulators," we can, through this deeper understanding of the cybernetic relationship to digital media, start to see the permeability of code and why it might

act, or at least have the promise of being, "other" than architecture. Lessig's notion that "code is law" adds some insight into this promise, particularly given his training as a lawyer: code is (potentially) permeable, and can be changed and utilized (by those who know how). Law is accessible insofar as it both changeable (by some) and understandable (to a point), but it is beyond most individuals and organizations to grok the intricacies of its structure and the ability to influence change within legal "code." Building and landscape architecture can too, but requires a much higher level of investment from the individual, requiring (much like analogue recording) training and (often expensive) tools. This cybernetic promise, where code can and should be modified, seems neither as architecture or law, but a new turn towards lowering the bar for entry. This is that same promise of an infinite replicability, changeability, modifiability, and remix-ability that mashups offer. Code is the "Legos" or building blocks of our digital-architectural pathways, which, with the right training, allow the possibility of "remodeling" for "anyone" with a computer. This, much like mashups, requires individuals to learn "how to code," illustrating yet another barrier for entry. However, this too can be understood within this system of the self-upgrading cyborg.

Steven Levy's 2001 *Hackers: Heroes of the computer revolution* offers an interesting insight into some of the early years of computer programmers and manufacturers, and how this ethos has been re-inscribed over the years of the digital revolution. Levy points out that these "hackers," such as Bill Gates, founder of Microsoft, Steve Jobs and Steve Wozniak, cofounders of Apple Computers, as well as others like Richard Stallman, creator of GNU and EMACS, were concerned (at the

time) with how computing had been stifled by not making it accessible (not in a "learn to code" way, but literally locked down with security, expensive hardware, and code that was filled with problematic "bugs" but could not be fixed). These "hackers" figured out how to create their own computing systems, wrote their own computing languages, and subvert the status quo to help spread computing accessibility. Regardless of the later actions of Gates or Jobs, they all helped to increase access to computers by making them universal, affordable, and accessible (by some). This ethic of access, participation, and agency arose from early MIT hacking and continued to spread through these digital systems, each new creation informed by the previous ethic.

The spread of Free/Libre "Open Source" (FLOSS) software movement, sparked partially by Richard Stallman and part of this "hacker ethic," has rapidly overtaken much of the coding ethic. In most commercial software the "source" code is under literal erasure as it has been translated to machine code by "compiler" software that takes the human readable and writeable code and translates it into something for computers to process. In FLOSS software, the "source" code is shared freely for those who understand that particular "language" to download, modify, or contribute to a software project. Some of the most widely used software packages are based off of or completely "open source," such as the Android operating system, the Firefox browser, and a variety of digital media manipulation tools, like Blender (an 3D animation software package), Ardour (a music mixing and editing package), and Handbrake (a digital encoding / transcoding software package). Often referred to as a LAMP stack, the software package that runs a majority of the Internet's

servers is comprised of Linux, Apache, MySQL, and PHP. One of Stallman's own major FLOSS contributions, GNU, is a major component of Linux, often referred to as GNU/Linux.

Participants in FLOSS projects often share their projects with Sourceforge or more recently using Git, the latter a version control software created by Linus Torvaldis, the creator and namesake of Linux (Linus and UNIX, the inspiring operating system for Linux). Git allows users to not only upload and share their FLOSS projects, but also to "fork" (create different trajectories for software development while still retaining parental associations) and collaborate on software development. Originally just a version-control system for Linux development, the ethic has passed through into Git, which has been continuously advanced to increase participation and access among software developers in order to promote additional FLOSS projects.

The barrier to access continued to crumble with digital media, and this ethic eventually informed a concern for barriers for participating in coding. Today not only is there a "National Day of Civic Hacking," as well as numerous other "Hackathons," but there are calls at the national level to increase coding skills in public schools. Online services such as Codecademy offer free courses on multiple programming languages, and, of course MIT's sponsored "open courseware" offers free college-level introductions to computer science and programming. Coding software, for some, is a component in key digital literacy, no longer just for the few software developers but participation is openly encouraged from everyone.

Of course, as Kittler notes "there is no software," (1995) as every piece of code is regulated by hardware, embodying its own ethic, its own set of determinations encoded within the medium. Even microprocessors require other microprocessors to design, a cybernetic postal exchange that exists within every mode of "writing":

The last historical act of writing may well have been the moment when, in the early seventies, the Intel engineers laid out some dozen square meters of blueprint paper in order to design the hardware architecture of their first integrated microprocessor (Ibid., 147).

Parikka illuminates Kittler's premise by explaining that we no longer have "direct" access to writing because "texts do not exist any more in time and space that we human beings can perceive, only in computer memory" (2012, 80). This computerized ethic is totalizing, as it infects each and every medium with these digital tools, processing all messages, even those we believe are still simply "writing." This is helpful to understand as even these coding systems are participating within an array of mediation. Not only is the software we write to create other software mediated through these hardware components, but additional hardware components are designed using this nearly un-packable history of software-designed-through-hardware and hardware-designed-through-software. In short, there is no escaping the digital mediation within contemporary society as these determinations run deep within our computerized systems.

Although it seems nearly impossible to fully unpack, this attempt at excavating these cybernetic mediating systems starts to reveal that it was nearly inevitable that the mashup would come to be. The mashup itself is simply a digital reconfiguration of what we have been doing all along with culture - mixing up,

recreating, tinkering, and reusing. Each new technology continues to carry the messages, which in turn, "work on our thoughts" and, as McLuhan notes, "work us over completely" (2001, 26), transforming not only who we are, but what we continue to produce in each new media form. Writing, transformed by the ones and zeros of microprocessors, and then further by microprocessors designing their own successors, continues to carry each mutated message. These technologies, cybernetically engaging us, continue to determine the boundaries and possibilities - influencing the "pathetic dot" in a constantly mutating feedback loop.

Despite positivity towards the future evolution of the cybernetic subject against cultural control systems, the numerous downsides to architectural determination cannot be ignored. Digital media technologies may have opened up a way for the subject to "retake" the orientation towards cultural sharing from legal and social pressures, but they also have become the space for archiving and accumulation of the subject's personal and information. The digital subject is one that can not only share perfectly, but also move and function within a perfectly surveilled world. The "analog world" (or "meatspace" as it has often been called by online communities) may be slower to share, disseminate, and remix culture, but each bit of data and every trace of the subject's online "footprint" are passed openly, much like the postcard. Ones and zeros are perfectly readable and copyable, so along with each share comes a much larger postcard of information that announces each subject to each other, whether or not the subject cares to be found. This has created a battleground for surveillance law, as well as technical attempts at engaging the issues that arise in the hope for privacy. Luckily, the orientation

towards access, participation, and agency has been in play here as well, as open solutions like GPG (Gnu Privacy Guard) and ToR (The Onion Router) have stepped in to encrypt, re-route, and generally obfuscate the digital trail of the subject. The software development here is, much like the cybernetic subject, always in flux and under development, as each component of the system attempts to catch up with the other, feeding off of and evolving.

This orientation does not "fix" the issues relating to access, participation, and advocacy, but it does provide a set of possible futures, particularly broadcasting one of increased inclusion. Through continued cybernetic evolution, each piece within this larger media system is slowly reshaped and reformulated via the embedded ethic of digital technical media. This ethic is more of a promise than anything, a promise that continues to echo through multiple media channels. Even traditional print, radio, and television advertising for computer systems and software offer promises of ease of use, promise of creative avenues, and empowering systems. Legal systems change too, as cybernetic subjects looking to ensure future proliferation of these messages lobby new laws or changes to existing laws. These messages continue to participate within this larger constellation of message circulation, slowly changing the face of everything around them.

This is why the event of the mashup is (simply) a case study in digitally mediated cultural production, as it is only a small snippet in the timeline of influence where the logic of digital media self-perpetuates. We have already passed through the immediate influences that the mashups circulated, but those messages still persist today in new forms of remixed cultural production. The mashup was not the

beginning, of course, nor it is nowhere near the end. The mashup it is simply a cultural artifact, which, when uncovered, illuminates hidden components of legal, social, and digital architectural histories and potential futures towards an understanding of the determinations embedded within each component. The mashup here acts as a bright star in the middle of a larger constellation of concerns within the areas of technical media, copyright law, and cultural production, aligning a way to identify connections and orient a way to see these components.

The questioning of the mashup is not simply one of the mashup, of course, but a questioning in hopes of exploring the edges of a larger set of phenomena that continues to work "on our thoughts." The question is not "what to do about it," but simply to trace out the different components operating within this particular phenomena and leave a door open to how to assess the possible futures of these message circulations. Understanding the method which messages are mutated and transformed, considering the effects of the interface, and considering how these fit in a cybernetic relationship opens up a new way to think about technical media as mutating and in a constantly changing and evolving relationship with the (always-already) cybernetic subject. Utilizing this way of assessing technical media can reorient a way to understand a myriad of cultural phenomena, from privacy and security to cultural production and digital labor.

In short, Lessig was right – we ARE turning our children into pirates. We are *all* turning into pirates. However, it is not because mashups are actually piracy. We are turning into pirates because there are competing legal, social, economic, and architectural determinations that are pulling us in multiple directions, and the

influence of digital media, and the mashup here in particular, are really there "in the first instance," before any other conscious or unconscious determinants take hold. Mashups are obviously fair in both common sense terms as well as legal terms, which helps to reinforce what was already "known" by the subject of the mashup - that culture is theirs to play with, to tinker with, and to share. We are turning into pirates because we are told through many manners that what we believe to be proper is someone else's property, but we are determined beforehand else wise. The mashup spreads hidden messages of fair use, encouraging others to borrow and remix, rethinking the way we approach what we know is copyrighted content. The medium is both affecting our messages, and it is *defining the system of conceptual possibilities that determine the boundaries of thought*. These messages, although they remain encouraging, may not represent the reality of the actual participation or access, but as it seems, this is only the beginning of this struggle, one that continues to constantly evolve.

Limitations and Caveats

Despite the mashup's relationship to remix in general, this research still remains in its infancy in regards to understanding the possibilities and constraints of remix culture. This work is not meant as a cultural history or a reflection on social movements, but instead tries to ascertain a better understanding on the construction of the digitally mediated subject in regards to the mashup.

This work is less concerned with individual cultural products and more concerned with the media that produces and circulates them. Of course this work is by no means intended as a panacea, explaining all there is to know about

contemporary society, or even digitally mediated society, only a clue to approach what is at work in our everyday lives as we are all part of the same mediated ecosystem.

This work reads only a specific set of texts under specific theoretical and methodological constraints, and within a specific geographic area, cultural situation, and particular timeframe. Limiting the study to western culture, constrained by western laws, referencing modern technology, and constraining this study within a timeframe that produced the mashup was necessary to understand this specific phenomena, but it also limits the takeaways from the study to those constraints. Numerous other cultures have different practices of remix, and other studies have carefully examined them in their own ways. This study remains limited by these choices, and therefore can only speak to the areas in which it focuses.

Finally, media systems are not static: both the ecological constitution changes as well as the individual media components. Laws change, architecture changes, markets change, and social norms change. This dissertation is meant to situate a theoretical model and read contemporary media systems through it, but is not meant to illustrate a static system through which messages are circulated.

Situating the Mashup's Archaeological Promise

Although the mashup has begun to lose its hold as the “new thing” in the last couple years, remix is still “the language of the internet,” with no indication that this will change any time soon. Furthermore, despite its limitations, this study has much to offer for considerations of digitally mediation and the role of digital technology in cultural production, particularly in the west. Within contemporary western digitally

mediated society, there seems to be a nearly unending supply of research topics that may intersect with this approach. Contemporary cultural production and cultural practices suffer an amalgamation of complicated determinants, begging for a mobile set of theoretical practices to analyze these cultural "events" within a larger context of architectural, legal, social, and economic determinations. The academic study of culture, as well as an understanding of cultural events in general, depends on a more thorough understanding of media in the first instance, as media often function against economic and legal determinations. The mashup helps to illuminate how media "work us over completely" by illustrating how media function against economic and legal concerns, replacing the "first instance," where to start theorizing about culture and cultural production, offering a place to undertake an archaeological analysis of the hidden role of technology.

Media archaeology comes in numerous forms, and (much like cultural studies) combines an array of mixed methodologies and theoretical frameworks to interrogate its objects of study. This study adds to the understanding of media archaeology by framing a possible trajectory of analysis for digital technologies and systems, thinking not only about their individual effects but how their effects play out within larger contexts. Furthermore, this study considers how these contexts play out over time within a second order cybernetic system, evolving and emerging new manners of hidden control.

From an understanding of media in this manner, cultural analysis can begin to bloom again through mobilizing this mediation-modified cultural studies approach. Mashups are nothing more than a cultural event, as all cultural events are mediated

through a variety of sources, particularly now in the age of technical media. The mashup as a cultural event helps to illuminate more than just a way of understanding mashups as determination-towards-pirate, but also a way of conceptualizing subjects in a cybernetic engagement with technical media, and how that, from the first instance, allows analysis to follow through these other determinations. This analysis simply adds to the larger project of Cultural Studies, placing media into the role of determination in the first instance rather than the economy. However, this analysis cannot function without all the other components within cultural studies that seek to understand the constellation of determinations within a larger postal system. The mashup helps to shed light on this style of analysis by locating a larger constellation of determinations through understanding media in the first instance. Through this understanding, the mashup functions as a way to think about the influence of technical media against these larger concerns of determination, seeking both to assess the role of technical media in a greater cybernetic postal system, as well as how these other determinants work in concert with and against these media messages.

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