YouTube_As_Archive: Who Will Curate this Digital Wunderkammer?

Robert Gehl
PhD Student, Cultural Studies
George Mason University
rgehl@gmu.edu

Draft of paper to be given at MiT5

Abstract: At first glance, the ease with which individuals can access and contribute to YouTube sets it in direct opposition to large corporate media outlets with their top-down mode of dissemination. However, in this paper, I argue that despite these seemingly democratic features, YouTube is better understood not as opposed to traditional corporate media but in the same genealogy as previous archival technologies and techniques. In archives, all content is flattened and has equal weight, so it is up to a curatorial authority to present content to audiences. While YouTube promises to democratize media, its lack of a centralized "curator" actually sets the stage for large media corporations to step into the curatorial role and decide how each object in YouTube's archives will be presented to users. As these new "curators" step in, the competition for the time and attention of an audience – and therefore advertising revenue – will inevitably lessen as internet media becomes more and more oligarchical. This paper thus draws on political economic and historical critiques of museums, collections, and archives in order to connect the emergent technologies in YouTube with earlier attempts to organize and present information, objects, and images.

Keywords: YouTube, archives, labor theory of value, tagsonomy, blogs, mediators, curators.

YouTube_As_Archive: Who Will Curate this Digital Wunderkammer? Old Tube versus YouTopia

Much of the press coverage of YouTube carries headlines such as "Friend or Foe?" and "Threat and a Tool". PR Newswire recently reported that YouTube users are less likely to watch television and a recent cover story in Broadcasting and Cable discussed "five major arenas" where YouTube will "shake up the TV industry." Writing in The Times (London), Dominic O'Connell refers to YouTube users as "pirates." In other words, the news and trade press has often simply presented YouTube (and streaming internet video in general) as a potential threat to traditional broadcast media, at least in capitalist economies. Traditional media, the narrative goes, must find a way to adapt to YouTube and other internet video sites, or it will die. And of course, mainstream media is seen as "fighting back" by forming competitive new internet video sites.

This vision of new media versus old is an understandable framing. Often in the teleology of news reporting, particularly in American reporting on technology, every new form of media and technology is presented as replacing past media, perhaps influenced by economist Joseph Schumpeter's notion of "creative destruction" whereby the old firms are constantly overwhelmed by their newer, more agile young competitors.⁶

¹ Holson, L. M. (2007, 15 Jan.). Hollywood tries to decide if YouTube is friend or foe. *International Herald Tribune*, p. 1.

² Noguchi, Y., & Goo, S. K. (2006). To the Media, YouTube Is a Threat and a Tool. *Washington Post*, p. D01.

³ One-Third of Frequent YouTube Users are Watching Less TV to Watch Videos Online; YouTube users also do not want to see advertisements before they watch videos (2007). *PR Newswire US*.

⁴ Becker, A., Grossman, B., Higgins, J. M., & Romano, A. (2006, 16 Oct.). Big Changes Ahead; How Google-YouTube will shake up the TV industry, . *Broadcasting and Cable*, 14.

⁵ O'Connell, D. (2007, 25 March). Big media's challenge to YouTube: Industry giants News Corp and NBC are ready to take on the pirates of Google's video-sharing site. *The Times (London)*.

⁶ In particular, see "The process of creative destruction" in Schumpeter, J. A. (1987). *Capitalism, socialism, and democracy* (6th ed.). London; Boston: Unwin Paperbacks.

And of course, some are excited by this challenge to broadcast media; many scholars have trumpeted YouTube's democratic nature. These works often draw, indirectly or explicitly, on the more utopian concepts in Manuel Castell's *The Rise of the Network Society* as well as Yochai Benchler's *The Wealth of Networks*. For example, Stephen Coleman argues that YouTube and other social networking sites enable greater participation in the democratic process. Similarly, James Trier discusses the pedagogical power of YouTube as a disruptor of the teacher/student hierarchy. And Axel Bruns has coined the term "produsage" for the participatory, open creative process so evident in websites such as YouTube. All of these scholars are defining what "Web 2.0" looks like and does.

Frankly, I don't argue against the prediction that YouTube (and computer/Internet based video in general) might replace or irreparably alter broadcast television. It may very well turn out to be a revolutionary, participatory and democratic form of media. However, I have my doubts, so what I would like to offer here is an alternative way of thinking about YouTube, and subsequently a different prediction or possible outcome, one that could come to pass if a particular subset of actors shaping this technology behave in the way I believe they will. In other words, this is my attempt to trouble the current discourse on YouTube. The approach I take is similar to Josh Greenburg, who studied the evolution of VCR technology and found that it is often not the users nor the large companies that drive technological change but the intermediaries – the distributors

⁷ Coleman, S. (2006). Digital voices and analogue citizenship: bridging the gap between young people and the democratic process. *Public Policy Research*, *13*(4), 257-261.

⁸ Trier, J. (2007). "Cool" Engagements With YouTube: Part 1. *Journal of Adolescent & Adult Literacy*, 50(5), 408-412.

⁹ Bruns, A. (2007). *Produsage: Towards a Broader Framework for User-Led Content Creation*. Paper presented at the Creativity & Cognition 6, Washington, DC.

and other middlemen – whom he calls the "mediators" of a technology. These mediators often get lost in the dominant discourses of technology, where grand battles are among user versus producer, and among competitive media outlets. ¹⁰

YouTube_As_Archive

My prediction is based on a close examination of the technical structure of YouTube, the legal agreements that enable it, and the actors who work with it, which includes the people uploading the videos to the bloggers and television networks that link to them. Given these contingencies, I argue that YouTube is an archive awaiting a curator. It is, as of now, a sort of digital *wunderkammer*, a place where many of the artifacts of digital empire sit on shelves, waiting to overwhelm a visitor.

I'd like to keep with the mission of "Media in Transition 5" and briefly look back at archives, which are efforts to organize and present information and have a long history. Clearly, YouTube is an archive. YouTube is not a peer-to-peer sharing program which links individual computers together in an ad hoc network; there are central servers which hold the video content that users have uploaded. As media and communications scholar Nick Couldry might put it, YouTube has a mythical "center," and web users go to that center to get content. However, it is not a broadcaster. YouTube does not produce any content of its own, only the frame in which content appears; all of the content is provided by third parties and is either intended for use on YouTube or is recycled from existing media content. In a way, pilgrims to YouTube's "center" are also producers at that center, much like those who visit local history museums might have some of their possessions placed in those museums someday.

¹⁰ Greenburg's doctoral dissertation, *Betamax to Blockbuster*, will be published by MIT fall 2007.

¹¹ See "Mediated Self Disclosure" in Couldry, N. (2003). *Media rituals : a critical approach*. London; New York: Routledge.

Given these facts, and the fact that YouTube has become a popular web site for anyone looking for particular news, entertainment, and music videos, I argue that the most adequate way to interrogate this object is as an archive, a sort of digital wunderkammer. This has several advantages over thinking of YouTube as merely a threat to broadcast media, or even as another node in the network. Considering YouTube as an archive helps explain the different terms of space and time in internet video. Again, instead of contrasting this with traditional television, we could discuss videos in terms of flows of people, much like they flow through a museum. Some might spend time reading all the captions; others may fly through; some might meet people there; but there is really little constraint. In studies of museum exhibitions, several researchers have found that, despite the best efforts of those who build the exhibitions, people rarely spend significant time on each object, and the paths that people take vary wildly.¹²

YouTube_as_archive also sheds light on labor and the role of the object in a collection. Scholars of archives argue that the archive is a place where information is purposely separated from value. In an archive, the object's original exchange value is often altered, creating possibilities for different exchanges. For example, Allan Sekula argues that "in an archive, the possibility of meaning is 'liberated' from the actual contingencies of use." Similarly, Geoffrey Bowker notes that "what is stored in the archive is not facts, but disaggregated classifications that can at will be reassembled to take the form of facts about the world." Bowker calls the current memory episteme

¹² See Serrell, B. (1997). Paying Attention: The Duration and Allocation of Visitors' Time in Museum Exhibitions. *Curator*, 40(2), 108-125 and Hein, G. (1998). *Learning in the Museum*. London: Routledge.

¹³ Sekula, A. (2004). Reading an archive: photography between labour and capital. In S. Hall & J. Evans (Eds.), *Visual Culture: the reader* (pp. 181-192). London; Thousand Oaks, CA; New Delhi: SAGE. 183. ¹⁴ Bowker, G. C. (2005). *Memory practices in the sciences*. Cambridge, Mass.: MIT Press. 18.

"potential memory," whereby narratives are created post hoc from ordered, taxonomically organized objects which are scattered across many physical storage sites. ¹⁵ While both Sekula and Bowker focus on slightly different aspects of the archive, the key congruency is the notion that an agent is required to "reassemble" the "possibilities of meaning" into what will become accepted as "facts about the world." In other words, labor is required to make meaning of the objects in an archive, which are themselves the products of someone else's labor. These agents – the mediators – are currently defining what the phenomenon "internet video" looks like; they are actively choosing from among myriad options and shaping this technology.

So Who is the Curator?

Of course, in an archive, the agent who is in charge is the curator. The curator's labor is needed to add cohesion and create "facts" from the collection of artifacts. I'll take a moment to outline all the duties of a curator:

- Acceptance (accessioning) of objects
- Proper storage of objects
- Categorization of objects
- Display of objects
- Legal disposal of objects

With apologies to anyone who works in a museum/archive, I will gloss many of these duties since my time in this talk is brief. However, one important side note – something we can tackle in the discussion – is the tension in museums between display and storage.

¹⁵ Ibid, 30.

If YouTube is an archive, who is responsible for all of these duties? I argue that, when we examine these duties *vis a vis* YouTube, we will find exactly where the current tension over its future (and legality) is coming from. It is the last two curatorial duties – display and legal disposal – which are at the heart of debates over YouTube.

First, I'll quickly note who handles the first three curatorial duties:

Acceptance of objects – YouTube is currently structured to accept just about any media object from users, as long as it is ten minutes or less. ¹⁶ Unless YouTube's programmers find a way to filter out copyrighted material or other content they do not want, ¹⁷ the duty of acceptance of objects is largely user-driven. Users are also able to remove videos they post. And of course, YouTube's administrators will remove videos when they fear lawsuits. However, even today, most of the work of acceptance and rejection is done by users the users who initially post the videos. A case in point would be the resurgence of <u>The Daily Show</u> and <u>Colbert Report</u> clips on YouTube, despite the recent Viacom lawsuit.

Proper storage – This is done by YouTube and the people who maintain their servers.This is much simpler and cheaper than the storage of historical artifacts!

Categorization of objects - Each and every object in YouTube is "tagged." This is a method of attributing key words to each video, which allows for their taxonomical organization. The most important aspect of tagging in YouTube is that it user driven and it does not rely on a predetermined vocabulary. ¹⁸ The users, not the administrators,

¹⁶ There is an exception to the ten minute rule: Director accounts, which allow for users to post longer videos as long as they adhere to stricture rules about copyright.

¹⁷ And of course, they are working to do exactly that.

¹⁸ Cameron, M., Mor, N., Danah, B., & Marc, D. (2006). *HT06, tagging paper, taxonomy, Flickr, academic article, to read.* Paper presented at the Proceedings of the seventeenth conference on Hypertext and hypermedia, Odense, Denmark.

supply the tags for each video. For example, if I uploaded a video that featured a man playing an electric guitar, I might tag it with "guitar, solo, electric, rock, Yngwie." Any user who searches for any one of those terms would come to my video, along with all the others that have related terms.

Most of the first three jobs are handled by users, with YouTube's administrators merely providing storage. While it is not a focus of this paper, I do find it intriguing that this is mainly unpaid labor. And, given that Google purchased it for \$1.64 billion, this is a lot of extracted surplus value from the users' labor!

However, the next two duties are where the current tension over YouTube's relationship to broadcast media lies:

Display of objects – At first glance, it would appear that this is driven by the viewer, who can search for videos or approach them via the "channels" feature. YouTube's software automatically presents "related videos," which are inviting to a viewer as she clicks through the website. Search engines also drive display; they work mainly on the tags supplied by the users. However, order of display is increasingly determined from without. This is mainly because navigating YouTube is a very time consuming (and time wasting) task. I argue that, since YouTube is an archive, navigating it from within is overwhelming, just as wandering the shelves of any archive is. It is simply not structured for casual browsing. Any of you who have gone trolling around in YouTube know that one easily and sometimes unknowingly move from a music video to a beheading to a pirated comedy sketch. The organization that stems from anything-goes tagsonomy fosters encounters with all of these videos, and all of them have equal weight within the structure of YouTube. Even with ratings and comments – and even with the

favoritism displayed by Google/YouTube towards sponsored videos and commercials - the fluidity of YouTube makes for a very overwhelming experience. In essence, YouTube is in general an archive and in particular a digital *wunderkammer*, a collection of wonders, gathered like tokens of empire and presented in order to overwhelm visitors.¹⁹

Legal Disposal – As is Viacom's lawsuit against Google makes clear, this is the other curatorial role that is up in the air, one that we will have to watch carefully. As of now, YouTube claims the right to "repatriate" copyrighted material if it is requested.²⁰ Obviously, this lawsuit will do much to determine the future of YouTube. However, I argue that since much of the most popular content on YouTube is user created, even the removal of all copyrighted material from YouTube would not hamper its function as an archive.

The New Curators of Display

Since the legal disposal function is still unresolved, I will focus on exhibition. Display of YouTube's objects is in flux. This is where, I believe, the future shape, appearance, and function of YouTube and internet video lies. The curators of display are small media (independent blogs) large media (traditional corporate media) and hybrids (new corporate formations). It is up to these mediators to define "internet video," just as professionalized curators defined the modern museum in the 18th century.

Bloggers

Since YouTube's technology allows anyone to host a video on her site, bloggers are becoming major curators to this archive. This allows for political, news, or sports

¹⁹ For good historical accounts of *wunderkammers*, see Kaufmann, T. D. (1978). Remarks on the Collections of Rudolf II: The Kunstkammer as a Form of Representatio. *Art Journal*, 38(1), 22-28. and Fletcher, J. (1979). Filippo Napoletano's Museum. *The Burlington Magazine*, 121(919), 649-650+659. ²⁰ O'Connell.

blogs to enhance their content (and advertising revenues) with video content on the cheap. Many of these blogs are relatively small, inexpensive, and independent affairs, run by only a handful of people. Nevertheless, popularity of blogs with even the smallest of staffs indicates their power as curators of YouTube's archive.

The diversity of blog content isn't surprising, but it is impressive. There are military blogs (Black Five); sports blogs (Need 4 Sheed, Detroit Bad Boys); news and political blogs (Framed, Informed Voters, America Blog, Shakesville); health (Living with Chronic Fatigue Syndrome, Women 4 Hope); and popular culture blogs (Confessions of a Jersey Goddess), to name but a few. 21 All of these use YouTube videos, often framing them with pictures and text.

Unlike what occurs within the YouTube itself, these videos aren't flattened objects, devoid of meaning. Unlike the *wunderkammer*, or even modern archives, the intention is not to overwhelm the visitor with the sheer number and diversity of seemingly unconnected and uncontextualized videos; one does not move from a music video to a webcam confessional to a reckless teenage stunt. Instead, all of the objects are framed and exhibited. These are curated exhibitions, with central organizing principles and clearly articulated purposes As curators of display, these bloggers do a particular job: they provide the same captioning, commentary, and context that visitors to a museum get.

In fact, these curators are doing visitors a service. While the technical requirements for hosting a YouTube video aren't great, finding and presenting YouTube videos is very labor intensive. Catherine Morgan, who hosts several blogs including *Informed Voters*, speaks about the work involved:

²¹ For a list of web addresses for these blogs, see the Appendix.

Finding both pictures and videos is very time consuming, I sometimes spend more time trying to find a picture or video that will best accompany my post, as I do on the post itself. I don't have a problem navigating within YouTube, only that I may navigate for a while to find a video that is just right.²²

Jim Trumm, who runs the political blog *Framed*, discusses several search strategies:

I usually find [videos] on other blogs... I have occasionally found them in two other ways... When I find a video I like, I will click on the name of the person who created it to see if he or she has done other things I might like. The other way is by a search on YouTube; for example, the last music video I posted was They Might Be Giants covering Phil Ochs. I found that because I was thinking that Phil Ochs' music is quite relevant to what's going on today, so I put his name into the search engine, played a couple videos, and eventually found one I liked.²³

Just like a scholar doing archival research to present ideas or exhibitions to the public, these bloggers act as curators to YouTube's archive. They scour the archive in search of the object that will fit the particular narrative they are constructing.

Large Media

On the other end of the new media/large media dialectic is traditional broadcast media. How does large media curate YouTube? Much of what is in the news relates more to the final curatorial duty, legal disposal of objects. Large, traditional media often work

_

²² Email interview conducted by the author.

²³ Email interview conducted by the author.

to close down distribution, analogous perhaps to the repatriation of Native American artifacts which is required by law in the United States.

However, traditional media such as the major broadcasting companies have stepped into curating the display of videos in the most dominating fashion by striking mutual deals with YouTube as well as co-branding with it. Two recent examples includes CBS's posting of NCAA basketball tournament clips to YouTube. The other is Al Jazeera, which has entered into a cobranding deal with YouTube, where the Middle Eastern news company will place short clips on YouTube that link back to their main website. This is an effort to increase awareness of Al Jazeera English. With their promise to share advertising revenue, these curators have incredible influence on the future direction of YouTube.

In an interesting twist, a Viacom subsidiary actually uses YouTube videos. *The Best Week Ever*, a show on Viacom's VH1, has a blog which uses YouTube (along with other Internet video sources) to discuss popular culture. In some cases, the YouTube videos could be argued to violate copyright protections. In others, the videos are (for lack of a better word) amateur. On a theoretical level, this use of the labor of home-based media producers by large companies might help foster the "creative class" mythology of late capitalism, where anyone with a camera and a personality can "make it." On a legal level, though, the fact that Viacom uses YouTube in one place and is suing them in other belies the complexity and expediency of copyright law in capitalism.

Hybrid Sites: Iraqslogger and Talking Points Memo

Finally, the curatorial mediators that I find most compelling and theoretically rich are new media ventures such as Iraqslogger and Talking Points Memo. Iraqslogger

represents a very powerful curator for this archive. According to their website, their goal is to be the "world's premier Iraq-focused Web site. The free 24/7 up-to-the-minute news service provides an unrivaled combination of exclusive and third party reporting and analysis on Iraq."24 To that end, they report on stories often left out in more traditional media outlets; simply put, they devote all of their space to their one subject, a luxury that television news or newspapers cannot afford. They conduct polls of the Iraqi population, study international coverage of the war, and connect military events to local and national Iraqi political events. Clearly, this is an entrepreneurial venture which, as we will see, counts as part of its capital videos on YouTube.

Iraqslogger uses many YouTube videos in their reporting. The most common use is in a section titled "Viral Video," which features footage culled from YouTube and other video sites. These videos are not news reports per se, but are part of Iraqslogger's coverage of the cultural impact of the war. They include political cartoons and home videos, either of American soldiers or Iraqi civilians. Less common are videos that supplement or drive hard news, but these videos appear in about one out of every ten stories. Usually these hard news videos are militia propaganda, American soldiers in action, or other now all too familiar scenes from the war, and are supplemented with a news story.

Similarly, <u>Talking Points Memo</u> and its sister site <u>TPM Muckracker</u> use YouTube videos to supplement their text and new media coverage of Washington D.C. politics. Their videos are typically clips from CSPAN, again framed with commentary and text. Like Iragslogger, Talking Points Memo is a venture looking to capitalize upon the often unpaid labor of the users of YouTube.

²⁴ http://www.iraqslogger.com/index.php/category/8/AboutUs

In fact, given all that <u>Iraqslogger</u> and <u>Talking Points Memo</u> have done to use the free labor of YouTube users, it is surprising that there aren't more sites like them. The recent copyright issues and Viacom lawsuit are most likely factors; perhaps the risk of lawsuit or the uncertainty of YouTube's future are making would be website builders nervous. However, <u>Digitizing the News</u>, Pablo Boczkowski's study of digital newspapers might have another, culturally based answer: news companies and their emulators have considered their role as gatekeepers and verifiers of information as inviolable, and they often prefer not to rely on outside sources of material, including home videos and consumer's comments. ²⁵ Regardless, I think that more sites such as these mid-sized companies are in our future.

Conclusion

Of course, predicting the future of any technology is risky (and paradoxically, risk free – no one today can prove me wrong!) However, allow me to make some sweepingly general predictions about YouTube. While YouTube's motto, "Broadcast Yourself" is a promise of a democratic form of media, its structure as an archive without a curator actually sets the stage for large and mid-sized media corporations and entrepreneurs to step into the curatorial role and decide how each object in YouTube's archives will be presented to users. The consideration of YouTube as threat to traditional media might be warranted, but I argue that the future is less about the creative destruction of traditional media; instead, it is a future of history repeating itself, another instance of capitalism's unique abilities to discover and exploit resources. As more and more "curators" see the vast archive of the products of free labor on the internet, the competition for the time and

²⁵ See the concluding chapter of Boczkowski, P. J. (2004). *Digitizing the news : innovation in online newspapers*. Cambridge, Mass.: MIT Press.

attention of an audience – and therefore advertising revenue – will heat up. However, factor in intellectual property laws and billion dollar corporations and there is no doubt, at least in my mind, that large media oligarchies will eventually merge and form to curate this digital *wunderkammer*.

Appendix: Websites Mentioned in this Paper

America Blog - http://americablog.blogspot.com

Black Five - http://www.blackfive.net

Confessions of a Jersey Goddess - http://jerseygoddess.blogspot.com

Detroit Bad Boys - http://www.detroitbadboys.com

Framed - http://www.framed.typepad.com

<u>Informed Voters</u> – http://informedvoters.wordpress.com

<u>Iragslogger</u> - http://www.iraqslogger.com

<u>Living with Chronic Fatigue Syndrome</u> - http://www.livingwithcfs.wordpress.com

Need 4 Sheed - http://www.need4sheed.com

Shakesville - http://www.shakesville.com

<u>Talking Points Memo</u> - http://www.talkingpointsmemo.com

The Best Week Ever - http://www.bestweekever.tv

<u>TPM Muckracker</u> - http://tpmmuckracker.com

Women 4 Hope - http://www.women4hope.wordpress.com

Bibliography

Becker, A., Grossman, B., Higgins, J. M., & Romano, A. (2006, 16 Oct.). Big Changes

Ahead; How Google-YouTube will shake up the TV industry, . *Broadcasting and Cable*, 14.

- Boczkowski, P. J. (2004). *Digitizing the news : innovation in online newspapers*.

 Cambridge, Mass.: MIT Press.
- Bowker, G. C. (2005). *Memory practices in the sciences*. Cambridge, Mass.: MIT Press.
- Bruns, A. (2007). *Produsage: Towards a Broader Framework for User-Led Content Creation*. Paper presented at the Creativity & Cognition 6, Washington, DC.
- Cameron, M., Mor, N., Danah, B., & Marc, D. (2006). *HT06*, tagging paper, taxonomy, Flickr, academic article, to read. Paper presented at the Proceedings of the seventeenth conference on Hypertext and hypermedia, Odense, Denmark.
- Coleman, S. (2006). Digital voices and analogue citizenship: bridging the gap between young people and the democratic process. *Public Policy Research*, *13*(4), 257-261.
- Couldry, N. (2003). *Media rituals : a critical approach*. London ; New York: Routledge.
- Fletcher, J. (1979). Filippo Napoletano's Museum. *The Burlington Magazine*, *121*(919), 649-650+659.
- Hein, G. (1998). Learning in the Museum. London: Routledge.
- Holson, L. M. (2007, 15 Jan.). Hollywood tries to decide if YouTube is friend or foe.

 *International Herald Tribune, p. 1.
- Kaufmann, T. D. (1978). Remarks on the Collections of Rudolf II: The Kunstkammer as a Form of Representatio. *Art Journal*, *38*(1), 22-28.
- Morgan, C. (2007). Interview conducted by author.
- Noguchi, Y., & Goo, S. K. (2006). To the Media, YouTube Is a Threat and a Tool. Washington Post, p. D01.

- O'Connell, D. (2007, 25 March). Big media's challenge to YouTube: Industry giants

 News Corp and NBC are ready to take on the pirates of Google's video-sharing site. *The Times (London)*.
- Sekula, A. (2004). Reading an archive: photography between labour and capital. In S. Hall & J. Evans (Eds.), *Visual Culture: the reader* (pp. 181-192). London; Thousand Oaks, CA; New Delhi: SAGE.
- Serrell, B. (1997). Paying Attention: The Duration and Allocation of Visitors' Time in Museum Exhibitions. *Curator*, 40(2), 108-125.
- Trier, J. (2007). "Cool" Engagements With YouTube: Part 1. *Journal of Adolescent & Adult Literacy*, 50(5), 408-412.
- Trumm, J. (2007). Interview conducted by author.