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The Eradication of Memory: Film Adaptations and Algorithms of the Digital

by ANNA WESTERSTÅHL STENPORT and GARRETT TRAYLOR

Abstract: This article analyzes how film adaptations and remakes exemplify and illustrate what the authors argue have recently emerged as two dominant conceptual frameworks for understanding cultural representation and digital information organization: an accelerated techno-historical forgetfulness, or an increasingly rapid cultural half-life of ideas, and theories of database logic and practices of digitally networked search culture. Discussing these frameworks with respect to film adaptation and remake theory and history, we draw on the global phenomenon of Stieg Larsson's crime-fiction Millennium trilogy and especially the two film versions of *The Girl with the Dragon Tattoo*, by Niels Arden Oplev (2009) and David Fincher (2011), respectively.

When David Fincher's feature *The Girl with the Dragon Tattoo* was released as "the feel-bad movie of Christmas" in December 2011, it represented the culmination of an unprecedented rise of a global popular culture phenomenon.¹ The fact that a major Hollywood studio (Columbia Pictures; distribution by Sony, international licensing by MGM), a respected director, and an A-list cast (Daniel Craig, Rooney Mara) would come together to convey a gruesome story of corruption and sexualized violence in contemporary Sweden signals both the worldwide appeal of Stieg Larsson's Millennium crime-fiction trilogy and changes in the pace, scale, and content of film adaptations and remakes.² Since its original publication in Sweden, the fiction trilogy has been translated into

1 The "feel bad" teaser trailer is discussed in an article by Ben Child, "David Fincher Goes Swede on the Girl with the Dragon Tattoo," *The Guardian*, June 1, 2011, <http://www.guardian.co.uk/film/filmblog/2011/jun/01/david-fincher-girl-dragon-tattoo>.

2 Stieg Larsson's Millennium series includes the following novels: *Män som hatar kvinnor* (Stockholm: Norstedts, 2005), *Flickan som lekte med elden* (Stockholm: Norstedts, 2006), and *Luftslottet som sprängdes* (Stockholm: Norstedts, 2007). The trilogy has been published in the United States under the following titles, all translated by Reg Keeland: *The Girl with the Dragon Tattoo* (New York: Vintage, 2008), *The Girl Who Played with Fire* (New York: Vintage, 2009), and *The Girl Who Kicked the Hornets' Nest* (New York: Vintage, 2010). Swedish publisher Norstedts has hired author David Lagercrantz to write a fourth book in the series, scheduled for publication in 2015.

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forty-three languages and has sold more than seventy-three million copies worldwide.³ A Scandinavia-produced film trilogy based on the series has been distributed globally, and millions have seen the American film remake of *Men Who Hate Women* (*Män som hatar kvinnor*, the original title of Larsson's 2005 novel and Niels Arden Oplev's 2009 film; the English translation of the novel and film title is *The Girl with the Dragon Tattoo*).⁴ This quick succession of alternate versions is significant on a number of levels. In terms of manifest content, the remade title transfers agency from men to an attribution of a female, and from adulthood to infantilization. As with other European film titles translated into an Anglophone context (Lukas Moodysson's 1998 *Fucking Åmål* becoming *Show Me Love*, for example), the modification reflects commercial marketing demands but also, we argue, situates the phenomenon within digitally networked, search, and database culture. "Dragon tattoo" is much more search specific than the generic nouns of the Swedish title; similarly, in a search culture, nouns and adjectives (which are inherently objects and descriptors) retrieve results better than verbs.

Reflecting a globalized mass-media entertainment context—and a transnational and internationally connected Scandinavian film and book publishing industry—*The Girl with the Dragon Tattoo* is an artifact of the early twenty-first century. It articulates on a broader scale the function and process of adaptations as figurations of digitality. In the current media landscape, viewing screens have proliferated, digital distribution (on-demand streaming and downloading) has accelerated, and appetite for (individualized) moving-image content has increased around the world. Content migrates from, to, and between genre, medium, and device to what appears to be an unprecedented extent. Literary adaptations and film remakes, while occupying established "old" media forms (novels or cinema), are not divorced from the digital but in fact concretize how digitally networked media, an acceleration of information availability processed through search actions, and database cultures function and how their critical significance can be expressed. Participatory and social media cultures that generate new versions of stories and images for immediate distribution and storing on the Internet are clear examples of these changes; a proliferation of official commercial adaptation and remakes that involve the buying and selling of intellectual property rights is another example. These adaptations and remakes also constitute

3 Figures on worldwide book sales and translations received from Åsa Bergman, Norstedts, Sweden, on May 29, 2013, via e-mail to the authors. See also Wilda Williams, "Stieg Larsson Stats: By the Numbers," *Library Journal*, June 3, 2011, <http://reviews.libraryjournal.com/2011/06/books/stieg-larsson-stats-by-the-numbers/>.

4 The phenomenon, the books, and the films have been extensively analyzed, mostly from ideological, cultural, and feminist perspectives. Several recent edited volumes (with covers that echo the design and layout of the US book covers) include Donna King and Carrie Lee Smith, eds., *Men Who Hate Women and Women Who Kick Their Asses: Stieg Larsson's Millennium Trilogy in Feminist Perspective* (Nashville: Vanderbilt University Press, 2012); Robin S. Rosenberg and Shannon O'Neill, *The Psychology of the Girl with the Dragon Tattoo: Understanding Lisbeth Salander and Stieg Larsson's Millennium Trilogy* (n.p.: Smart Pop, 2011); and Eric Bronson, ed., *The Girl with the Dragon Tattoo and Philosophy: Everything Is Fire* (Cambridge, UK: Wiley-Blackwell, 2011). On the films, see, for example, Maaret Koskinen, "Tracing Difference—Or What Travels (Not So) Well: David Fincher's *The Girl with the Dragon Tattoo*," in *Directory to Swedish Cinema*, ed. Marcelline Block (London: Intellect Press, forthcoming); see also Kim Newman, "The Ice Girl Cometh," *Sight and Sound*, February 2012, who makes a number of comparisons between the numerous versions of *Men Who Hate Women / The Girl with the Dragon Tattoo* (Larsson's 2005 novel, Oplev's 2009 film, and Fincher's 2011 film).

distinct forms of global cultural transfer, organize information in particular ways, and historicize the contemporary and recent past.

As adaptations and remakes proliferate and accelerate in the digital, multimedia context, once-dominant “fidelity debates” about the value and merit of adaptations and film remakes have been demoted in favor of other interpretive paradigms.⁵ Historically, remaking is not a new phenomenon to film, yet it is often regarded as lesser or as a cheap tactic for commercial gain rather than as a culturally generative practice.⁶ But as Linda Hutcheon argues in *A Theory of Adaptation*, shouldn’t deconstructivist, postcolonial, and feminist theory from the 1960s onward have taught us not to assume that to be “second is not to be secondary or inferior; likewise, to be first, is not to be originary or authoritative”? And that “multiple versions exist laterally, not vertically”?⁷ Along these lines, as Thomas Elsaesser argues, film studies has always occupied a place of tension within this debate, as “cultural production is always ‘post-production,’ the appropriation and transformation of already existing texts, discourses and cultural ready-mades.”⁸ In fact, a digitally networked media context precipitates new cultural, economic, and aesthetic configurations of remakes and adaptations: “Digital is more than a platform; it is changing the context in which films, for instance, are made, distributed, and consumed.”⁹ Part of what this article seeks to do is to move away from discussions of differences between adaptation and remake, what Elsaesser calls a general trend of postproduction, since, within a digitality paradigm, terms and taxonomies become mutable. The terms can be provocative, but in this context we do not see them as definitive. For those interested in definitive taxonomies of remakes, see further discussion near the conclusion and information within the footnotes.

In addition, we draw on one primary example, *The Girl with the Dragon Tattoo*, not to undertake a cross-cultural analysis of differences between the Swedish and American versions (such discussions tend to move toward fidelity argumentation) but to make the case that within a digitality paradigm, adaptations and remakes have a global reach. One could easily draw on remakes of Japanese horror films such as *Ringu* (Hideo Nakata, 1998) and its American counterpart *The Ring* (Gore Verbinski, 2002), which focus

5 Many scholars have discussed the pitfalls and reductivity of this paradigm, and adaptation studies generally have moved away from that interpretive focus, as evidenced by the work of the following: Linda Hutcheon, with Siobhan O’Flynn, in *A Theory of Adaptation*, 2nd rev. ed. (London: Routledge, 2012); Robert Stam, *Literature through Film: Realism, Magic, and the Art of Adaptation* (London: Wiley-Blackwell, 2004); Constantine Verevis, *Film Remakes* (Edinburgh: Edinburgh University Press, 2005); Katherine Loock and Constantine Verevis, eds., *Film Remakes, Adaptations and Fan Productions: Remake/Remodel* (London: Palgrave Macmillan, 2012); and many of the publications in *Journal of Adaptation in Film and Performance*. For an innovative approach to how literature and poetry travel across media and screens, see Kiene Brillenburg Wurth, ed., *Between Page and Screen: Remaking Literature through Cinema and Cyberspace* (New York: Fordham University Press, 2012).

6 Lucy Mazdon further critiques this denigration of remaking as an exploitative commercial practice in her book *Encore Hollywood: Remaking French Cinema*, stating: “[B]y ignoring the pre-history of the remake in this manner, critics seem to suggest that it is a new phenomenon, a fresh onslaught upon French culture on the part of Hollywood. Thus it is inscribed in a general history of ‘American cultural invasion’ while abstracted from its particular past in order to lend it increased significance.” Lucy Mazdon, *Encore Hollywood: Remaking French Cinema* (London: British Film Institute, 2000), 51.

7 Hutcheon, *Adaptation*, xiii.

8 Thomas Elsaesser, *The Persistence of Hollywood* (New York: Routledge, 2012), 27.

9 Hutcheon, *Adaptation*, xxi; see also O’Flynn, epilogue to Hutcheon, *Adaptation*, 179–209.

on a cursed videotape. The conceit of the horror is that individuals who view the tape have seven days to copy it and pass it on, or they will be cursed to die. Reproduction and reach of an image within a constrained temporal turnover in this case is essential. In this sense, we also find “reboot,” the current operative moniker for American or Hollywood-to-Hollywood remakes, to be suggestive (one example is the recent rapid succession of film versions of *Spider-Man*). “Reboot,” of course, is a digitality term in and of itself, which partly helps us move away from an originality-fidelity paradigm.¹⁰ The term stems from restarting a computer when it has been running for too long and is no longer functioning properly. This necessity simultaneously implies that the *original* instance was a failure and constitutes an erasure of the previous iteration, thus setting the stage for an infinitely repeatable function. Any subsequent version thereby gains equal value to the previous version, as it exists on equal footing within a corpus of potential origins. Through this set of examples we mean to open up the terminology of adaptations and remakes, whether transcultural or not, and to show how this practice fits with the digitality context paradigm. The term “reboot” further indicates the flexibility and mutability of the boundaries of film, digitally networked content, and popular culture; it encompasses the significance of computerized conceptualizations for cross-media delivery.

Specifically, film adaptations and remakes exemplify and illustrate what in the twenty-first century have emerged as two dominant conceptual frameworks for understanding cultural representation and digital information organization. We call the first an accelerated techno-historical forgetfulness, or an increasingly rapid cultural half-life of ideas, and the other we situate with respect to theories of database logic and practices of digitally networked search culture. Indeed, we posit that film remakes and adaptations, as established forms of cultural representation that mobilize billions of dollars every year in the global entertainment industry complex, are especially relevant to this inquiry. Fiction film and serials are alive and well around the world, distributed through innumerable channels (some legal, others not), and constitute an important representational storytelling form with global reach. What stories, we ask, does the adaptation and film remake paradigm tell us about contemporary digitally networked information culture?

The practice, process, and product of adaptation and film remakes, we argue, help concretize and conceptualize the ways a digitally networked and technologically mediated society amasses, organizes, and accesses information. We build on library and information science theory, including that of Jean-Baptiste Michel’s massive data corpus investigations and Lev Manovich’s concepts of indexicality and database logic. We thereby use now-dominant practices of digital information retrieval and storage that challenge a Western intellectual tradition premised on chronology, sequentiality, and recollection. Current adaptation practice also helps us challenge a pervasive and positivist digitality ideology that postulates infinite information proliferation, access, and retrieval in a digital sphere: we show here how this context also makes us forget. Within this inquiry we draw on *The Girl with the Dragon Tattoo* both as a media and

10 The term “reboot” is also often defined within specific taxonomies referring to comic books and comic-book films: for further discussion of use within this context, see works by William Proctor. In any case, we find the term provocative.

cultural phenomenon and for its explicit content-level address to digitality, that is, to all the implications of digital culture existence.

Releasing Salander: Accelerated Techno-Cultural Forgetfulness and the Half-Life of Ideas. To consider what adaptations adapt and remakes remake, why this matters, and what the metaculture around this phenomenon signifies, we introduce the concept of accelerated techno-cultural forgetfulness. This concept helps explain how remakes function within a context of increasingly expanding information availability and preservation. As such, remakes fulfill two primary functions. First, they are mnemonic devices for the recollection of previous artifacts, that is, mnemonic devices integral to a novelty and Internet search culture in which more and more audiovisual representational figurations are available through digital networks (e.g., film, video, television, YouTube, web). Second, remakes function as preservative, or archival, markers by providing a direct link to previous domain examples. Remakes thereby serve the functions of both cultural memorialization and information preservation.

We derive the concept of accelerated techno-cultural forgetfulness, or the cultural half-life of ideas, from quantitative research into large-scale bibliographic metadata, a core part of digital humanities scholarship. In the groundbreaking article “Quantitative Analysis of Culture Using Millions of Digitized Books,” Jean-Baptiste Michel and colleagues document through quantitative reasoning, drawing on more than five million books published between the 1500s and 2011, that as information availability increases, recollection decreases.¹¹ They investigate the staying power of terms within a corpus of texts over time and are able to show that as book-printing technology has accelerated and more books are available, each individual work becomes less known or remembered.¹² By extension, we argue that an accelerating half-life of ideas—indicating the rate of forgetting, not pertaining to the quality of ideas—is a defining aspect of Western modernity, and therefore has implications extending far outside the world of books, including phenomena such as film remakes. Drawing on the same data set, Michel and colleagues show that fame may come more quickly and reach a larger audience, but that it is more short-lived today than it was 150 years ago.¹³ Their research thereby affirms what modernity and modernism scholars of film and literature have long emphasized in qualitative studies, namely, as we get closer to the current moment, “there is a greater focus on the present.”¹⁴ One of the most remarkable aspects of this study is that the authors help quantify and support the anecdotal view of many humanities scholars and nonscholars: “We are forgetting our past faster with each passing year.”¹⁵ What Michel’s innovative work supports is that what we call techno-cultural forgetfulness, is increasing, that is, the cultural half-life of

11 Jean-Baptiste Michel et al., “Quantitative Analysis of Culture Using Millions of Digitized Books,” *Science* 331 (2011): 176–182.

12 *Ibid.*, 177.

13 *Ibid.*, 180.

14 *Ibid.*, 179.

15 *Ibid.*

ideas, fame, or societal significance, is decreasing. With more information available, we forget more quickly.

The multiple versions of *The Girl with the Dragon Tattoo*, including film remakes, help illustrate the workings of accelerated techno-cultural forgetfulness. The numerous trailers released for the US version are illustrative. The first “leaked” teaser version released on May 30, 2011, labels it “the feel-bad movie of Christmas,” clearly alluding to the fact that the plot and theme would be known to movie audiences. A subsequent version compiled closer to the premiere and listed as the official trailer by Sony Pictures is a fast-paced cross-cut montage of scenes, without dialogue, operating on the assumption that the characters and milieus would be familiar to audiences. Held together by Trent Reznor and Atticus Ross’s cover of Led Zeppelin’s “The Immigrant Song,” the opening soundtrack to the film, the trailer ends with full-screen capitals, intercut with snow-covered grounds and distinctive bluish-gray tints from the wintry weather and low sunlight as we move closer and closer to the Vanger family’s main residence: “FROM THE INTERNATIONAL BEST-SELLING TRILOGY / THE GIRL WITH THE DRAGON TATTOO / EVIL SHALL WITH EVIL BE EXPELLED.” The genre packaging of the US version in marketing material and trailers is different from the Swedish: it is formatted less as a plot-driven procedural murder mystery and more as a character vehicle for Craig and Mara, while engaging visual characteristics of the horror genre. This is especially evident in some of the final shots of the trailer, when a “security camera” recording of Salander’s face (pale skin, hollow eye sockets, vacuous pupils) is interspersed with the previous wording to suggest that the film operates in an effectively global horror or zombie register. What the trailer transitions indicate, furthermore, is that this is a remake that draws very clearly—indeed depends on—previous iterations of the phenomenon, and that it has an international pedigree. The quick succession of artifacts supports our notion of accelerated techno-cultural forgetfulness. The US remake exists most fully in the world when it is explicitly connected to a predecessor and a global context.

The release and distribution history of the films support the thesis of an accelerated half-life of ideas. Oplev’s *The Girl with the Dragon Tattoo* (YellowBird Productions, Nordisk) was released in theaters in Sweden on February 27, 2009 (the DVD in late August 2009), and in US theaters on March 19 the following year, distributed by independent foreign film distributor Music Box (DVD released July 6, 2010).¹⁶ Media buzz about the film included plans for a US remake, which was underway even before the film had opened in Sweden. Oplev’s version was indeed marketed in the United States on the premise that it would be remade. YellowBird producer Søren Staermose served as executive producer for the American production, connecting the two throughout the process and working closely with US producers Scott Rudin and Ceán Chaffin. This included facilitating Fincher’s version being not only set but also largely shot in Sweden (this was the largest foreign film production in Sweden, ever, and one of the largest, period). Obviously, the American version sought to capitalize on the popularity of the Millennium series of crime novels, which had sold extremely

16 Information on sales, release dates, and distribution specifics in this and the subsequent paragraph is derived from easily accessed public websites such as Box Office Mojo, IMDb, *Svensk Filmdatabas* (www.sfi.se), and Wikipedia.

well in the United States, but the producers also conceived, timed, and marketed the US release in very close connection with the Scandinavian film version.

Released in thirty-four theaters in the United States during a mid-March opening weekend, Oplev's *Girl* landed an initial sales rank of number 23. This is extraordinary for a Scandinavian film in the United States but arguably quite low when considering the impact of the Millennium series on the US book market. While a high-concept, high-production-value, and popular film in the Scandinavian context (1.8 million tickets sold within thirty days, a Nordic record, though the age limit of fifteen and up limited potential sales), with a \$13 million dollar budget Oplev's *The Girl with the Dragon Tattoo* is effectively a low-budget film in the US context. Similarly, when the film travels across the Atlantic, it arguably transforms into an upmarket art film, screening primarily in urban centers and college towns rather than ubiquitously at suburban multiplexes. At its widest release, however, the film reached 202 theaters, with nearly continuous screenings across the country through early February 2011. This long-tail screening legacy indicates the broad appeal of the film within the constraints of commercial cinema release and helped keep it in the cultural present for a long time, albeit in scattered markets. Fincher's \$90 million remake was already in production by the time of the US premiere, which further indicates the continuity of the phenomenon. Fincher's version opened nearly simultaneously all over the world and was screened across 2914 US theaters during its opening weekend, reaching number 3 in sales rank.

Simultaneous cinema release, as opposed to staggered distribution, is a relatively new phenomenon and directly reflects a digitally networked media landscape that privileges simultaneity and immediacy over temporal longevity and extension. Subsequently in theatrical release for just over three months, *The Girl with the Dragon Tattoo* closed on March 22, 2012. More expensive, and generating more in total global sales than the original, it also had a shorter life span. Similarly, the DVD was released in the United States within three months (March 20, 2012), with a subsequent release in Sweden a month later (April 25, 2012). In a moment defined by accelerated techno-cultural forgetfulness, this release pattern and artifact iteration makes perfect sense. What this shows is an acceleration of artifact iteration; each additional version is released more quickly and is in circulation for a shorter length of time.

While the law of diminishing returns has long affected the release of sequels and merchandise in the movie industry, which suggests that it is better to capitalize on the phenomenon while it is fresh, we want to point to some actual differences in how digitality promotes globalization. The media landscape of digitally networked distribution is different not only in terms of how it accelerates proliferation and simultaneity but also in that it functions this way *because* of media industry globalization. To give a counterexample, when *Three Men and a Baby* (Leonard Nimoy, 1987) was released in America, its connection to the French precursor *Trois hommes et un couffin* (Three Men and a Cradle; Coline Serreau, 1985) was downplayed and the US version posited as unique and "American."¹⁷ Conceiving of remakes as closely connected in time to previous iterations, and as embracing a global context, is distinctive of a digitally

17 See Mazdon, *Encore Hollywood*, 51–61, for an insightful analysis of this film and the US remake.

networked cultural context with an increased rate of techno-cultural forgetfulness. Without a globalized digital context, the American audience did not have an awareness of the French precursor to relate to.

Remakes, especially technology-dependent genre vehicles such as crime, action, and science fiction, often reflect advances in media and technology that have a bearing on the diegesis of the film. New variations of digitally networked communication devices—from fax machines and desktops to cell phones, embedded chips, and wearable computers like Google Glass—are mobilized to help characters solve crimes or combat enemies. The acceleration of technological innovation and commercially motivated ideologies of inherent obsolescence thus also influence assumptions of what devices characters need to operate appropriately within their diegetic context. This kind of technology-dependent rationale for remakes supports our notion of accelerated techno-historical forgetfulness: the gadgets mobilized in service of the narrative may appear new and original, yet they fully conform to patterns according to which previous technologies have been made to function, so that the new technology used in the remake in fact functions as a mnemonic and archival device harking back to past versions. Similarly, the production specifics of remakes reflect advances in technology, such as Fincher's version being filmed with a state-of-the-art Red Epic digital camera rather than the Arricam LT of Oplev's version (which, while also being a top-of-the-line camera, is analog), though both versions used many of the same lenses.¹⁸ The Red Epic digital camera allows for easier image manipulation than its analog counterpart. That "the editor has more control over the final product output due to the use of new technologies" is evidence that editing (manipulation) is the emphasis of modern production rather than an originality paradigm of capture and record.¹⁹ The captured image is no longer expected to be the final image, and the technologies support this mode of thinking.²⁰

The international and accelerated release pattern of Oplev's and Fincher's versions, in contrast, exemplify the decreasing half-life of ideas. The US version reached more people, making it, to recall Michel's terminology, more famous for a shorter period of time, while the Swedish version had longer staying power. The phenomenon thereby conforms to a pattern of increasing techno-cultural forgetfulness. The different iterations of *The Girl with the Dragon Tattoo* function as storehouses of cultural memory; each iteration serves as a mnemonic marker of both the previous instance and the set

18 Information on technical specifications from the Internet Movie Database (IMDb), for Oplev's *The Girl with the Dragon Tattoo* (2009), "Technical Specifications, IMDb, n.d., http://www.imdb.com/title/tt1132620/technical?ref_=tt_dt_spec; and for Fincher's *The Girl with the Dragon Tattoo* (2011), "Technical Specifications," IMDb, n.d., http://www.imdb.com/title/tt1568346/technical?ref_=tt_dt_spec.

19 Lev Manovich, "Digital Cinema and the History of a Moving Image," in *The Film Theory Reader: Debates and Arguments*, ed. Marc Furstenau (London: Routledge, 2010): 245–253, 249.

20 This is also true regarding remastered releases of films, such as the *Star Wars* trilogy (George Lucas, 1977; Irvin Kershner, 1980; Richard Marquand, 1983), rereleased in the 1997 special edition as a reminder to audiences of the *Star Wars* cultural artifacts in preparation for subsequent releases. The three "prequel" films (1999, 2002, and 2005) were also released using state-of-the-art computer-generated imagery and production techniques, which constituted an update of analog effects such as models, puppetry, and costuming used in the original films. In terms of reboot and sequel examples, we also have films such as *Tron* (Steven Lisberger, 1982) and *Tron: Legacy* (Joseph Kosinski, 2010), the latter of which was a sequel and used 3D technology to treat essentially similar material.

of artifacts as a group. They are simultaneous, not separate. The chronology of the remake is mutable and indicative, as the half-life of ideas joins digitally networked media culture and globalization ideology.

A close examination of book-publishing trends and Amazon's best-seller rankings further illustrates half-life filtering through a particular set of print artifacts. That is, the rankings show how newness can affect our interest in materials, diminishing our interest in the old. Amazon rankings are recalculated in tiers, with numbers 1–10,000 recalculated every hour, 10,001–110,000 every day, and more than 110,001 every month. The lower the Amazon sales rank, the better the sales.²¹ Though containing the same content, hardcover, paperback, rereleased editions, and e-book editions are usually ranked separately. This allows us to see cultural half-life in action, as the newer releases of materials grab more attention: these are the versions purchased and hence cataloged. Some instances may be accounted for by an edition going out of print and a reader simply no longer being able to purchase the book, but that is a different case entirely. When we look at the most recent mass-market paperback edition of *The Girl with the Dragon Tattoo* (November 2011), we see that it is ranked at 2,820. Older editions are ranked less favorably (they do not sell as well). In November 2012, author Denise Mina released the first volume in a series of graphic novel adaptations of the work. This adaptation became recognized as a *New York Times* best seller, and Amazon ranks it at 49,419 in books. In its digital format, more than one million Kindle e-books were sold, a first for e-books. Across all formats the Millennium trilogy has sold more than seventeen million copies in the United States alone.²² It is a popular property, and that popularity propels it against the half-life decay of cultural awareness, but only as it is rereleased in new editions and into new formats.

As the examples outlined here suggest, adaptations and remakes in their most basic form remake history through particular forms of media technology, thereby also technologizing history and historicizing technology. Through remakes and adaptations, we thus encounter a particular mode of forgetfulness. Yet—and this is part of the question we want to pose about the phenomenon of remakes—is it the case that we are indeed growing more forgetful, as in the sense of a half-life (a logarithmic function), or are we producing more than we can remember (as an exponential function)? Exponents and logarithms, after all, are inverse functions.

If a novelty culture produces information at an exponential rate, then it follows that the objects within this corpus would undergo an inverse decay. At the same time as we are able to produce more information, such as adaptations and remakes across genres, platforms, and media, we are also able to preserve more. The material is not what is lost in decay; it is the cultural currency and attention given to what is in the materials produced. The continued popularity and prevalence of adaptations and remakes thus illustrate key components of contemporary digital media and information theory: is it a matter of information overload or filter failure, in the sense that nothing disappears from what is searchable but we cannot devise filters that locate the information we need?

21 "Inside the Amazon Sales Rank," *Rampant TechPress*, n.d., http://www.rampant-books.com/mgt_amazon_sales_rank.htm.

22 Of the sixty million copies sold worldwide. See Williams, "Stieg Larsson Stats."

Similarly, how do we, through remakes, engage definitive aspects of digitality such as copyright ideology and information mutability? Do adaptation procedures in a time of accelerated techno-cultural forgetfulness perhaps point to a return to how the creative process worked before copyright statutes came into play on a large scale, originating around the time of mass-produced book printing? Are not Greek and Roman ancient myths, medieval morality plays, and Renaissance drama (and Shakespeare thereafter) about constant adaptation, wherein the transfer of tropes, figures, themes, and plot is seen not only as unproblematic but, indeed, as the foundation of any compelling storytelling?²³ Historicizing accelerated techno-historical forgetfulness thereby helps counter an argument that digitality paradigms are completely new or constitute a radical break with past practices.

“All media were once new media,” media historians Lisa Gitelman and Geoffrey Pingree argue in “What’s New about New Media?” to help counteract naïve but pervasive assumptions in new media studies that are “heavily influenced by experiences of digital networks and the professional protocols of the social science of communications.”²⁴ Yet—and this is what we find so useful with Gitelman’s and Pingree’s framework—there are certain moments when new media orders “are not yet accepted as natural, when their own meanings are in flux. At such a moment, we might say that new media briefly acknowledge and question the mythic character and the ritualized conventions of existing media, while they are themselves defined within a perceptual and semiotic economy that they then help to transform.”²⁵ We argue that adaptations and remakes—as old and established media—help exemplify exactly such a transitional moment. This conception of newness, of challenging the very assumption of technologically mediated novelty, thus develops Walter Benjamin’s seminal arguments on the auratic work of art in “The Work of Art in the Age of Mechanical Reproduction,” by which we would need to question whether a remake correlates to a previous version as a copy to an original, meaning that it is “lacking in one element: its presence in time and space, its unique existence at the place where it happens to be.”²⁶ Historicizing techno-historical forgetfulness and database and search culture through the example of film remakes in the twenty-first century thus provides one way to specify and situate media newness and technological mediation historically, culturally, and discursively.

Copyright Salander: Beyond the Aura and Approaching the Watermark.

Early twenty-first century media and entertainment industries—the movie business no less—have circled uneasily around the relationship between original and copy, as evidenced by legal and public battles around copyright legislation, file-sharing

23 For example, Anat Zanger discusses this constant historical adaptation as essential to the Greek *palimpsestos* and transformations of Homer’s *Iliad* and *Odyssey* to Virgil’s *Aeneid* and Joyce’s *Ulysses*. She makes this point in her book *Film Remakes as Ritual and Disguise* (Amsterdam: Amsterdam University Press, 2006), 17–18, 38, respectively.

24 Lisa Gitelman and Geoffrey Pingree, “What’s New about New Media?,” *New Media 1740–1915*, ed. Lisa Gitelman and Geoffrey Pingree (Cambridge, MA: MIT Press, 2003), <http://web.mit.edu/transition/subs/newmediaintro.html>.

25 Ibid.

26 Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction,” in *Media and Cultural Studies: Key-Works*, ed. Meenakshi Gigi Durham and Douglas M. Kellner (Malden, MA: Blackwell, 2001), 50.

practices, and piracy (e.g., Digital Millennium Copyright Act, Stop Online Piracy Act, Pirate Bay). While often conceived as pitting powerful media conglomerates against the individual user, this set of tensions can also inform our thinking about the form and function of remakes. *The Girl with the Dragon Tattoo* is emblematic in this sense. Salander may appear to be the one distinctive entity in a novel replete with formulaic conventions that range from the locked-room amateur detective genre to the corporate and crime thriller. Salander remains a compelling character through the various iterations of *Girl*, and this may partly be due to the American female action-hero character tradition, one that is itself consistently remade and updated.²⁷ In the marketing material for the US release of Oplev's *The Girl with the Dragon Tattoo*, for example, Blomkvist (Michael Nyqvist) is removed from the images, which feature Salander (Noomi Rapace) only, situated front and center. A tension in characterization between assumptions of uniqueness and iterativity informs *The Girl with the Dragon Tattoo* on several levels while connecting the cultural artifact to a discursive and digital complex of the relation between original and copy.

When related to the notion of an accelerated half-life of ideas, upholding copyright laws can be seen as an attempt to slow information turnover, duplication, and manipulation. Copyright laws, as such, can be understood as decelerating the information wave that makes us forget our past faster. The remakes under consideration here abide by copyright and intellectual property laws: rights have been sold and transferred. These are not pirated or free-standing appropriations. The remake screenplay and film is legally understood as a new original, a work of art in its own right. This allows for preserving the status of the original work while at the same time creating a new, independent work—indeed, partially preserving “aura” in Walter Benjamin's formulation. Yet the remake's popularity within the film industry also, we argue, reflects file-sharing ideologies that maintain that information should be able to be duplicated and manipulated. Corporate Hollywood emulates practices that challenge the very copyright laws the same industry seeks to keep in place. Remakes become a way for global studios to keep step with piracy or file-sharing practices: remaking content emulates these processes but regulates them as part of an established and (often) lucrative industry practice.

As a character, Salander is in explicit dialogue with this cultural and legal register, especially in promoting the free flow of information. As a private investigator, she disregards copyright legislation, hacks into Blomkvist's and others' computers, wiretaps, and unlawfully enters property. She engages in these practices seemingly without consideration for breach of confidentiality, integrity, or the law: the iterative practice of these actions, rather than an essentialist moral authority of right and wrong, governs her actions. Similarly, we could argue, remakes are iterative practices that manifest a tension in popular culture between free sharing and information regulation. The remake straddles both conceptual modes. Refusing to report violations against her own person (e.g., rape, assault, abuse by the state of which she is a ward), Salander is configured as a typical “hacktivist,” seeking an individual solution to a systemic and large-scale problem, partially to avoid prosecution for her proximity to the violation.

27 See also Michael Tapper, *Snuten i skymningslandet* (Lund, Sweden: Nordic Academic Press, 2011), 624.

In one particularly striking scene, however, we see Salander acting as an enforcer of a digital rights management (DRM) paradigm. To stop attorney Bjur (Peter Andersson and Yorick van Wageningen, in the Swedish and US versions, respectively) from repeating—copying, really—sadistic rapes on other women, Salander regulates his actions by branding “I am a rapist pig” in a crude tattoo on his chest and stomach. This regulatory action is related to the digital copyright practice of “watermarking”; she cannot prevent unwarranted copying, but she can regulate and demarcate the range of sharing by recourse to a material stamping, onto his body, of language that will identify him not by essence (he is not literally a “pig”) but by his iterative practices of copying unwarranted code: sadistic mutilation of women (“rapist”). Part of Salander’s apparent originality as a character is her recurrent challenge to reproductive normativity: sexual intercourse is an iterative practice to be copied at will with available agents rather than definitive of gender coding; “privacy” in the sense of shunning the display of nudity does not pertain to her, whereas verbal expression of thought and emotion, that is, of coding understood as fundamental to human essence, is actually safeguarded and not duplicable. Salander as a character and *Görl with the Dragon Tattoo* are a set of artifacts thereby operating in a field of tension between copyright preservation and the free sharing of information.

We know that the status of remakes has been contested in film history, especially along lines that pit original against copy. Implicit in such a facile and polarized opposition is, however, a relation to history. What do remakes remake? How do they relate to the past, as individual films, in relation to film history, genre propagation, and theory and to the very actions, processes, and questions raised by the form and content of the films themselves? In relation to digitally networked media copyright discussions of the twenty-first century, film can be understood as an old medium with a distinct relation to history. As in Elizabethan literature, a film’s “originality” is judged not on its standing alone but on how creative the appropriations and adaptations are. Similarly, the later Victorians had a habit of adapting just about everything—and in just about every possible direction; the stories of poems, novels, plays, operas, paintings, songs, dances, and *tableaux vivants* were constantly being adapted from one medium to another and then back again. We postmoderns have clearly inherited this same predilection, but we have even more new materials at our disposal.²⁸

Adaptations in the twenty-first-century context could, moreover, be understood as a particular form of media repetition, most often from novel to moving image. They reflect, Thomas Elsaesser argues, the form of a “mutual dependence—both cultural and economic—of the institutions of cinema and television.”²⁹ Among strategies related to this mutual dependence, the first, *serialization*, is a textual strategy employed by both television (serials, series, sagas) and cinema (series, sequels, remakes) to deliver and bind a global audience to its product and its own institution. The second, *multiplication*, is a *marketing* strategy that connects these institutions, and their audiences, beyond

28 Hutcheon, *Adaptation*, xi.

29 Thomas Elsaesser, “Fantasy Island,” quoted in Constantine Verevis, *Film Remakes* (Edinburgh: Edinburgh University Press, 2005), 37.

textual and national boundaries via adjacent discursive fields.³⁰ Serialization and multiplication are mutually constitutive in a twenty-first-century, digitally networked, and global media landscape, each reinforcing the other in ways formulated to counteract an accelerated half-life of ideas. At the same time, the “ever-expanding availability of texts and technologies and the unprecedented awareness of film history among new Hollywood film makers and contemporary audiences,” Constantine Verevis argues, have helped influence industry interest in remakes.³¹

As we have seen with *The Girl with the Dragon Tattoo*, once a corpus is in place, it can be adapted, and the remake practice becomes in and of itself a way to assert the feature film genre’s canonicity. Yet remakes also illustrate aspects of historical appropriation. Their fascination among audiences and practitioners alike illustrates the half-life of ideas argument. In particular, “contemporary remakes *generally* enjoy a (more) symbiotic relationship with their originals, with publicity and reviews often drawing attention to earlier versions,” and “just as adaptations of literary properties often lead viewers back to source novels for a first reading, remakes encourage viewers to seek out original film properties.”³² In this way, remakes correlate with accelerated technological forgetfulness: the past can be forgotten quickly, but remakes provide a way of reminding us of what was worth remembering and of continuously reintegrating these cultural instantiations into a present. The quality or success of the remake is not relevant in this argument; the practice is culturally and historically significant in itself.

An accelerated rate of forgetfulness, especially as it pertains to a collective memory, is illustrated also on the plot level of *The Girl with the Dragon Tattoo*. The numerous crimes committed against women—the large-scale importation of Baltic women by Martin Vanger for gruesome treatment in his death cave in the basement of his home and the legacy of killing he inherited from his father—are in all versions of *The Girl with the Dragon Tattoo* erased from the manifest plot level as soon as the culprits have been identified. Fincher’s version is highly symbolic and expeditious: the numerous Post-it notes taped on the wall identifying the victims are quickly taken down by Salander as she and Blomkvist vacate the summer house to return to Stockholm. The material vestige in the form of handwritten notes of these crimes is removed—incinerated by implication—to reestablish large-scale corporate culture, restore the Vanger enterprises and family name, relaunch the *Millennium* news journal (in print form), and facilitate Salander’s getting her hands on a fortune hidden in secret bank accounts. But knowledge of the crimes remains within Salander’s infinite resources of photographic memory, as if hidden within a database where information can be retrieved only by coming up with the right search terms. This relationship between overt and manifest history, and the process through which remakes reveal that history to us, is one of the major aspects of *The Girl with the Dragon Tattoo*’s set of artifacts. Analyzing implications of database and search culture helps us understand this complex of ideas further.

30 Thomas Elsasesser, “Two Decades in Another Country: Hollywood and the Cinéphiles,” in *Superculture: American Popular Culture and Europe*, ed. C. W. E. Bigsby (London: Paul Elek, 1975), 99–225, 211; Verevis, *Film Remakes*, 38.

31 Verevis, *Film Remakes*, 18.

32 *Ibid.*, 17.

Search and Retrieve, Salander: Database Culture and the Networked Archive. Film no longer exists in a vacuum, if it ever did. It exists in a cultural landscape of screen proliferation, digitization, and new media convergence, where search and retrieval are fundamental modes of cultural exchange. As Lev Manovich argues, the key form of expression in this new media landscape is the database, which favors a nonhierarchical collection of data that can be searched and retrieved.³³ This signals a difference from how information has traditionally been organized. An application of database logic is therefore critical for understanding the roles of film adaptations and remakes in this new media context. As we have argued, originality is not a useful paradigm for interpreting the value and relevance of film remakes in this cultural landscape. Rather, with so much of our cultural attention and access being mediated through computers and the Internet, we turn to information theory to argue the importance of searchability. Film adaptations and remakes provide a logical illustration of this in a computerized search culture.

An excellent case for the metatextual interpretation of data proliferation, *The Girl with the Dragon Tattoo* provides a unique representation of this cultural search paradigm within the artifact itself.³⁴ On the one hand, we have Mikael Blomkvist, an investigative journalist, who represents the “old guard” of print journalism. His story and screen time dominate the first half of both versions of the film, which then gives way to a focus on Lisbeth Salander in the second. Figured as a hacker and an independent, fearless, cold-blooded researcher with extraordinary capacities, not the least of which is a photographic memory, Salander is (like) a database, a metaphorical cyborg of infinite data capacity. This is a novel and set of films embedded within the Internet information age and governed by the assumptions of a search culture. The celebration and re-creation of this character represent the values of the techno-cultural moment in which we live. Salander never forgets, which means that any information can be accessed and surfaced if only the right questions are asked, or by analogy, if the right search terms are computed. As a character, she does not respect copyright or privacy: she freely accesses information across digitally networked systems.

The novel and films operate on the narrative logic of the information search quest. Both detective figures, Salander and Blomkvist, continually search archives, databases, newspapers, journals, diaries, scrap paper, and the web for information that will both help solve the missing-person mystery on which the plot tentatively relies and reveal the dark shadows of Nazism and the contemporary systematic trafficking and murder of women. In contrast to older characters such as Henrik Vanger, who employs the pair to solve the mystery of his long-lost niece and is motivated by family lineage, history, and personal involvement, Salander is motivated by an associative and networked logic. Her agency is driven by questions that relate her to others in associative patterns rather than in social hierarchies, which she actively resists. Yet it is

33 Lev Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2002), 218.

34 We see this in much the same way as Laura Grindstaff examines “the case of ‘La Femme Nikita’ [as] an ideal vehicle through which to examine the complexities of the remake and its structural relations of indebtedness, since it cuts across mediums and across cultures, and since the ‘origin story’ in this case is itself so clearly enmeshed in a web of intertextual operations.” Laura Grindstaff, “Pretty Woman with a Gun,” in *Dead Ringers*, ed. Jennifer Forrest and Leonard R. Koos (Albany: State University of New York Press, 2002), 273–278, 275.

also important to note that Salander and Blomkvist work *together* in Vanger's employ to solve these murders, not against each other. Both are determined not to let the past be forgotten. The films do not argue, nor do we, that the new must overwrite the old. That is, one methodology does not subsume the other; one film does not replace the other; and the characters within the film do not replace each other. In repetition, layers are added, new associations are made, but they do not erase what has come before. Arguments of techno-cultural forgetfulness and database logic therefore add to our understanding of film and remakes. In a digitally globalized context, the Hollywood remake adds American overlays, rather than changing the structure or basis of a film. This is essentially palimpsestic, and highly generative, with one text existing on top of another without subtraction.

In classic narrative theory, chronology is the basic fundament for narrative, and spatiality is secondary. For Paul Ricoeur, "one presupposition commands all the others, namely, that what is ultimately at stake in . . . every narrative work, is the temporal character of human experience . . . ; narrative, in turn, is meaningful to the extent that it portrays the features of temporal existence."³⁵ Database organization, just like the Internet, instead favors spatial, associative organization (considered in terms of a web, nodal points, units relative to one another, units in a context). With the Internet as a major platform of cultural exchange (especially for film, with access ranging from discovery of films via search and social media push to streaming through service providers like Amazon, Hulu, Netflix, and illegal pirating), it is important to examine its form. A web page is made up of many separate elements stored in many locations, all called into new instances as needed, and never existing as complete and final. They grow and change over time.³⁶ A similar growth and change applies to remakes, especially in transnational productions like the remake of *The Girl with the Dragon Tattoo*. Is the chronology (of plot and character arc) basically the same in most of the remakes, while the spatial depiction and the cinematography change? While the remake remains set and filmed in Stockholm, the use of English-speaking actors signals a cultural switching within the space, recontextualizing that space as a nonexclusive element.

Though Stockholm is otherwise "other" to a North American audience, this switching affects our understanding of the place. Through an element of familiarity, it allows the audience to equate this location with New York City, Chicago, or Los Angeles, yet it can be accessed from anywhere and by anyone. This spatial accessibility is critical to the remake's role in a search culture. On a content level, once populated by American or UK actors, the narrative becomes a hybrid cultural form through which, arguably, Salander's vicious revenge on an egregious state manipulation of power loses some of its edge. The punch-in-the-face force of the novel and film when unequivocally identified as "Swedish," especially as it presents a corrupt system in thrall to neoliberal corporatism, becomes a globalized artifact rather than a symbol

35 Paul Ricoeur, *Time and Narrative*, vol. 3, trans. Kathleen McLaughlin and David Pellauer (Chicago: University of Chicago Press, 1988); see also Noël Carroll, "On the Narrative Connection," *New Perspectives on Narrative Perspective*, ed. Willie van Peer and Seymour Chatman (Albany: State University of New York Press, 2001), 21–42, 34; and Mieke Bal, *Narratology: Introduction to the Theory of Narrative*, 2nd ed. (Toronto: University of Toronto Press, 1997), 133–141.

36 Manovich, *New Media*, 220.

for what perhaps never even was a cradle-to-grave welfare state.³⁷ For a search culture, the instance rather than the context is what is most significant; thus the “Stockholm” or “Sweden” represented in the US version of the film is part of a networked context of instances that can be retrieved with the right search term rather than a defining component of a particular sociohistorical context.

The chronological arrangement of narrative elements is equally mutable, however. In the Swedish film, for example, Salander discovers a connection between names and numbers in the missing girl’s journal and biblical verses, sending the clue to Blomkvist, which then prompts their first meeting. The US remake repositions this discovery to Blomkvist’s daughter, with Blomkvist subsequently connecting one of the verses to a murder before even meeting Lisbeth. Ultimately, this change has little impact on the encompassing narrative arcs, signaling that chronology, too, is one mutable element among many. With this mutability, the narrative becomes an element that can be accessed from anywhere, by anyone, and at any time. Mutability is not secondary to the remake but essential to it as part of a database culture. Even a one-to-one reproduction will tend to have its subtle (or overt) differences. This has been true since the earliest of remakes and adaptations, but a database culture allows us to recognize this truth as an inherent and essential quality of the remake. When a (film) culture moves toward a database ethos, this alters the boundaries within which we organize and access information and knowledge, and when applied to remakes, database logic erases spatial boundaries entirely. Remakes emphasize the spatial and the chronological as conceptual, associative elements rather than as rules, lessening emphasis on sequentiality and increasing the emphasis on spatiality in ways that challenge traditional narrative theory. In this way, we can consider remakes cross-cultural products that move explicitly across contexts.

Database logic also allows us to address remakes in terms of the origin and trajectory of a collection of social artifacts and especially in terms of how these relate search culture to the idea of indexing, namely as a sequential arrangement of material. While “Charles Sanders Peirce defined the index as a sign that functions through existential connection to its referent ‘by being really and in its individual existence connected with the individual object,’” as Tom Gunning argues, in library and information science, “index”—and “indexicality”—is a particular term that refers to sequential hierarchy.³⁸ The concept is more like the table of contents signaling the order of chapters in a book than the database of terms in an index at the back of a book, which in that constellation reorders terms alphabetically and associatively (with page numbers, and sometimes “see also” annotations) to facilitate a search-and-retrieval function. While indexical realism remains an important point of origin for the study and understanding of representational meaning in individual films, when we consider

37 See Anna Westerståhl Stenport and Cecilia Ovesdotter Alm, “Corporations, Crime, and Gender Construction in Stieg Larsson’s *The Girl with the Dragon Tattoo*: Exploring Twenty-First Century Neoliberalism in Swedish Culture,” *Scandinavian Studies* 78, no. 2 (2009): 157–178; and Kerstin Bergman, “Beyond Stieg Larsson: Contemporary Trends and Traditions in Swedish Crime Fiction,” *Forum for World Literature Studies*, <http://www.fwls.org>.

38 Tom Gunning, “Moving Away from the Index: Cinema and the Impression of Reality,” *differences* 18, no. 1 (2007): 29–52, cited in Marc Furstenuau, ed., *The Film Theory Reader: Debates and Arguments* (London: Routledge, 2010), 255–267, 255.

remakes we are no longer dealing with individual films, and in so doing, we need to move past individual-film thinking. With every remake, whether as sequel or reboot, as a theatrical release or a television series, we add new properties to a social artifact. We expand its indexicality by expanding from sequential hierarchy to associative database: “[i]f new elements are being added over time, the result is a collection, not a story.”³⁹ Remakes do not tell a single story and are connected neither to an individual existence nor to an individual object. When elements are added over time to a database, they are not tacked on at the end of the hierarchy; they are inserted into the collection. Though a database query will often return items in a list, this does not constitute an inherent hierarchy. These rankings instead depend on the search algorithm, the query terms, and relevant metadata, rather than on an operational logic of originality. The idea is that we should not think of these rankings as an absolute, rigid hierarchy—they share the same mutability indicative of the forms of a database culture and of the remake. The main way to access information in a database culture, after all, is to search for it or have it filtered in other ways that rank results in a particular order with the help of commercial products such as Google. This provides a parallel to current remake practice: while all films are potentially fodder for remakes, only films posited to make a substantial profit are remade, and the possibility is only realized when integrated into a collective commercial identity.

As social artifacts, it is important to note not only the remake’s function as part of a collection but the original object’s place within that collection. All objects are referents to the same collection of social artifacts, and if one object is forgotten, the collection is still known. For example, the phrase “Girl with the Dragon Tattoo” does not necessarily refer to any particular object that makes up the collection of *Girl with the Dragon Tattoo* social artifacts. It could refer to the series of books, the Swedish films or Hollywood remake, or even the graphic novel. Indeed, a query for “girl with the dragon tattoo” across various search engines returns a multitude of mixed media seemingly in no particular order. Even “Men Who Hate Women,” which refers more specifically to the Swedish title, does not necessarily distinguish between book and film. With such a rapidly expanding collection of materials, none is necessarily the privileged cultural authority. The corpus itself is the authority. In a culture that forgets faster and faster, more referents means more cultural capital.

Some transcultural remakes may undergo more drastically ambiguous retitling, although this does not necessarily diminish the collective accumulation and recognition of artifacts. For example, the Icelandic thriller *Reykjavík Rotterdam* (Óskar Jónasson, 2008) became *Contraband* (Baltasar Kormákur, 2012) in the Hollywood remake, which would seem to disrupt keyword search and retrieval, although the popular discovery sources IMDb and Wikipedia still connect the two. While the cultural capital of transcultural productions as collections is perhaps undercut in major search engines, even these disparate titles are connected to varying degrees on the first pages of search engine results (e.g., Google, Yahoo, Bing) for title queries.

Furthermore, we do not limit this kind of digital corpus building to only transcultural productions, nor do we argue that this mutability is solely attributable to

39 Manovich, *New Media*, 221.

the trend of the transcultural remake. One prominent contemporary example would be the Batman franchise. Like *The Girl with the Dragon Tattoo*, the franchise comprises multimedia productions, running the gamut of adaptations, remakes, sequels, and—importantly—reboots across comic books, novelizations, live and animated television series, video games, films, and even a roller coaster at Six Flags. In this case, the Batman corpus stretches back to the character's first appearance in a 1939 comic strip, providing a case for a collection that has gained authority over an individual object over time. While the franchise has undergone many iterations since its inception, Batman films have been released with incredible regularity since Tim Burton's 1989 *Batman* starring Michael Keaton. This coincides with the rise of the Internet in US culture. As we enter the digitality paradigm, we see consistent remake practice not only within the film industry (where it had been an established practice) but within the same set of cultural objects. This is not a transcultural mode of reproduction but trans-chronological within the same cultural context. The collection has become digitally mutable over time. The mutability of the digital image not only in film but also across media, in the context of a computerized society, demands reproduction. Remakes can thus be considered a cultural imperative. With an increase in digital film production, we also experience a shift from "rearranging reality to rearranging its images."⁴⁰ This imperative may stem from indexicality as a form of sequentiality (one object will follow and refer to another), but the result is a more generative mode of operation. As an idea proliferates into the cultural consciousness as an object of copying, translation, and interpretation, it becomes part of a common pool from which new ideas form. In a society that celebrates newness, this common pool is an essential point of origin. The collection is the origin that adds to itself as origin. This is a basic property of a living culture—and indeed, though perhaps counterintuitively—of digitality. It allows the celebration of newness without overwriting the old (i.e., remaking is not the same as replacing, which again emphasizes the democratizing spatiality of the remake). If we are to speak of a film culture, then we must recognize this property of database logic.

With so many social artifacts being pushed faster and faster across media into the social consciousness, whether as remade or original works, we come up against the concept now common in information theory: information overload versus filter failure, a diametric first proposed by new media scholar Clay Shirky.⁴¹ The basic question is whether we have too much information or simply a problem sorting through it. *The Girl with the Dragon Tattoo* provides an excellent example of this, with Salander embodying the ideal, human-filtered database, capable of turning up the relevant information, insusceptible to information overload. Also addressing this concept, IT veteran Craig Roth writes, "I think a more serious problem is the information that's just sitting out there, not calling for your attention, but that you should notice. That means search (including more sophisticated forms like faceted search), alerting, notification,

40 Manovich, "Digital Cinema," 250.

41 Clay Shirky is the author of several recent books on web culture, including *Cognitive Surplus: How Technology Makes Consumers into Collaborators* (London: Penguin, 2011), and *Here Comes Everybody: The Power of Organizing without Organizations* (London: Penguin, 2009).

agents.”⁴² This could certainly be true of *The Girl with the Dragon Tattoo* and other international films, which may be relegated to the status of art-house films and not receive widespread attention in US markets. Remakes improve the searchability of an intellectual property while also serving as an alert to the public’s attention.

Searchability is a critical facet of the remake’s status in a cultural context that produces information, which can easily be overlooked, ignored, or dismissed. To understand the impact of the technical filters at work in searchability, we can turn to another information theory concept: term frequency–inverse document frequency, or tf-idf. Essentially, tf-idf is a basic model for ranking the relevance of a document in a collection based on the frequency of terms within each document. The more times a term is used within a document, the more relevant that particular document becomes when searching for that term in the corpus. Similarly, the more that a referent document appears in a database, the more searchable and findable it is. While the rarity of a term within a database may make the referent more easily identifiable, the rare term is also less likely to be the query of a search. While *The Girl with the Dragon Tattoo* illustrates this in a twenty-first-century media context, we can apply it to a film canon as well. These aren’t just new rules for new media; the canon is part of the new media landscape too. Take, for example, the search terms “Nosferatu” and “vampire.” If only one version of *Nosferatu* existed, then searching for “Nosferatu” would be unambiguous. However, one would be less likely to search for the rare term in favor of the more general “vampire,” where *Nosferatu* would be returned as one choice among many other vampire films. Of course, in 1979 Werner Herzog remade the classic film *Nosferatu* (F. W. Murnau, 1922), and so we have (at least) two versions of the film. Although this inflates the number of vampire films overall, it also makes both versions of *Nosferatu* stand out among the query results, with 2 out of 101 results being more visible and better odds than 1 out of 100. Given the choice, one has the opportunity to ask, “Which of these should I watch?” rather than “Should I watch this?” Repetition of the social artifact has given it prominence in the search. The authority in this case is given to searchability rather than any measure of originality.

Many search engines, however, are not based solely on tf-idf and will largely, though not exclusively, favor newness. This is because, with the exception of projects like Archive.org’s Wayback Machine, which attempt to preserve older versions of web artifacts, the Internet is not archival. Pages and content that have gone un-updated are often considered irrelevant. In a computerized search culture, this is a major factor of accelerated techno-cultural forgetfulness. When we depend on Google as an authoritative filter for what social artifacts we see, we also favor newness, as few users will click through to the second page of results. Considering our previous example regarding vampire films, if we search Google for “vampire film,” the first page of results is filled with references and images dominating pop culture, from *Let the Right One In* (Tomas Alfredson, 2008) to *Twilight* (Catherine Hardwicke, 2008), even listing “twilight film” under the suggested search terms. While *Nosferatu* is listed in some of the “Top 10 Vampire Films” links on the first page, the film isn’t at all visible in

42 Craig Roth, “Information Overload Is Not Just Filter Failure,” *Gartner Blog Network*, last accessed July 11, 2011, <http://blogs.gartner.com/craig-roth/2012/07/11/information-overload-is-not-just-filter-failure/>.

the Google results themselves until the second page. *Nosferatu* has not been erased from the public consciousness, but even as one of the establishing, canonical vampire films, it takes a backseat in searchability to the more recent or recently updated social artifacts. Yet while *Nosferatu* may be eclipsed by *Twilight*, thus in one way more absent, isn't it at the same time also more present in terms of search retrievability? If it can be relegated to second-tier status in a search culture, that may be better than being virtually unknown in a pre-Internet age. Hierarchization of search results leads to marginalization but arguably maintains a presence for social artifacts otherwise relegated to potential obscurity.

This preference for newness is not evidence of an indexical (sequential) hierarchy, which favors originality, but it marks a clear motivation for remakes. A theory of accelerated techno-cultural forgetfulness would not be the first to challenge the status of film as index. An index implies a hierarchy, as would be found in the table of contents at the beginning of a book outlining a sequence of ideas. Most other theories of adaptation focus heavily on exactly this kind of hierarchical sequentiality, on the indexical realism of film, and on the taxonomies of remakes. These taxonomies tend to focus on a comparative/contrastive paradigm of source and secondary text, as do the arguments of indexical realism, and are not particularly useful in understanding why films and other media are remade in the context of a computerized search culture.⁴³ Rather than emphasizing taxonomies, we prioritize the associative characteristics of the remake, which are critical in a search-driven context. Building from the *Nosferatu* example, we can return to our query for "girl with the dragon tattoo," which returns, in this order, pages referring to: the 2011 David Fincher remake, the 2009 Niels Arden Oplev film adaptation, and the first book of Stieg Larsson's Millennium trilogy. If we slightly alter the search to "*the* girl with the dragon tattoo," a curious thing happens: the 2009 film drops from second place and the results obscure the fact that there are two films at all, although the 2011 Fincher remake still shows up as the first result. Clearly the search terms used have a significant impact on the documents retrieved, but even more important is the staying power of newness. Repetition is relevance.

This presents a challenge to indexical realism in that film discourse has historically favored the material image as Truth with a capital *T*. Rather than a single image or instance depicting the sole truth of a social object, we now have a form of database realism in which we can select among realities, but only if we are aware of the possibility. In a computerized, novelty culture, where cultural half-life is a dominant paradigm, newness is the favored truth (not the only truth but the favored truth). This is no longer merely a question of relating an image to a present reality. Nor is it a question of originality.

Concluding Remarks. In database culture, one element can supplant another without erasing the previous instance. Our article historicizes that phenomenon,

43 Constantine Verevis discusses several of these taxonomies in depth in *Film Remakes*, focusing variously on Michael B. Druzman's categories of disguised remake, direct remake, and non-remake; Harvey Roy Greenberg's acknowledged close remake, the acknowledged transformed remake, and the unacknowledged disguised remake; and Thomas M. Leitch's readaptation, update, homage, and true remake. See pages 7, 9, and 12–13 for his discussion of these taxonomies, respectively.

emphasizing that it does not spring out of nowhere. Adaptations, in this way, help us conceive of history: a history that has been hidden *because* it has shown itself in practices like adaptations, which in interpretative traditions emphasizing originality must be denigrated. Adaptations and remakes thereby also function as recuperative mnemonic devices particular to a techno-cultural moment of accelerated forgetfulness by being both archival and recollective agents, yet within this paradigm adaptations continue to have their status challenged. Their prominence in the cultural moment signals nodal, spatial, and organizational modes that govern any corpus, large or small, but which have previously been subsumed under a rigid regime, whether in terms of sequentiality (first or subsequent), valuation (original or derivative), ontology (autonomous or dependent), or hierarchy (supplative or additive). Remakes and adaptations thus also offer ways to see continuity in the Western narrative and figurative tradition: the ways in which remakes function within and illustrate specifics of a twenty-first-century database and search culture provide a historical connection to earlier aesthetic and cultural representational traditions, which allows for nuancing a “newness” ideology predicated on technological innovation and progression dogma. Similarly, in this ideology, accelerating data accumulation on a massive scale is seen as relatively unproblematic. An ever more sophisticated search-tag-and-connectivity capacity becomes figured in ways that order, hierarchize, and determine the scope and value of the information amassed in a database culture. As we have argued through the use of a particularly illustrative case, the extended and multiplying *The Girl with the Dragon Tattoo* phenomenon, the diegesis—the content—of the information amassed is highly illustrative in the ways that it can be mobilized to challenge positivistic data ideology. With more information available, we forget more quickly; we need more and more markers (like remakes or new editions) to remind us of what is important, which unveils the dialectic constitutive of database and search culture. Data accumulation is inseparable from forgetfulness; search culture can be imagined only as difficulties of retrieval increase. *The Girl with the Dragon Tattoo* is thus an icon, if not an emblem, in all its contradictions and incongruities, precisely of the effectiveness of a database and search culture to elide the implications of the forgetfulness that lies at its core. Like Salander with her photographic memory, we need reminders—remakes—to recall what we otherwise may think we remember but have actually forgotten. *

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