

The Evolution of Authorship in a Remix Society

Nicholas Diakopoulos, Kurt Luther, Yevgeniy “Eugene” Medynskiy, Irfan Essa

GVU Center, School of Interactive Computing, Georgia Institute of Technology
nad@cc.gatech.edu, luther@cc.gatech.edu, eugenem@gatech.edu, irfan@cc.gatech.edu

ABSTRACT

Authorship entails the constrained selection or generation of media and the organization and layout of that media in a larger structure. But authorship is more than just selection and organization; it is a complex construct incorporating concepts of *originality, authority, intertextuality, and attribution*. In this paper we explore these concepts and ask how they are changing in light of modes of collaborative authorship in remix culture. We present a qualitative case study of an online video remixing site, illustrating how the constraints of that environment are impacting authorial constructs. We discuss users’ self-conceptions as authors, and how values related to authorship are reflected to users through the interface and design of the site’s tools. We also present some implications for the design of online communities for collaborative media creation and remixing.

Categories and Subject Descriptors

H.5.4 [Information Interfaces and Representation (HCI)]:
Hypertext/Hypermedia – *theory, user issues*.

General Terms

Design, Economics, Human Factors, Legal Aspects.

1. INTRODUCTION

As far back as the 1970s, the term *remixing* has referred to the practice of separating individual audio tracks from different multi-track recordings and recombining them into a novel musical work. As easily-manipulable digital media has replaced analog tapes, the popularity of this and similar practices has increased, and the term *remix* has now been generalized to refer to separating and recombining many other types of media, including images, video, literary text, and video game assets. Facilitated by digital technology, remixing is instigating an evolution in our traditional notion of the author. How is authorship conceptualized in an environment where individuals can easily appropriate, share, and remix media through online collaboration?

We begin to address this question through a study of the online video remixing community, Jumpcut (<http://www.jumpcut.com>). In particular, we posit a conception of authorship as constraint satisfaction and contribute an understanding of how environmental constraints such as *legal codes, community and social norms, physical and architectural design, and economic factors* affect four core facets of authorship that we have identified: *originality, authority, intertextuality, and attribution*. Through our study of Jumpcut we seek to understand how collaborative authorship in remix culture is being affected by the composition and design of environmental constraints. An expanded version of the background, study, and analysis can be found in [4].

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

HT’07, September 10-12, 2007, Manchester, United Kingdom.

Copyright 2007 ACM 978-1-59593-820-6/07/0009...\$5.00.

2. REMIX BACKGROUND

Before delving into how remix culture can impact the author, we first wish to clarify our use of the word *remix* and situate it in reference to hypermedia. Remix culture refers to a society that encourages derivative works by combining or modifying existing media. One could imagine a spectrum of tangibility within remixing, from remixing physical artifacts to remixing abstract ideas or concepts. When we refer to *remix media*, we mean an instantiation of digital media content that was formed by segmenting and recombining other media content. Remix media can be conceptualized as a reworking of the trajectory through a hypermedia, potentially including new material in the trajectory.

3. NOTIONS OF AUTHORSHIP

Historically, there are two competing conceptions of the author: the author as a lone creative genius, and the author as collaborator. The notion of author as lone creative genius is historically recent, prevalent only since the Romantic period of literature [12]. A major objection to the romantic notion of authorship is that it “exalts the idea of individual effort to such a degree that it often fails to recognize, or even suppresses, the fact that artists and writers work collaboratively with texts created by others” [9]. An alternate conception of the author is that of a collaborator in a system of authors and texts working together. A multitude of traditional productions rely on the creative input of groups of people: theater, film, and architecture among others. This notion is reflected in Barthes’ argument that a text does not release a single meaning, the “message” of the author, but that a text is rather a “tissue of citations” born of a multitude of sources from culture [1]. In this light, the author is simply a collaborator with other authors; citing them, reworking their ideas and contributing to an intertextual web of ideas and media.

3.1 The Author as Constraint Satisfier

Authorship can be seen as the task of making choices and selections concerning the structure and content of media elements within the constraints of a particular medium in order to make meaning [6]. We term these *production* constraints. In this paper, however, we focus on the *environmental* constraints impacting authorship, which include *legal codes, community and social norms, physical and architectural design, and economic factors* [10]. Historically, legal and economic constraints dominate the conception of the romantic author.

Legal constraints represent a potent and influential part of authorship in terms of what is and is not lawfully permissible in a particular society and legal jurisdiction [10]. The constraint is enforced using punishment as a consequence of violation or by encoding the law into the means of production and consumption to prevent misuse. In the U.S., copyright law is primarily used to safeguard economic interests; however, in other jurisdictions, the concept of authorial moral rights is embedded in the legal codes. Moral rights are concerned with protecting the dignity and autonomy of authors and include the rights of *disclosure* (when to

publicly disseminate a work), *integrity* (prohibition of the misrepresentation of an author's expression) and *attribution* (the recognition of a work's creator) [8]. Together, they tend to reflect the romantic notion of authorship and are grounded in protecting the human spirit contained in an author's creations.

Audience expectations, social norms, and culture may also constrain what an author produces. Because the meanings of signs vary culturally, an author may create for a particular consumption context. For instance, readers of a scientific magazine might not tolerate articles written from an artistic world-view and vice versa. Similarly, plagiarism is a good example of how social norms can constrain an author's behavior. To avoid potential stigma, an author must operate within the social values and rules regarding attribution in a particular community or culture.

Physical and architectural influences also come into play in the process of authoring, especially in new media, which is experienced and mediated through a computing platform. The design of the platform (e.g. its interface and available features) dictates what is possible for the author or reader to achieve within that environment. Software or hardware architecture can be used to enforce the other constraints on authorship. For example, Digital Rights Management (DRM) systems can be used to enforce copyright law [10], or social norms can be enforced by automatically attributing appropriated content to its creator.

The economic system in which the author is operating dictates whether or not the value of media is gleaned monetarily, or from recognition or attention. A monetary environment may give rise to modes of authorship where media is created solely for its financial value. In contrast, in a recognition economy, the author is constrained to create works of high quality, according to the metrics of the community in which the author seeks recognition. Since the cost of reproduction in digital media is often times negligible, scarcity within a media economy gives way to abundance; reputation or gift cultures are an adaptation to abundance economics in which value is conferred through peer evaluation and social status through gifting [7].

3.2 Authorial Constructs and Remix

Based on a literature review of authorship and media theory [1-3, 5, 6, 9, 12, 14] we identified four interrelated concepts which are important to understanding authorship: *originality*, *authority*, *intertextuality*, and *attribution*. Our claim is not that these provide an exhaustive description of authorship, but that they are a starting point for analyzing how the environment affects the practice of authorship while remixing.

Originality: Originality and individuality (and their relationship to property) are deeply entwined in the historic emergence of the definition of the authorship in early modern England. As the system of art benefaction waned and artisans came to be seen as "petty commodity producers," the mystification of the author represented some "spiritual compensation for this degradation" [12]. In this way the notion of a lone creative genius was introduced into the traditional discourse of authorship; the originality of the work, and its value, becoming dependent on the individuality of the author [12]. A similar rhetoric of authorship in film was introduced as auteur theory in the 1960s [13]. Auteur theory claims that it is often most appropriate to characterize a film by its director instead of its cast or genre, as was common previously. While originality and personality as embodied in creative works are important in defining elements of authorship,

clearly there is a difficulty in reconciling this with notions of joint or collaborative authorship prevalent in remix media. The granularity of remix video in particular calls into question the potential pervasiveness of the auteur throughout the production.

Authority: In general, authority is defined as either (1) an individual cited or appealed to as an expert or (2) the power to influence thought. These classic notions of authority in authorship were buttressed by the changelessness of print in books which promulgated the idea that the author had created something staying, unique, and identifiable [9]. Mass production of copies from the printing press as well as resource barriers to publishing have historically supported homogeneity and the authority of the author [3]. Copyright laws also support the immutability of the author's voice (for a limited duration) and the notion of the romantic author as an authoritative source. In contrast, the ephemeral qualities of digital media (e.g., facile remixability and publishability) support less authorial control. The thoughtful voice of the author is subverted through the rearrangement of decontextualized fragments or through the limitations of a software platform which dictate the medium's autonomy.

Intertextuality: The notion of intertextuality considers texts as networks of associations with other texts which may be extra-physical to the work itself [5]. Barthes saw this intertextuality as beginning with the author as text, and extending to material drawn from other authors and society at large. Authorship partly consists of the intake, digestion, and transformation of material that an author has experienced in society [15]. In traditional literature, intertextuality can be passive, with the reader potentially not even noticing a tacit reference or allusion to another text. Remix media has an intrinsically intertextual nature insofar as it cannot exist outside its network of references to other media.

Attribution: Legally and practically speaking, attribution of a creative work to an entity is necessary in order to protect that work and maintain economic rights for that entity under the copyright law. Attribution can be a consequence of both the legal and economic climates in which the text is produced. On the other hand, attribution can also be considered a moral right due to the author [8]. In many scientific discourse communities, attribution may not be money or rights driven, but rather recognition-driven; attribution drives the recognition economy [11]. Remixing media can undermine attribution since the process of appropriation may not involve explicit citation of the original (i.e., intertextuality is implicit). This is not to say that remix cultures do away with attribution; it can be enforced through architectural constraints or the community's own adjudication processes.

4. REMIX AUTHORSHIP ON JUMPCUT

Jumpcut is an online video sharing, editing, and remixing community which allows people to upload video footage or grab footage from others, create movies with that footage using an online editor, and then publish or remix those movies. We were interested in studying Jumpcut in order to characterize how its environment impacts the authorial concepts introduced earlier. Our study of Jumpcut included interviews, document and remix video analysis, and participant observation for six months. We conducted six interviews, including one with a Jumpcut employee who was active on the site. Interviewing the employee was helpful for understanding the normative community and design values.

4.1 The Environment of Jumpcut

Legal Codes: Analysis of Jumpcut's policy documents indicates that the company is interested in upholding standard copyright precedent in a U.S. jurisdiction. The Terms of Use document contains licensing clauses which dictate that users only upload content that is original (i.e., fully owned) and that they only use the site for non-commercial purposes. While these official documents espouse attention to legal details, we also talked to users about their positions on using copyrighted material. Some interviewees preferred using their own footage and one was deeply interested in using Creative Commons licensed media. Interviewees who did want to use copyrighted content, however, were generally uninformed and unconcerned about the law. Thus, although there are legal constraints to creation that are in place and enforceable, interviewees tended to be lenient or apathetic about considering the law when they were appropriating content. Some remixed copyrighted content on Jumpcut is for criticism and commentary, which is indeed covered under fair use doctrine.

Community and Social Norms: A value which came out of the interviews was that people in the community are not perceived as possessive: they want to share their content and have it remixed or appropriated by others. This generosity goes hand-in-hand with a feeling that users of the site are easygoing with respect to copyright law. The general acceptance that people were there to share their content fits well with the idea of freely appropriating others' footage and of enabling (rather than constraining) appropriation, creative reuse, and derivation.

Physical and Architectural Design: Jumpcut's interface and available features affect the ways in which users are able to create and remix movies. Some legal constraints implied by U.S. copyright law and described in the site's policy documents are encoded into the site's functionality. While presumably implemented to limit the site's legal liability, these constraints also limit the range of creative options available to users. For instance, music and audio clips cannot be grabbed in the same way as video clips.

Economic Factors: The economic model of the community is non-commercial; no users were observed uploading or creating content for the purpose of making money, although some content could arguably be seen as marketing material. Most of the users can be seen as video hobbyists, participating in movie making for its intrinsic value and challenge. As traditional notions of authorship are enshrined in the value of media as property, the economic factors with respect to motivation on Jumpcut represent a significant change to the creative environment. Many interviewees mentioned the ability to share their movies and feel a part of the online community as central motivations for creating. They created and remixed movies as a mechanism for getting attention and for the purposes of disseminating their ideas and creations since they knew that people would watch them online.

4.2 The Impact on Authorial Constructs

Originality: Several interviewees noted that they felt obliged to make substantial alterations to a work before being comfortable calling it their own. When this was violated by others and it resulted in the remix getting more attention, it led to frustration. Interviewees expressed appreciation for remixes that were interesting rather than explicitly original. One interviewee drew an explicit connection between originality and interestingness: "Obviously it has to be something that's interesting and if you see

something everyday it becomes no longer interesting. So, kind of by definition, something has to be somewhat original to be interesting. Or you could maybe take a twist on something very familiar and make it a little bit different." Perspectives like this suggest that when presented with a repository of raw footage, users find originality in creative rearrangements. They value skills associated with finding, editing, and remixing existing content in interesting ways. And in contrast to historical perceptions of authorship closely tying originality to the individual, users redefine originality as fundamentally connected to collaborative appropriation and remixing.

Authority: Users agreed that uploading video content to Jumpcut places it in the public domain for all intents and purposes. One interviewee elaborated, "If it helps express what I want then I'll go with it, but I don't specifically go out and say, 'I want to steal a copyrighted clip today.'" In other words, he decides whether or not to use a clip based on his personal goals for a project rather than external rules or regulations constraining how that clip may be used. At the same time, he recognizes that his use of some of the video material on Jumpcut is a violation of copyright law. Authority can be framed as the influence of an individual or a piece of footage in the community, one metric of which might be the amount of viewing attention received. Users gave little consideration to videos that were deemed "popular" by others when selecting content for their remixes, with the exception of one interviewee who mentioned a strategy of using pornographic clips to attract views to his profile. In this case, he made use of popular video clips to influence the attention which is brought to his other more serious movies, thereby enhancing his own authority and ability to influence others.

Reputation and authority within the community of remixers was closely tied to perceptions of expertise. Interviewees sought to understand a remix's quality, its creator's authority, and its appraisal by the community from information gleaned from a video's web page (i.e., the physical design). Specific elements mentioned by interviewees include the number of constituent clips as a proxy for effort, the number of views and "love" conferred, and the use of appropriately-timed music. The transparency of how a video was put together using the editor was also mentioned as a key enabler for evaluating the expertise of remixers.

Intertextuality: The physical page layout supports intertextuality through an array of hyperlinks to remixed versions, contributors of clips, and tagged categories. User pages link to videos and remixes the user has contributed, as well as fans and friends of that user. All of these associations coalesce to create a tapestry of intertextuality (both explicitly with links and conceptually with tags) within Jumpcut and between Jumpcut and other online communities. Interviewees reported that while the ability to view contributors to a remix is a useful one, the utility lies mostly in identifying potential media for appropriation. Jumpcut users bring content into the site from various sources such as YouTube, personal video and still cameras, DVD rips, and even Google Image Search. The variety of these sources illustrates not only intertextuality between videos and users on Jumpcut, but also between Jumpcut and other online media repositories. Several users opined that they would like to see more explicit connections made with other websites to facilitate simplified video imports, however, legal constraints presently make this infeasible.

Attribution: Some interviewees admitted they enjoy seeing their videos remixed, which involves being attributed on the contributors list for all subsequent remixes. However, precisely when Jumpcut users feel entitled to attribution and when they do not is complicated. Our interviews elicited several perspectives based on *footage provenance* and *effort*. The importance of footage provenance harkens back to moral rights, economic factors, and social norms and expectations. Moral rights dictate that footage from an individual is more entitled to attribution than from a company. Economically speaking, because the community is non-commercial, there is no strong push from companies or non-hobbyists for branding through attribution. Finally, the social norm surrounding appropriation is associated with the notion of plagiarism. The more recognizable the footage, the more the appropriation can be seen as allusion rather than plagiarism since the audience is expected to already recognize the reference without explicit attribution. The length of a video or the degree of effort involved in editing a video were also factors in determining whether attribution was expected by interviewees. The degree of effort correlated with what one interviewee referred to as “creative ownership”—the idea that ownership is not just about traditional property rights but also about how much of yourself you put into the production, regardless of who owns the underlying footage. Interviewees indicated that they often (but not always) notify other users when remixing their footage. This explicit attribution takes place despite the fact that Jumpcut clearly indicates each video’s remix history and the names of the users who contributed clips to the current version and *automatically* notifies someone through email if their video has been remixed. People may still feel a moral obligation to *people* (but not companies) as creators who have a moral right to be attributed (and notified) despite the physical design which accomplishes this automatically.

5. IMPLICATIONS

Seen through the lens of the analytic framework which we have proffered, our study has elucidated a range of interconnections between environmental factors and authorship. Here, we suggest design implications for building collaborative creation and remixing communities. These implications should be treated carefully since the environmental system and its impact on the author is complex. The data that we have collected is indicative of trends but cannot be considered conclusive.

Novelty and originality are still paramount to the conception of the author on Jumpcut, although these concepts are flavored by motivations to remix using the platform of the original movie. From our video content analysis, we saw that many remixes were extended in duration, using the original movie as a foundational structure to build on with new clips. Novelty arises out of the creative or interesting juxtaposition and combination of footage. Tools to support creativity could be leveraged in the interface to enhance a remixer’s ability to find interesting juxtapositions of clips by, for instance, providing a palette of suggested clips based on loosely related tags. Furthermore, reducing the time and effort of searching for and importing content from sources outside of the system would enhance the ability to rapidly test and evaluate creative remix ideas.

Much of traditional authority is regulated by physical or architectural constraints both in the presentation and editing interfaces of the site, whereas new forms of authority (having others remix your material) are regulated by the community. The

lack of a monetary economy on Jumpcut means attribution, explicit intertextuality, and attention are of utmost importance in providing authority. Designers of similar sites might consider combining these ideas so that users accrue some metric of value according to how many other users have remixed or appropriated their content. In addition to providing search results based on *passive* metrics of viewership (popularity of viewing), search and filtering could make use of an *active* metric such as frequency grabbed or appropriated (popularity of reuse).

As mostly hobbyists, the Jumpcut users we spoke to had an easygoing attitude toward attribution and appropriation of copyrighted content, but nonetheless liked receiving credit and attribution when others remixed their footage and movies. The method of automatically adding and showing contributors to every movie seems to enforce this value in the interface fairly well, although a key component that is lacking is some metric of *effort* involved in the contribution. Effort was key in interviewees’ feeling a sense of creative ownership; metrics of effort in remixing need to be developed to better explicate the proportionality of the collaboration. Barring automatic metrics or comparisons such as a diff utility available for text, an alternative would be to provide better *visual awareness* of what has changed between remix versions. This would enhance the remix history with more explicit tracking of who had changed what between versions.

6. CONCLUSIONS

In this paper we have presented a framework for studying the environmental influences on authorship and a qualitative study of a video remixing community meant to illustrate how authorship in remix culture is being affected by a different composition of environmental constraints. We suggested some potential design implications based on our analysis. Future work needs to incorporate the notion of production constraints in conjunction with environmental constraints and to understand how originality, authority, intertextuality, and attribution can best be supported through interface and community design.

7. REFERENCES

- [1] Barthes, R. The Death of the Author. in *Image, Music, Text*, 1978.
- [2] Barthes, R. From Work to Text. in Harari, J.V. ed. *Textual Strategies: Perspectives in Post-Structuralist Criticism*, Cornell University Press, 1980.
- [3] Bolter, J.D. *Writing Space*. Lawrence Erlbaum Associates, 2001.
- [4] Diakopoulos, N., Luther, K., Medynskiy, Y. and Essa, I., *Remixing Authorship: Reconfiguring the Author in Online Video Remix Culture*. Georgia Tech, Technical Report. GIT-IC-07-05. 2007.
- [5] Douglas, J.Y. *The End of Books - Or Books Without End?* 2000.
- [6] Foucault, M. What Is an Author? in Harari, J.V. ed. *Textual Strategies: Perspectives in Post-structuralist criticism*, 1980.
- [7] Kollock, P. The Economies of Online Cooperation: Gifts and Public Goods in Cyberspace. in Smith, M.A. and Kollock, P. eds. *Communities in Cyberspace*, Routledge, 1999.
- [8] Kwall, R.R. The Attribution Right in the United States: Caught in the Crossfire between Copyright and Section 43(A). *Washington Law Review*, 77.
- [9] Landow, G. *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*. Johns Hopkins University Press, 1997.
- [10] Lessig, L. *Free Culture: The Nature and Future of Creativity*. 2004.
- [11] McSherry, C. Uncommon Controversies. in Biagioli, M. and Galison, P. eds. *Scientific Authorship: credit and intellectual property in science*, 2003, 225-250.
- [12] Rose, M. *Authors and Owners: The Invention of Copyright*. Harvard University Press, 1993.
- [13] Sarris, A. Notes on the Auteur Theory in 1962. in Sitney, P.A. ed. *Film Culture Reader*, Cooper Square Press, New York, 2000.
- [14] Stillinger, J. *Multiple Authorship and the Myth of Solitary Genius*, 1991.
- [15] Yen, A. The Interdisciplinary Future of Copyright Theory. in Woodmansee, M. and Jaszi, P. eds. *Construction of Authorship: textual appropriation in law and literature*, 1994, 159-173.