Regressive and Reflexive Mashups in Sampling Culture
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During the first decade of the twenty-first century, sampling is practiced in new media culture when any software users including creative industry professionals as well as average consumers apply cut/copy & paste in diverse software applications; for professionals this could mean 3-D modeling software like Maya (used to develop animations in films like *Spiderman* or *Lord of the Rings*);[1] and for average persons it could mean Microsoft Word, often used to write texts like this one. Cut/copy & paste which is, in essence, a common form of sampling, is a vital new media feature in the development of Remix. In Web 2.0 applications cut/copy & paste is a necessary element to develop mashups; yet the cultural model of mashups is not limited to software, but spans across media.

Mashups actually have roots in sampling principles that became apparent and popular in music around the seventies with the growing popularity of music remixes in disco and hip hop culture, and even though mashups are founded on principles initially explored in music they are not straight forward remixes if we think of remixes as allegories. This is important to entertain because, at first, Remix appears to extend repetition of content and form in media in terms of mass escapism; the argument in this paper, however, is that when mashups move beyond basic remix principles, a constructive rupture develops that shows possibilities for new forms of cultural production that question standard commercial practice.

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[1] Mike Snider, "Maya Muscles its Way into Hollywood film awards," *USA Today*, 25 March, 2003, (23 June, 2007) <http://www.usatoday.com/life/movies/movieawards/oscars/2003-03-19-maya_x.htm>.

The following examination aims to demonstrate the reasons why mashups are not always remixes, as defined in music, and the importance of such differences in media culture when searching for new forms of critical thinking. I will first briefly define mashups and Remix to then examine mashups' history in music, then briefly consider them in other media, and subsequently examine in detail their usage in web applications. This will make clear the relationship of mashups to Remix at large, and will enhance our understanding of sampling as a crtical practice in Remix and Critical Theory.
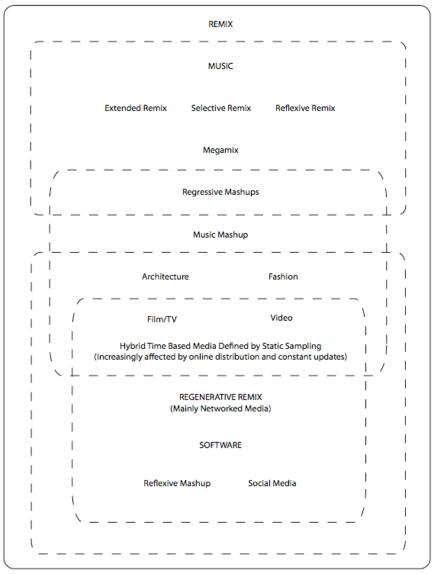
REMIX

MUSIC

Extended Remix   Selective Remix   Reflexive Remix

Megamix

Regressive Mashups

Music Mashup

Architecture   Fashion

Film/TV   Video

Hybrid Time Based Media Defined by Static Sampling
(Increasingly affected by online distribution and constant updates)

REGENERATIVE REMIX
(Mainly Networked Media)

SOFTWARE

Reflexive Mashup   Social Media

Diagram by Eduardo Navas, http://remixtheory.net

Mashups Defined

There are two types of mashups, which are defined by their functionality. The first mashup is *regressive*; it is common in music and is often used to promote two or more previously released songs. Popular mashups in this category often juxtapose songs by pop acts like Christina Aguilera with the Strokes, or Madonna and the Sex Pistols.[2] The second mashup is *reflexive*, and is usually found outside of music, and most commonly in web 2.0 applications. Some examples of this genre include news feed remixes as well as maps with specific local information. This second form of mashup uses samples from two or more elements to access specific information more efficiently, thereby taking them beyond their initial possibilities. While the *Regressive Mashup* can be commonly understood as a remix in terms of its initial stages in music, the *Reflexive Mashup* is different. I define it as a *Regenerative Remix*: a recombination of content and form that opens the space for Remix to become a specific discourse intimately linked with new media culture. The *Regenerative Remix* can only take place when constant change is implemented as an elemental part of communication, while also creating archives.

This implementation, at a material level, mirrors while it also redefines culture itself as a discourse of constant change. But to move further with this argument Remix must be defined in direct relation with modernism and postmodernism, because it is at the crux of these two concepts that Remix was first practiced popularly as an activity with a proper name.

Remix Defined

Generally speaking, remix culture can be defined as a global activity consisting of the creative and efficient exchange of information made possible by digital technologies.

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2 Sasha Frere-Jones, "1 + 1 + 1 = 1: The New Math of Mashups," *The New Yorker,* 10 January, 2005, http://www.newyorker.com/archive/2005/01/10/050110crmu_music.

Remix, as discourse, is supported by the practice of cut/copy and paste.[3] The concept of Remix that informs remix culture derives from the model of music remixes which were produced around the late 1960s and early 1970s in New York City, with roots in the music of Jamaica.[4] During the first decade of the twenty-first century, Remix (the activity of taking samples from pre-existing materials to combine them into new forms according to personal taste) has been ubiquitous in art, music and culture at large; it plays a vital role in mass communication, especially in new media.

To understand Remix as a cultural phenomenon, we must first define it in music. A music remix, in general, is a reinterpretation of a pre-existing song, meaning that the "spectacular aura" of the original will be dominant in the remixed version.[5] Some of the most challenging remixes can question this generalization, but based on its history, it can be stated that there are three basic types of remixes. The first remix is *extended*; it is a longer version of the original composition containing long instrumental sections to make it more mixable for the club DJ. The first known disco song to be extended to ten minutes is "Ten Percent," by Double Exposure, remixed by Walter Gibbons in 1976.[6]

The second remix is *selective*; it consists of adding or subtracting material from the original composition. This type of remix made DJs popular producers in the music mainstream during the 1980's. One of the most successful selective remixes is Eric B. &

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[3] This is my own definition extending Lawrence Lessig's definition of Remix Culture based on the activity of "Rip, Mix and Burn." Lessig is concerned with copyright issues; my definition of Remix is concerned with aesthetics and its role in political economy. See Lawrence Lessig, *The Future of Ideas* (New York: Vintage, 2001), 12-15.

[4] For some good accounts of DJ Culture see Bill Brewster and Frank Broughton, *Last Night a DJ save my Life* (New York: Grover Press, 2000); Ulf Poschardt, *DJ Culture* (London: Quartet Books, 1998), 193-194; Javier Blánquez, Omar Morera, Editors, *Loops: Una historia de la música electrónica* (Barcelona: Revervoir Books, 2002).

[5] I use the term "spectacular" after Guy Debord's theory of the Spectacle, and Walter Benjamin's theory of Aura. We can note that the object develops its cultural recognition, not on cult value, but exhibit value (following Benjamin), because it depends on the spectacle (following Debord) for its mass cultural contribution. See Guy Debord, *The Society of the Spectacle* (New York: Zone Books, 1995), 110-117; Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," *Illuminations* (New York, Schocken, 1968), 217-251.

[6] Brewster, 178-79.

Rakim's "Paid in Full," remixed by Coldcut in 1987.[7] In this case Coldcut produced two remixes. The most popular version not only extends the original recording, following the tradition of the club mix (like Gibbons), but it also contains new sections as well as new sounds, while others were subtracted, always keeping the "essence" or "spectacular aura" of the composition intact.

The third remix is *reflexive;* it allegorizes and extends the aesthetic of sampling, where the remixed version challenges the "spectacular aura" of the original and claims autonomy even when it carries the name of the original; material is added or deleted, but the original tracks are largely left intact to be recognizable.

An example of this is Mad Professor's famous dub/trip hop album *No Protection*, which is a remix of Massive Attack's *Protection*. In this case both albums, the original and the remixed versions, are validated on the quality of independent production, yet the remixed version is completely dependent on Massive's original production for validation.[8] The fact that both albums were released in the same year, 1994, further complicates Mad Professor's allegory. This complexity lies in the fact that Mad Professor's production is part of the tradition of Jamaica's dub, where the term "version" was often used to refer to "remixes," which due to their extensive manipulation in the studio pushed for autonomy. This was paradoxically allegorical; meaning that, while dub recordings were certainly derivative works, due to the extensive remixing of material, they took on an identity of their own.[9]

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[7] Paid in full was actually a B side release meant to complement "Move the Crowd." Eric B. & Rakim, "Paid in Full," Re-mix engineer: Derek B., Produced by Eric B. & Rakim, Island Records, 1987.

[8] Poschardt, 297.

[9] Dick Hebdige, *Cut 'n' Mix: Culture, Identity and Caribbean Music* (New York: Methuen, 1987), 12-16.

The Allegorical Impulse in Remix

Now that Remix has been defined, I will contextualize the theory of allegory by art critic and theorist, Craig Owens in direct relation to the three basic forms of Remix, in order to evaluate how a fourth form emerges in areas outside of music. I call this fourth form the Regenerative Remix.

The remix is always allegorical following the postmodern theories of Craig Owens, who argues that in postmodernism a deconstruction—a transparent awareness of the history and politics behind the object of art—is always made present as a "preoccupation with reading."[10] The object of contemplation, in our case Remix (as discourse), depends on recognition (reading) of a pre-existing text (or cultural code). For Owens, the audience is always expected to see within the work of art its history. This was not so in early modernism, where the work of art suspended its historical code, and the reader could not be held responsible for acknowledging the politics that made the object of art "art."[11] Updating Owens's theory, I argue that in terms of discourse, postmodernism (metaphorically speaking) *remixed* modernism to expose how art is defined by ideologies, and histories that are constantly revised. The contemporary artwork, as well as any media product, is a conceptual and formal collage of previous ideologies, critical philosophies, and formal artistic investigations extended to new media.

In Remix as discourse, allegory is often deconstructed in more advanced remixes following the Reflexive Remix, and quickly moves to be an exercise that at times leads to a "remix" in which the only thing that is recognizable from the original is the title. Two examples from music culture are Underworld's remixes of "Born Slippy," released in

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[10] Craig Owens, "The Allegorical Impulse: Towards a Theory of Postmodernism," eds., Brian Wallis and Marcia Tucker, *Art After Modernism* (New York: Godine, 1998), 223.
[11] Ibid.

1996,[12] and Kraftwerk's remixes of their techno classic "Tour de France" released in 2003.[13] Both remix projects are produced by the original authors. Some of their remixes are completely different compositions that only bear the title of the supposed remixed track. At this moment Remix becomes discourse: its principles are at play as conceptual strategies. Kraftwerk and Underworld use Remix as a concept, as a cultural framework rather than a material practice. These examples demonstrate that, a remix will always rely on the authority of the original composition, whether in forms of actual samples, or in form of reference (citation).

The remix is in the end a *re-mix*—that is a rearrangement of something already recognizable; it functions on a meta-level. This implies that the originality of the remix is non-existent; therefore it must acknowledge its source of validation self-reflexively. The remix when extended as a cultural practice, as a form of discourse, is a second mix of something pre-existent. The material that is mixed at least for a second time must be recognized, otherwise it could be misunderstood as something new, and it would become plagiarism. However, when this happens it would not mean that the material produced does not have principles of Remix at play, only that the way the author has framed the content goes against an ethical code placed by culture on intellectual property. Regardless of the legal contentions, without a trace of its history, then, the remix cannot be *Remix*.[14]

The Regenerative Remix

The recognition of history is complicated in the Regenerative Remix. The Regenerative Remix takes place when Remix as discourse becomes embedded

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[12] Underworld, "Born Slippy," Single EP, TVT, August 1996.
[13] Kraftwerk, *Tour De France Soundtracks*, Astralwerks, August 2003.
[14] DJ producers who sampled during the eighties found themselves having to acknowledge History by complying with the law; see the landmark law-suit against Biz Markie, see Brewster, 246.

materially in culture in non-linear and ahistorical fashion. The Regenerative Remix is specific to new media and networked culture. Like the other remixes it makes evident the originating sources of material, but unlike them it does not necessarily use references or samplings to validate itself as a cultural form. Instead, the cultural recognition of the material source is subverted in the name of practicality—the validation of the Regenerative Remix lies in its functionality. A Regenerative Remix is most common in Software Mashups, although all social media from Google to YouTube rely on its principles. The Regenerative Remix consists of juxtaposing two or more elements that are constantly updated, meaning that they are designed to change according to data flow. I choose the term "regenerative" because it alludes to constant change, and is a synonym of the term "culture." Regenerative while often linked to biological processes is extended here to cultural flows that can move as discourse from medium to medium, although at the moment it is in software that it is best exposed. This is further evaluated in later sections.

The Regenerative Remix then is defined in opposition to the allegorical impulse, and in this sense, is the element that, while it liberates the forms that are cited from their original context, opens itself up for ahistoricity, and misinterpretations. The principle of the Regenerative Remix is to subvert, not to recognize but to be of practical use. In this regard Google news is a basic Regenerative Remix. Google does not produce any content, but merely compiles—mashes up—material from major newspapers around the world. People often do not think about which newspaper they may be reading, but rather rely on Google's authority as a legitimate portal when accessing the information. In the following sections I note how online resources like *Yahoo!* Pipes appropriate pre-existing information to create mashups that are specific to a user's need. For instance, some people may be looking for an apartment, so they mash together a map with a list of rentals, both which are constantly updated by their particular members. This example is

previewed to argue that, while Remix is mostly recognized for its three basic forms, it is the Regenerative Remix—the fourth form—that offers a great challenge, as the tendency to appropriate material in the name of efficiency does not always mean that proper recognition of the originating source is performed.   This contention, as will be noted in one of the following sections, is what keeps the term remix culture relevant, which was largely made popular by Lawrence Lessig to support the production and distribution of derivative works, while doing justice to intellectual property.[15] As Lessig's main concern is with the law, his preoccupation exposes how history (a trace of citations, in his case) is vital in derivative licenses distributed and supported by the international non-profit Creative Commons, which Lessig co-founded.[16] The principle of periodic change, of constant updates (i.e. Google news are regularly updated) found in the Regenerative Remix makes it the most recent and important form that enables Remix as discourse to move across all media, and to eventually become an aesthetic that can be referenced as a tendency. Nevertheless, even in this fourth form, allegory is at play—only it is pushed to the periphery.

Whether at the periphery or at the center of culture, it follows that Remix is not only allegorical, but is also dependent on history to be effective. This is the reason why it is a discourse. This is crucial to keep in mind because History was questioned coincidentally in the same time period of postmodernism, which ranges roughly from the mid/late-sixties to the mid-eighties, in which the rise of remixing in music took place. The postmodern period resists a simple definition; however, to note its complexity, two contrasting views by Jean Francois Lyotard and Fredric Jameson can be revisited.

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[15] Lessig has written a number of books on this subject. The most relevant to the subject of creativity and intellectual property: Lawrence Lessig, *Free Culture* (New York: Penguin, 2004).
[16] Creative Commons, http://creativecommons.org.

Jean Francois Lyotard contextualized postmodernism as a time of fragmentation, of bits and pieces, of incompleteness and open-ended possibilities;[17] a time when little narratives questioned Universal History. Meta-Narratives attained a certain stigma due to the rise of disciplines such as Cultural and Post-colonial Studies, where the story of the subaltern could be expressed. Simultaneously, during the postmodern period the general tendency of specialization in both research and commercial fields became streamlined. In contrast, Fredric Jameson considers the postmodern period as a manifestation of the logic of Late Capitalism, following the definitions of Ernest Mandell. Jameson, unlike Lyotard, does not question Universal History, but instead argues that what is called the postmodern is really "a conception which allows for the presence and coexistence of a range of very different, yet subordinate, features."[18] For Jameson, Postmodernism is in line with the dialectic of History, as defined by Marx, and thus is in its complex form a progression of Modernism and Capital. In both Lyotard's and Jameson's positions as well as those in-between, an acknowledgement of some form of plurality, as well as a rupture in History is evident. However, what is debated by theorists who reflect on modernism and postmodernism is how such plurality and rupture are linked to History, epistemologically. This is of great importance because neither modernism nor postmodernism have been left behind—they are *mashed up* as ideological paradigms.

During the first decade of the twenty-first century, we function with a simultaneous awareness and conflictive acceptance of both cultural paradigms. Therefore, we must dwell on how they are linked to new media, particularly in relation to the terms *repetition* and *representation* as defined by Political Economist Jacques Attali,

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[17] Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis, Minnesota: 1984), 3 – 67.
[18] Fredric Jameson, *Postmodernism or, The Logic of Late Capitalism* (Durham: Duke University Press, 1991), 4.

who wrote about the relationship of these two terms in the 1980s, during the heyday of postmodern thought. Attali, who shares a materialist analysis with Jameson, argues that since the rise of mechanical reproduction, the main way that people understand their reality is not through representation but repetition; for him this means mechanical repetition vs. representation by a person who, for example, performs a music score repeatedly for an audience.[19] These concepts are actually linked to Jameson's own theory which he calls "the waning of affect in postmodern culture," that is a sense of fragmentation, a suspension or collapse of history into intertextuality due to the high level of media production. I paraphrase this collapse as multiple ahistorical readings of all forms of cultural production.

During the postmodern period, the concept of the music remix was developed. As previously noted, the remix in music was created and defined by the DJs in the early 1960's and late 70's in New York City, Chicago and other parts of the United States. Their activity evolved into sampling bits of music in the sound studio during the 80's, which means that the DJ producers were cutting/copying and pasting pre-recorded material to create their own music compositions.

New Media, depends on sampling, (cut/copy and paste), an activity that shares the same principles of appropriation that DJ producers performed. To provide a specific example in new media, the Internet as a network relies directly on sampling; some examples include file sharing, downloading open source software, live streaming of video and audio, sending and receiving e-mails. These online activities rely on copying, and deleting (cutting) information from one point to another as data packets. Cut/copy and paste then applies directly to New Media at large when we consider the efficiency with which independent print publications are produced, and made accessible for

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[19] Jacques Attali, *Noise The Political Economy of Music* (Minneapolis: Minnesota Press, 1985), 68-81.

download or online reading, by small businesses or non-profits like the activist publication *The Journals of Aesthetics and Protest*,[20] as well as the online and print new media magazine *a minima*,[21] among many others. The international activity of these and other journals and magazines was acknowledged in 2007 by Documenta, an exhibition of contemporary art that takes place in Germany every five years. Documenta created a special forum and exhibition that encased new digital forms of publication.[22] Here we see how the act of sampling, a key element in actual remixing, is used for different interests beyond Remix's foundation in music. In this case, principles of sampling (cut/copy & paste) are at play for practical reasons. The journals are mainly concerned with producing affordable publications, and make use of computer sampling technology towards this end. Sampling (cut/copy & paste) technology also makes possible the larger than life special effects of movies like *Star Wars*;[23] not to mention the possibility of watching video on iphones and ipods while text messaging: constantly being connected becomes the norm based on this one activity of cutting/copying and pasting. Thus, culture is redefined by the constant flow of information in fragments dependent on the single activity of sampling. The ability to manipulate fragments effectively, then, extends principles of Remix even in practical terms. But it must be noted that these examples are not remixes themselves. They are cited to note how principles of Remix have become ubiquitous in media, so that we may begin to understand the influence of Remix as discourse.

Now that remix has been defined in its four basic forms, we are ready to look at mashups in music as well as other fields in mass culture, especially web 2.0

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[20] Journal of Aesthetics and Protest, http://www.journalofaestheticsandprotest.org.
[21] A minima:: Magazine, http://www.aminima.net/.
[22] Documenta XII,, http://www.documenta.de/100_tage.html?&L=1.
[23] Snider

applications. This will then expose the latent state for critical practice in Reflexive Mashups.

From Megamix to Mashup

The foundation of musical mashups can be found in a special kind of Reflexive Remix known as the megamix, which is composed of intricate music and sound samples. The megamix is an extension of the song medley. The difference between a medley and a megamix is that the medley is performed usually by one band, meaning that a set of popular songs will be played in a sequence with the aim to excite the listeners or dancers. A popular example of a medley band is Stars on 45, a studio band put together in 1981 to create a medley of songs by the Archies, the Beatles, and Madness among others.[24]

A megamix is built upon the same principle of the medley but instead of having a single band playing the compositions, the DJ producer relies strictly on sampling brief sections of songs (often just a few bars enough for the song to be recognized) that are sequenced to create what is in essence an extended collage: an electronic medley consisting of samples from pre-existing sources. Unlike the Extended or the Selective Remixes, the megamix does not allegorize one particular song but many. Its purpose is to present a musical composition riding on a uniting groove to create a type of pastiche that allows the listener to recall a whole time period and not necessarily one single artist or composition.

The megamix has its roots in the sampling practice of disco and hip hop. While disco in large part experimented with the Extended Remix, hip hop experimented with the Selective and Reflexive Remixes. Grandmaster Flash may be credited with having

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[24] Stars on 45 .*The Very Best of Stars on 45*, Red Bullet. Re-released 2002. Also see the band's website: Stars on 45, http://www.starson45.com/aboutus1.html.

experimented in 1981 with an early form of the megamix when he recorded "The Adventures of Grandmaster Flash on the Wheels of Steel,"[25] which is essentially an extended mix performed on a set of turntables with the help of music studio production. The recording included songs by The Sugarhill Gang, The Furious Five, Queen, Blondie and Chic.

Flash's mix does not fit comfortably into any of the Remix definitions I have provided above; instead, it vacillates among them as a transitional song. "The Adventures of Grandmaster Flash on the Wheels of Steel" exercises principles of the Extended Remix, when it loops an instrumental version of the 1970's group Chic's "Good Times," over which sections from different songs (such as "Another One Bites the Dust" and "Rapture") are layered for a few bars to then slip back to Chic's instrumental. Flash's mix also has principles of the Reflexive Remix because it pushes the overall composition to attain its own independence with the quick juxtaposition of the songs. But in the end, the slipperiness of the recording is mainly invested in exploring the creative possibilities of the DJ mixing records on a set of turntables as quickly as possible. The influence of the cutting and switching from one record to another found in this particular recording can be sensed in megamixes that were produced in the music studio from actual samples. An example from the history of electro-funk is "Tommy Boy Megamix" produced in 1984 which is a six minute remix of the most popular songs by the hip hop label Tommy Boy; the megamix includes compositions by Afrika Bambaataa and the Soul Sonic Force, as well as Planet Patrol and Jonzun Crew among others.[26] The megamix found its way into the nineties in the forms of bastard pop and bootleg culture often linked to culture jamming. One of the best known activists/artists during

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[25] Grandmaster Flash, "The Adventures of Grandmaster Flash on the Wheels of Steel," 12 inch single, Sugarhill Records, 1981.
[26] "Tommy Boy Megamix," 12 inch single, Tommy Boy, 1985.

this period is the collective Negativland, who have produced some well noted mashups to date.[27]

The music mashups at the beginning of the twenty-first century follow the principle of the eighties megamix, and unlike the Selective or Extended Remixes, they do not remix one particular composition but at least two or more sources. Mashups are special types of Reflexive Remixes, which at times are *regressive*—meaning that they simply point back to the "greatness" of the original track by celebrating it as a remix; this tendency to take the listener back to the original song logically leads us to name such remix a *Regressive Mashup*. The term regressive here makes an implicit reference to Adorno's theory of regression in mass culture, which for him is the tendency in Media to provide consumers with easily understood entertainment and commodities.[28] Some popular music mashups are "A Stroke of Genie-us" produced in 2001 by DJ Roy Kerr, who took Christina Aguilera's lyrics from "Genie in a bottle" and mashed them with instrumental sections of "Hard to Explain" by the Strokes.[29] Another example is a mega-mashup by Mark Vidler of Madonna's "Ray of Light" and the Sex Pistol's "Problems."[30] But perhaps the most popular, and historically important mashup up to date is a full-length album by Danger Mouse titled *The Grey Album*, which is a mashup of Jay-Z's special a capella version of his *Black Album* with carefully selected sections from the Beatles' *White Album*.[31] *The Grey Album* is important because it is completely sampled. It is one of the most important sampling experiments, along with Marrs's "Pump Up The Volume"[32] which can be considered an early mashup still relying on the concept of a

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[27] Negativland, http://www.negativland.com

[28] Theodore Adorno, *The Culture Industry* (London, New York: Routtledge, 1991), 50 – 52.

[29] A copy of this mashup can be found at The Hype Machine: DJ Roy Kerr, "A Stroke of Genius" http://hypem.com/track/54069.

[30] Mark Vidler, "Ray of Gob" for more information on the mashup see Go Home Productions, 2006, http://www.gohomeproductions.co.uk/history.html.

[31] Frere-Jones.

[32] For a good account on the importance of "Pump Up the Volume" see, Poschardt, *DJ Culture*.

uniting groove as first experimented on the turntables by Grandmaster Flash. The *Grey Album* goes further because it exposed the tensions of copyright and sampling with emerging technologies: Danger Mouse deliberately used the Internet for distribution and he was pushed by EMI (the copyright holders of the Beatles' *White Album*) to take the *Grey Album* off line.[33]

The creative power of all these megamixes and mashups lies in the fact that even when they extend, select from, or reflect upon many recordings, much like the Extended, Selective and Reflexive Remixes, their authority is *allegorical*—their effectiveness depends on the recognition of pre-existing recordings. In the end, as has been noted, mashups are a special kind of reflexive remixes that aim to return the individual to comforting ground. As Adorno would argue, they support the state of regression that gives people false comfort. In postmodernism, as Jameson argues, this became the norm.

In this fashion we move from modernism: a state of contemplation of utopia, to postmodernism: a state of mere consumption of utopia as just another product to shop around for, along with anything that can be commodified, from nature to the act of resistance. Supporting this waning of affect linked to repetition are the principles of Remix in mashups; however, this norm can potentially be disrupted with Web 2.0 applications, as we will see below.

From Music to Culture to Web 2.0

Once mashups become complementary of Remix as discourse, as a strategy for deployment of repetition, their influence can be noticed in diverse cultural forms: tall buildings in major cities are often covered with advertisements selling products from

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[33] Corey Moss, "Grey Album Producer Danger Mouse Explains How He Did It" *MTV*, May 11, 2004, http://www.mtv.com/news/articles/1485693/20040311/danger_mouse.jhtml.

bubble gum to cell phone services, or promoting the latest blockbuster film. The building

turns into a giant billboard: advertising is mashed up with architecture. A more specific

example: cigarette companies in Santiago de Chile have been pushed to include on their

cigarette packs images and statements of people who have cancer due to smoking; two

cultural codes that in the past were separated on purpose are mashed up as a political

compromise to try to keep people from smoking, while accommodating their desires.

The Hulk and Spiderman have been mashed up to become the Spider-Hulk, as

an action-figure. In this case, the hybrid character has the shape of the Hulk with

Spiderman's costume on top (Two already hybrid characters in their own right). It is

neither but both—simultaneously.[34] Since their popular introduction, mashups as a

spectacular aesthetic are everywhere. They have moved beyond music to other areas

of culture, at times merely as cultural references, and at others with actual formal

implementation. Such a move is dependent on running signifiers that are in turn

dependent on the repetition of media. And repetition had meddled with computer culture

since the middle of the twentieth century.

The strategic aesthetic of mashups was at play in new media during the 1980's

with the conceptualization of the personal computer. While people who developed early

personal computers may not have been influenced by mashups directly as a cultural

reference, their similarities bear comparison, especially because the eighties is the time

when computers and remix in music were both introduced to popular culture. The

computer's "desktop" which was designed for Apple's GUI (Graphic User Interface) is in

essence a technological and conceptual mashup; in this case the computer's

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[34] These are citations based on my own travels to different cities. The buildings with images can be found in any major city. For information about cigarettes see: Liz Borkowski, "The Face of Chile's Anti-Tobacco Campaign: The Pump Handle" Posted on January 4, 2007, http://thepumphandle.wordpress.com/2007/01/04/the-face-of-chiles-anti-tobacco-campaign/. For an image of the Spider- Hulk see: "The Incredible Hulk Engine of Destruction," http://www.incrediblehulk.com/spiderhulk.html.

information, which usually was accessed via the notorious command line became available to the average user when it was mashed up with a visual interface called a "desktop" (for convenience of mass recognition) making an obvious reference to a person's real life desktop.

This allowed the computer user to concentrate on using the machine for personal goals, while not worrying about how the different parts of the computer ran. This conceptual model has been extended to web application mashups, in which the Regenerative Remix is fully at play, as will become evident shortly.

Web Application Mashups

Mashups as a conceptual model take on a different role in software. For example, the purpose of a typical Web 2.0 mashup is not to allegorize particular applications, but rather, by selectively sampling in dynamic fashion, to subvert applications to perform something they could not do otherwise by themselves. Such mashups are developed with an interest to extend the functionality of software for specific purposes. As we can note, this is one of the essential elements in the Regenerative Remix.

In software mashups, the actual code of the applications is left intact, which means that such mashups are usually combinations of preexisting sources that are brought together with some type of "binding" technology. In a way, the pre-existing application is almost like Lego: ready for modular construction. The complexity with web applications mashups lies in how intricate the connections become. The most rough of mashups are called "scrapings" because they sample material from the front pages of different online resources and websites, and the more complex mashups actually include material directly taken from databases, that is if the online entity decides

to open an Application Programming Interface (API) to make their information available to web developers.[35]

In either case web application mashups, for the most part, leave the actual code intact, and rely on either dynamic or static sampling, meaning that they either take data from a source once (static) or check for updates periodically (dynamic). Web application mashups are considered forms that are not primarily defined by particular software; they are more like models conceived to fulfill a need, which is then met by binding different technology. The most obvious example is Ajax which has been defined by Duanne Merrill as "a web application model rather than a specific technology."[36] Ajax tentatively stands for "Asynchronous Javascript + XML." Some well-known mashups include mapping mashups, which are created with readymade interfaces like Google Earth or *Yahoo!* Maps, offering the combination of city streets with information of specific businesses or other public information that might be of interest to the person who developed the mashup.[37]

A mashup model, as previously noted, appears to be stable as long as the websites offering the information keep their APIs open is Pipes by *Yahoo!*.[38] This particular type of mashup goes deep into the database to access dynamic data. Pipes by *Yahoo!* actually points to the future of the web, where the user will be able to customize, to a sophisticated level, the type of information that s/he will be accessing from day to day. *Pipes*, in theory, provides the user with the same possibilities made available by Google, when the user is able to customize his/her own personal portal news page. The difference in Pipes, however, is that the user can combine specific

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[35] Duane Merrill "Mashups: The new breed of Web App. An Introduction to Mashups,"*IBM*, October 16 2006, http://www-128.ibm.com/developerworks/web/library/x-mashups.html.
[36] Ibid
[37] For various examples on map mashups see the blog *Google Maps Mania*, http://googlemapsmania.blogspot.com/.
[38] *Yahoo! Pipes,* http://pipes.yahoo.com/pipes.

sources for particular reasons. In a way, the specificity demands that the user really thinks about why certain sources should be linked.   *Pipes* allows the user to choose a particular source, such as news, biddings, or map information to then link it to another source. Many of the pipes that I have browsed through leave me with a sense of critical thinking and practicality by the persons who created them, not that Pipe developers are after social or cultural commentary, but rather that they develop most pipes to be useful in specific ways.

When the user is initiated in *Pipes*, some of the examples provided include: "apartment near something," "aggregated news alert," and eBay "Price Watch." All these pipes propose a very specific functionality: that is, to find an apartment, to get the latest news, or to keep up with the best prices on particular biddings on eBay. For example, a user could be looking for an apartment in a particular area, then the person could connect a public directory, such as Craig's List, which has rental information, to *Yahoo!* maps; the Pipe would then be updated as the information is actualized in the particular sources, meaning the map and the rental resource.

What these examples show is that web application mashups function differently from music mashups. Music mashups are developed for entertainment; they are supposed to be consumed for pleasure, while web application mashups, like *Pipes* by *Yahoo!* actually are validated if they have a practical purpose. This means that the concept and cultural role of mashups change drastically when they move from the music realm to a more open media space such as the Web. We must now examine this crucial difference.

The Ideology Behind the Reflexive Mashup

Contrary to popular understanding, Web Application Mashups are not remixes in the traditional sense, following the principles of music. Based on their functional

description, they are Regenerative Remixes; they subvert pre-existing material for the sake of functionality, pushing allegory (or the historical importance of the originating source) to the periphery. To reflect further on this, let us consider again the music mashups considered so far. Their power lies in their spectacular aura, meaning that they are not validated by a particular function that they are supposed to deliver, but rather by the desires and wants that are brought out of the consumer who loves to be reminded of two or more songs for his/her leisure enjoyment.

Music has this power because it is marketed as a form of mass escapism. Keeping in mind the previously introduced theories of Jacques Attali and Theodore Adorno, the average person consumes music in order to wind down and find delight in the few spare moments of the everyday. Those who can, go to concerts, but most people are likely to enjoy music as recordings on CDs and MP3s. When people hear their favorite songs mashed up, it is very likely that they will get excited and find pleasure in recognizing the compositions; their elation will help them cope with whatever stress they may have had throughout the day. Musical mashups are *Reflexive Remixes* that never leave the spectacular realm.

They support and promote the realm of entertainment and therefore find their power as forms of regression as defined by Adorno, and repetition according to Attali, while extending postmodernism's intertextuality after Jameson. But web application mashups can function differently as we have already seen with *Yahoo! Pipes*. The reason for this is that web application mashups are developed with a practical purpose; this tendency for optimized functionality has pushed web application mashups to constantly access information from the originating sources: to constantly update data. They are (at least initially) proposed to serve as convenient and efficient forms to stay informed rather than to be entertained.

The notion of Mashups found in music culture is appropriated in the name of efficiency once such concept enters the culture of new media; this also changes the concept of a mashup drastically, making it reflexive rather than regressive. The term reflexive here functions differently than how it functions in the Reflexive Remix. As previously defined, the Reflexive Remix demands that the viewer or user question everything that is presented, but this questioning stays in the aesthetic realm. The notion of reflexivity in a software mashup implies that the user must be aware as to why such mashup is being accessed. This reflexivity in web applications moves beyond basic sampling to find its efficiency with *constant updating*.

A *Reflexive Mashup* does not therefore necessarily demand critical reflection, but rather practical awareness. The validation of the Reflexive Mashup found in web applications does not acquire its cultural authority in popular recognition of pre-existing sources, but instead it is validated based on how well those sources are sampled in order to develop more efficient applications for online activity. This turns the Reflexive Mashup into a different object; one that does not celebrate the originating sources, but if anything, subverts them. Usability rules here, making allegory as encountered in other remixes incidental; allegory is pushed to the periphery. This is Remix as discourse—this is the basic Regenerative Remix, expressed materially in software.

However, this does not mean that reflexive mashups cannot be used for spectacular entertainment. *Youtube* and *MySpace* (which function according to the principles of the Regenerative Remix) are some of the most obvious manifestations influenced by mashup models in Web 2.0, where people are willing to tell their most intimate secrets for the sake of being noticed, and to (maybe even) become "media stars." One has to wonder how the concept of privacy may be redefined in these spaces. So, with this in mind, *Pipes* by *Yahoo!* may be used for a spectacular cause in the end: any music fan can potentially mash two or more feeds to keep up with the news of

his/her favorite movie star. In this example the software mashup becomes appropriated for the sake of pure entertainment.

It follows that the reflexive mashup's foundation in functionality does not make it free from the allegorical tendency that other forms of Remix are dependent on; however, this duality in purpose may be a hint as to the real possibilities that lie latent in emerging technologies, which can be tapped if one is critically aware of the creative potential of web 2.0. Software mashups expose that it is a deliberate decision by the user to define the combinations as reflexive or regressive according to personal interests, regardless of the mashup's initial mode.

Sampling and the Reflexive Mashup

Mashups, whether they are regressive or reflexive, are dependent on sampling. But sampling, as can be noticed from the various examples that have been discussed, begins to be supplanted by *constant updating*. Some mashups do not "cite", but rather materially copy from a source. This differs for the constant updates found in Web 2.0 applications like *Pipes* by *Yahoo!* because such mashup is dynamically accessing information. In music, architecture, film and video as well as many other areas of the mainstream, the source is sampled to become part of another source in form, while in more dynamic applications developed in Web 2.0 the most effective mashups are *updated constantly*.

The Regressive Mashup in music is regressive because it samples to present recorded information which immediately becomes meta information, meaning that the individual can then understand it as static, knowing it can be accessed in the same form over and over again—this recorded state is what makes theory and philosophical thinking possible. Because of its stability, the principles of the regressive mashup, as previously mentioned, could inform the aesthetic of a building covered with an image

publicizing a film such as the *Transformers*, a cigarette box showing the image of a person with lung cancer, as well as two songs by disparate musical acts like Christina Aguilera and the Strokes. The regressive mashup as an aesthetic depends on the recorded signs that are not mixed but transparently juxtaposed: they are recorded to be repeated, accessed, or looked at perfectly over and over again, while the Reflexive Mashup in Web 2.0 no longer relies on sampling but instead on *constant updating*, making incidental not only the allegorical reference that validates the Regressive Mashup, but also pushing forward with a constant state of action toward reflection on what is being produced each time the mashup is accessed. The Reflexive Mashup then is the most basic form of a Regenerative Remix in terms of software. But this form, after being internalized by people as part of their daily activities comes to affect other areas of culture.

Conclusion: Regenerating Bonus Beats

What exactly is the Regenerative Remix? In the beginning of the twenty first century the Regenerative Remix is a form of material production best understood in software. The Regenerative Remix is exposed in the activity of constant updates made with software that also creates a well-organized archive; the Reflexive Mashup has been the case study in this occasion. Yet, even when its archive may be accessible, it does not mean that people will necessarily ever use it directly; most people will stick to the most immediate material, placed on the front pages of any online resource, because the Regenerative Remix encourages the now: the present—for the sake of practicality and functionality. The archive, then, legitimates constant updates allegorically. The database becomes a delivery device of authority *in potentia*: when needed, call upon it to verify the reliability of accessed material; but until that time, all that is needed is to know that such

archive exists.[39]   But there is another face of the coin: the database, which is played down in the front pages, is actually extremely crucial for search engines.   Here the archive becomes the field of knowledge to be accessed; it is the archeological ground to be explored by sophisticated researchers and lay-people alike.   It is a truly egalitarian space, which provides answers to all queries possible.   Because of this potential, RSS feeds have attained great importance, and due to demand, people are given tools with which to choose feeds to read.   The interfaces of these RSS readers become personalized "front pages," which are organized to present the latest information first. There are quite a few RSS readers available; some, like Vienna,[40] can be downloaded and used as applications on a personal computer; others like Google Reader are web applications that run online, and can be accessed from any computer.[41]

The Regenerative Remix, then, becomes the contemporary frame of cultural reference by combining the state of social communication with software that is designed to keep up with changes materially and ideologically.   Software Mashups are specifically designed to make this possible. As an extension of this aesthetics, Google News is constantly updated, as is Wikipedia; Twitter feeds are relevant only because of pervasive updates; Facebook, mySpace, YouTube and all social media are dependent on constant updating as well, and thus defined by the principles of the Regenerative Remix.

The type of production at play in networked culture was not possible prior to the rise of software, as it is the speed of information exchange that makes such production

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[39] This is similar to Craig Owens's observation that the Old Testament validates the New Testament. Without the Old Testament, the New Testament would have no authority. It is allegory that makes this possible. See Owens, 204.

[40] Vienna, A Freeware RSS/Atom Newsreader for Mac OS X, http://www.vienna-rss.org/vienna2.php

[41] Barb Dibwad, "HOW TO: Choose a News Reader for Keeping Tabs on Your Industry," *Mashable*, December 3, 2009, http://mashable.com/2009/12/03/news-reader/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Mashable+(Mashable)

feasible. In the commercial sector this becomes a challenge for major media corporations, who have to constantly remind people about what to consume, because popular culture is deliberately designed to be forgotten—or become *uncool* almost as soon as it begins to be consumed; this means that eventually, it can be reintroduced in modified form as "new." This is particularly true of music hits often repackaged as remixed versions, mashups, etc., with the purpose to open a fresh demand within the younger generations. This is why commercial production relies on remix principles to reintroduce their products in culture with "retro" flair. Fashion is the master of this strategy, of course—nobody needs to recognize the actual historical reference of a garment, only that it recalls something from a vague period which makes it *hip*, if it is designed with enough historical distance.

Admittedly, people have more power than ever before on what they decide to consume and to what contribute their time and effort, which is why social media is so important in networked culture. It is here where the mission of remix culture as a means for the people's voice as a creative collective emerges, and appropriates back the principles of Remix that DJ's developed in the early days of Dub, and Hip Hop. While this is real, it must also be acknowledged that corporations are trying to control this collective movement, which is why they have invested in social media, while trying to hold on strong to pre-established copyright laws. At the moment major corporations support, or are at least are willing to participate and/or pay close attention to social networks that can then be assessed by marketing analysts in order to develop more effective ways to break through the media noise, itself. MySpace may perhaps be the most obvious example in this ongoing development, Rupert Murdoch bought it for the means to data-mine its members' online activity.[42] Like software mashups, Remix as

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[42] Jeremy Scott-Joynt"What MySpace Means to Murdoch," BBC News, July 19, 2005, http://news.bbc.co.uk/2/hi/business/4697671.stm

discourse, then, offers a double face: it can be regressive or reflexive, depending on how the technology is used.

At the beginning of the twenty-first century, ultimately, the question becomes, what to search for, if one is to be presented with ahistoricity as the norm? Why know history when one can learn about particular subjects whenever so desired? But how can one know what to look for if one is encouraged to navigate through fragments according to random desires? These questions are equally important to cultural theorists as well as marketing directors, which means that while constant updates enable people to stay better informed, they also become a challenge for critical reflection.

The concept of *critical distance*, which has been used by researchers and intellectuals to step back and analyze the world, is redefined by the Regenerative Remix. This shift is beyond anyone's control, because the flow of information demands that individuals *embed* themselves within the actual space of critique, and use constant updating as a critical tool. This is quite a challenge because as this text demonstrates, the Regenerative Remix is primarily designed for practicality, for the sake of immediate services; and the archive is designed to come to the front at the very moment that a query is made. While these features could be seen as neutral, one can quickly notice their friendliness to the market. In fact, the Regenerative Remix primarily exists because the market finds it useful. The Regenerative Remix privileges the ever-present—at the same time, it knows it needs history for legitimation, and the archive can be called upon to suffice as proof of its reliability. But, as previously noted, the archive also functions in market value as the resource's importance grows as its database grows; when reconfigured properly, it can provide revenue when people use a search engine to buy items online. Amazon and Wal-Mart among many other major corporations make the most of this feature.

The database, then, is ahistorical, ready to be manipulated for the sake of immediate needs that can place the accessed material in quite different contexts. This was already true when Walter Benjamin noted the popular replacement of exhibit value over cult value in the 1920's and 30's, in his well-known essay "The Work of Art in the Age of Mechanical Reproduction;"[43] in Attali's terms, who published his theory in the 1980's, this is equivalent to repetition overshadowing representation. The difference during the first decade of the twenty-first century is that efficiency is coming near to a collective "living" form: a *Wikipedia* page is likely to be adjusted within minutes after an apparent inconsistency is found—like a living person, online resources tend to contradict themselves. Yet, in the case of *Wikipedia*, constant updating is the only reason why it can stand against Encyclopedia Britannica as a valid alternative. This means that people's understanding of History in terms of the past, present, and future are mashed up in the Regenerative Remix as a dataset that is always changing and is ready to be accessed according to the needs of the user in the ever-present.

At the beginning of the twenty-first century, it is evident that the Regenerative Remix is defining the next economic shift. Remix culture is experiencing a moment in which greater freedom of expression is mashed up against increasingly efficient forms of analysis and control.

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[43] Benjamin.