# ROSE-TINTED SCREENS AND RUINED DREAMS

### DIGITAL DECAY AND NOSTALGIA ON NETFLIX



Iris Du 6147127

M.A. Thesis New Media & Digital Culture

Supervisor: Dr. Imar de Vries Second Reader: Dr. Ingrid Hoofd

July 2018



Faculty of Humanities
Utrecht University

#### **ABSTRACT**

In an exploration of digital video as a historically terrifying and oftentimes uncanny entity, this thesis delves into how the medium fairs in our current digital age, where nostalgic motifs and aesthetics seem to intensify as fiercely as technology is advancing. Contextualised within Svetlana Boym's epoch of the "off-modern", a journey is spun through affective, digital, and perceptual theories, updating the popularly discussed economic readings of nostalgia. This phenomenon is explored using the example of Netflix, by analysing its state as an interface, digital streaming platform, and producer of nostalgic original television; predominately the 2016 series, Stranger Things. Nostalgia is framed as an aesthetic technique that borrows the textures and properties of analogue screen pictures and earlier, obsolete technologies to disguise the uncanny user experiences we face within the digital. Finding that nostalgia arrives frequently in the form of decaying, breaking and dying media objects, the argument concludes in a speculation that the appeal for nostalgia in a digital age is the reminder of mortality in the media object and human body alike.

<u>Keywords:</u> digital video, nostalgia aesthetics, Netflix, Stranger Things, off-modernism, dead media

#### **ACKNOWLEDGEMENTS**

There are many I must thank for the completion of this thesis. I truly believe I would have never finished if not for the incredible support of those around me. Firstly, I would like to thank my supervisor, Imar de Vries, of whose extraordinary patience and understanding is something that I have never witnessed in a person before. Thank you for always offering me what I needed most, whether that be time, reassurance, advice, or extra deadlines. Thank you also to my second reader Ingrid Hoofd who I deeply respect academically for always being happy to offer extra assistance and wisdom, despite having absolutely no obligations to. I would like to thank my family, for not only letting me complain about my lack of progress when I wasn't making any, but also for the lashings of encouragement when I was (and knowing when a good old family visit was necessary). Thank you to my friends, old and new, especially this year's New Media and Digital Culture group, which couldn't have been more welcoming if they tried. This piece of writing was not only an academic challenge, but also a personal one. It began to morph into a life of its own almost from the beginning, growing and growing until I was convinced it was inevitably going to remain incomplete. Yet, here it is. Finished, formatted, and best of all, finalised into something I am truly proud of. So lastly, I guess I should take this line to thank myself, for getting up all those times, and just doing it.

#### CONTENTS

Abstract	1
Acknowledgements	2
Contents	3
Introduction	4
Academic and Social Relevance	6
A Note on Studying "Digital Video"	8
Methodology and Structure of the Thesis	9
The (D)evolution of Digital Video and the Rise of Nostalgic "Ruins"	12
Digital Inadequacies	12
The Parallel Saturation of Nostalgia	15
'Netflix and Kill': The Case of A Nostalgic Digital Platform	21
The Netflix Model	21
The Netflix Design	22
The Netflix Original: Stranger Things	28
Conclusion	42
Works Cited	44

#### INTRODUCTION

"Decay and disease are often beautiful, like the pearly tear of the shellfish and the hectic glow of consumption."

— Henry David Thoreau

Even the most distracted consumer of today will notice a current trend within the digital visual entertainment industry. Parallel to the progression and proliferation of newer, sleeker, and increasingly updated media objects, there is a fascination with media that is largely dead. In our landscape of cloud computing, 4K Ultra HD, and increasingly immersive VR and AR entertainments, there is a simultaneous demand and interest for the cumbersome media objects of yesterday. Old media such as the vinyl record, the cassette tape, the VHS – all arguably obsolete – are coming back to haunt our current digital present. Counterintuitive to the logical belief that digital "new" media objects are always progressing, obsolete and "retro" objects with heavy structures and noisy transmissions still exist within our circuit of media production. A phenomenon emerges in a digital age which fascinatingly belies the advances of ever-efficient and radicalised technological products: within digital perfection and innovation, dead and dying media objects still feature prominently.

The return of these old media objects — particularly their aesthetic of visual clunkiness and grainy pops and crackles — is significantly delivered oftentimes within *digital* environments: for example, the analogue film-filters of digital photography app, Instagram; the implementation of skeuomorphism in mobile app user interfaces; vinyl-grain noise in digital music; and the focus of this essay, the rise of nostalgic motifs and aesthetics in the original television content of incongruously 'new' streaming platforms such as Netflix. Although these areas have been explored in the past, conversation has predominantly centred around digital photography (Bartholeyns, 2014; Bate, 2013; Caoduro, 2014) and music (Fisher, 2014; Reynolds, 2010). The lattermost example of digital video streaming platforms

has arguably gained the most growth in popularity over recent years (Perez), and yet has had little exploration in academic discussions<sup>1</sup>.

Streaming services are significant because they illustrate our contemporary attitudes towards popular visual culture, with Netflix being the most widely-consumed (Archer, 2018). As the most recent alternative to traditional television and cinema, streaming services reflect what we want to see, hear, and consume. The film and television mediums have consistently provided integral insights into cultural change, with Sconce explaining how the mid-twentieth century represented the "dissolution of TV into life [and the] dissolution of life into TV" (5), and Kracauer claiming that "Films reflect... psychological dispositions, those deep layers of mentality" (qtd. in Chapman 368). Connections between what is watched and who is watching fuse when consuming film and television, both with the fictional narratives that are told and indeed, how they are told. Therefore, the relationship between Netflix and how it subsequently reflects collective philosophies provokes an interrogative commentary on the matter in this thesis.

This argument looks through the lens of media decay, ruins, and digital perfection versus imperfection, to ask how we can read nostalgic aesthetics on Netflix as a way to reconnect within the digital form. What if these romanced nostalgia narratives and the aesthetics they carry inherently create a way to enliven digital experiences that have become all too unnerving? What if borrowed, familiar visual gestures were a means to occupy attentions and incite pleasurable viewing experiences as opposed to the growing vulnerabilities, anxieties, and even boredoms surrounding digital technology? What if digital videos could be more engaging and entrancing through identifying with something they are not? The digital video has been historically associated with a lack of human feeling, a dissociation from human vision, and even the terror of death (Rombes). With digital displays often meticulously designed to emulate increasingly immersive experiences, the presence of decay and death create interesting interruptions. In tracing and unpacking the appearance and

\_

<sup>&</sup>lt;sup>1</sup> The current conversation surrounding digital streaming has delved into areas such as how it has promoted on-demand culture (Tryon, 2013), but very few critics have analysed a particular platform's original content within the context of its digital, interfaced nature. One study that I did find falling into a similar research area is Gonzalez's PhD research on "The Nostalgia Economy: Netflix and New Audiences in the Digital Age", but this is yet to be published and uses an interview methodology to assess a set of series' popularity. Instead, in this paper, I tackle the philosophical and aesthetic appeal behind this phenomenon to connect nostalgic and digitality. Further insight into this paper's academic relevance can be found later in the introduction.

structures of digitally interfaced platforms and screens, we will begin to broach these questions and uncover where their potential answers may lie.

This thesis takes a theoretical approach that avenues through digital video structures, visual film theory, and the concept of "off-modernism" which, "unlike the new media based on technology alone," re-reads 'new media' as "dwell[ing] on human error and danc[ing] with it" (Boym, "The Off-Modern Mirror" 4). Journeying through these concepts, we will arrive at the case study of Netflix and its original series, Stranger Things, investigating how the appropriation of nostalgia offers a way to disguise and distract from latent digital semantics of menace and volatility. In containing nostalgic images within the digital platform, the digital medium escapes its own flaws through the technique of nostalgia, opening up to the appearance of something far more familiar, "warm" (Rombes), and satisfyingly imperfect. Stranger Things successfully performs the television show that takes this nostalgia effect to the extreme, appropriating and implementing motifs from a largely digital-less setting to paradoxically shed itself of the implicit, unnerving digital blankness of the Netflix platform that interfaces its narrative. Ultimately, this thesis aims to demonstrate how our epistemological understandings of the appearance of "new media" has shifted into one that inherently blurs with qualities of the old. More present than holograms and immersive virtual realities, cinematic works and television series that flaunt motifs of the past saturate the choices available to the mundane mobile phone addict and popular television spectator. It is this collage of nostalgic imagery that can ultimately cloak the mundane lifelessness associated with the digital screen.

#### Academic and social relevance

Studying nostalgic screen images is far from 'new'. Perhaps the most recognisable and influential explorations into this area can be traced back to Fredric Jamesons' postmodern 'nostalgia cinema' of the 1980s which he prescribed as a direct side-effect of late capitalism. According to Jameson, the frequency of nostalgic motifs is one way postmodern sensibilities are enacted within popular culture: "shreds of... older avatars - of realism... live on, to be rewrapped" (xii). Jameson's political-economic stance legitimises interpretations of nostalgia, which he explains is adopted by industries to distract the public through "the spell and distance of a glossy mirage" (21), and subsequently mask the lack of history postmodernism

brings with it. More recently, critics such as Michael Dwyer and Simon Reynolds have taken similar outlooks, considering commercialism, capitalism and marketability at the heart of nostalgia's demand and proliferation. For instance, Dwyer in *Back to the Fifties* describes the phenomenon of continual fifties references in popular culture of the Eighties as the rise of "pop nostalgia... prompted by tropes, symbols, or styles, even without claims for historical verisimilitude" (4). Dwyer reads the nostalgia boom during the post-Cold War 1980s as a yearning for a "simpler, cheerier, and more pleasant America", such as the 1950s which had far more economic and political security (Dwyer 11). Indeed, nostalgia when packaged as a set of aesthetic motifs and images, does bleed into the culture industry (Adorno and Horkheimer) and is unshakeable from the economy, both past and present.

Whilst political-economic factors are integral to the way nostalgia is generated and received, another angle to consider is the more bodily, perceptual reactions to the rise of nostalgic images and feeling. Jason Sperb, in his more contemporary *Flickers of Film*, supports this viewpoint of reading dualistically when it comes to nostalgia. He claims that nostalgia can "serv[e] as the potential catalyst for resistance to... [the] industrial change" (5) while also regarding the symbolic nature of nostalgia as "a lingering spectre of death" (1). Although Sperb acknowledges that all acts of cinematic nostalgia naturally lend themselves to economic, industrial readings because of the medium's historically labour-intensive production, perhaps we need to start straying from "the messy economic realities of a digital transition that contains more troubling questions than answers" (Sperb 3).

This thesis, then, is motivated beyond economic readings and studies the connotations of mortality and security that can be carried along with the obsolete medium. Industry alone cannot justify the magnetism our age has towards decaying media aesthetics. Accordingly, I consider the psychological, affective, and associative qualities watchers can gain from interacting with nostalgic media on a markedly digital and technological environment. I still deal with nostalgia as a visual, decorative mode rather than as an emotion in a similar way Jameson sees it, but I review how it distracts from people's *digital* experiences instead of historical and capitalist ones. It should be noted that several critics have begun this conversation, including Nicholas Rombes and Dominik Shrey who observe the analogue and obsolete aesthetic arising within filmic digital mediums for the sake of texture. However, what they lack is the commentary on the new interactivity of streaming services and interfaces that have adapted the traditional television or cinema screen experience. Therefore,

their theoretical positions will be used as a starting point that inspires deeper observations and examples within the case of Netflix itself.

#### A note on studying "digital video"

As outlined earlier, the phenomenon of digital services and platforms that use the aesthetics of obsolete media can be seen in many forms. The digital interface, both as its own entity and paired with the digital video medium as is the case of streaming services, has had little academic investigation especially when analysed directly alongside the content it independently produces. Not only is it a highly contemporary form, but the streamed video also has a particularly interesting relationship with nostalgia. Kathleen Williams observes that there is a "nostalgic logic [to] streaming services... in which past consumption dictates future viewing recommendations" (60). Before diving into further study however, my argument that uses such contested terms such as 'digital' and 'video' needs to be primed with some definitions and explanations.

"Digital video" as a conceptual term is at face-value, wildly vague. Yet I shamelessly choose to adopt the term as I believe it best encompasses the form I wish to study. 'Digital' has been rightfully contested since the dawn of the term itself, and now so ubiquitously used, finding a unilateral definition for the term would deserve a full lifelong study in its own right. Aware of these murky definitions however, this thesis draws from the digital frameworks of Lev Manovich's The Language of New Media, focusing saliently on the binary code-structures behind the digital in contrast to the continuous materiality of photochemical film reels and magnetic videotape. Therefore, at times, I draw cross-references to the 'analogue' as a way to define 'the digital' through opposition. Though this too, is a hotly contested binary, it allows for a way to demonstrate the unique phenomenological differences between the digital interface versus the more traditional analogue mode of viewing. Therefore, I will be analysing the ways people experience the video image through the digital interface that has a fundamentally different aesthetic structure: "represented by a rectangular array (matrix) of picture elements (... or pixels)" (Poynton 4) and lacking any true texture in their flat display. The 'digital' element in this paper will therefore lean heavily on the internet-reliant, rental – and therefore transitory – nature of the Netflix service. At times, the term will be used

interchangeably with 'electronic' and 'technological' which will be used to reflect a similar meaning.

Likewise, 'video' will be used rather literally as any form of moving image displayed through the pixelated matrices of a digital medium. This essay will forthwith interpret the term 'video' as on-demand videos with fictional narratives, inclusive of both film and television. Although film and TV can be seen as two entirely different visual forms, the architecture of digital-streaming has in fact, redefined and reduced the differences between them. On Netflix, film and television are quite literally arranged side-by-side, creating little experiential difference between the two except their durations. Indeed, a much more intensive research investigation could be made in studying exactly how the two mediums have become homogenised, yet, for the scope and intentions of this paper, I combine the two under 'video' to ease overcomplication, while also acknowledging that two entertainment forms that were once very different, have become blurred in our current convergence culture<sup>2</sup>. As Lev Manovich describes, technological developments bring with them a "crisis" of the medium, where "mutation in the concept of medium color about as new technological forms of culture were gradually added to the old typology of artistic mediums" (1). Stranger Things, that supports the base of this thesis' analysis as a television show, adopts a cinematography highly mimetic of the appearance of film, encapsulating how television series have grown boldly filmic on digital streaming platforms (Nevins). Thus, as the mediums grow closer in similarity, "digital video" aptly encompasses the object of analysis in the context of this thesis. Moreover, in noticing their convergence into one form, film and cinema theory can be applied to help better understand the visual experiences of today's television.

#### Methodology and structure of the thesis

For a theoretical discussion of this kind that implements and interacts with several philosophical debates, this thesis takes a critical hermeneutic stance: it "reveals the mediated

<sup>&</sup>lt;sup>2</sup> It is important to note that "convergence culture", termed by Henry Jenkins, has significantly been used to assess how "old and new media collide". Used mostly to discuss the rise of transmedia storytelling, this phenomenon of digital-streaming creates convergence also in the sense of homogenisation.

processes of all human understanding" that "offer[s] an implicit conceptual underpinning to research" (Kinsella). In previous academic conversations surrounding the discourse of nostalgia in visual cultures, approaches have also been largely interpretive and unstructured rather than scientific or controlled. Employing a style similar to the theorists I actively engage with throughout this paper, I take a more speculative 'method' informed by previous literature and past observations in cultural expressions, essentially "let[ting] whatever you are writing about determine the format of your paper" (Rombes 11). I am indebted most of all to Svetlana Boym, an influential nostalgia critic who I largely endeavour to support. In *The Off-Modern*, Boym explains her academic, "off-modern" style which:

Defies the 'distant reading' and remote-controlled historiographic mappings of the modern and contemporary period; instead it engages in the embarrassment of theory and in a double movement between perspectivist estrangement and almost tactile nearness to artistic making. (Boym)

Inspired then, by not only the substance but also the style of the nostalgia criticism discussed in this thesis, I celebrate Boym's deeply poetic and creatively-unbound academic approach, embracing the "embarrassment of theory". I then dabble with the close rather than "distant reading" of nostalgic aesthetics: in other words, the visible objects and textures connected to obsolete or analogue video mediums, by studying visual and functional features of the Netflix interface, design and fictional content. In a close analysis that pertains to no single, prescriptive 'interface analysis' or 'television analysis' to comment on my cases of Netflix or *Stranger Things*, this thesis traces visual patterns through these 'texts' together, to support a wider, observed phenomena.

In Chapter 1, the thesis journeys first into the theoretical perspectives of scholars who have already handled nostalgia imagery within digitised video spheres including Dominic Shrey, Nicholas Rombes, and of course, Svetlana Boym's concept of off-modernism. I also briefly provide some theoretical context for digital video file structures and displays by referencing Lev Manovich, Bruce Sterling and regarding the uncanny and uncomfortable experience of digital interfacing. In Chapter 2, I analyse the case study of Netflix as a boldly illustrative example of digital mediation in an interface, catering to both a seamless user experience and the promotion of non-digital, obsolete, and nostalgic textures. This extends into a closer reading of *Stranger Things* (2016-) by tracing the appearance of decaying, broken or ruined obsolete media objects within the narrative and how these images are

simultaneously interfaced through a pristine new medium. To conclude, I summarise by transitioning back into a theoretical realm, proffering an explanation as to why this phenomenon is so attractive and prevalent. By ending with a potential *why*, I propose that the desire for the ruptures, ruins, and erring in dead media are all ways to access our innate attraction to mortal forms. Where we end then, is back at the beginning, forming the "loop" that Lev Manovich so aptly and enthusiastically identifies as "a new narrative form appropriate for the computer age" (n.p.). To find an opening in this whirling loop however, we begin by laying out some current theoretical considerations.

## THE (D)EVOLUTION OF DIGITAL VIDEO AND THE RISE OF NOSTALGIC "RUINS"

"At the heart of the perfect digital image – coded by its clean binaries – is a secret desire for mistakes, for randomness..."

— Nicholas Rombes

#### Digital inadequacies

Following the dawn of the millennium, discourses surrounding the "digital" medium, especially within the realm of the visual art, drifted towards fear and unrest. In Cinema in the Digital Age, Nicholas Rombes demonstrates how our current emotional connection to the watching experience has become one of unfamiliarity, verging on anxiety. Framing developments through the cinema industry, he identifies how the millennium brought with it not only the digitisation of what was once a largely analogue medium, but with this transition, a cultural response which he calls "the wonder and the terror [for] the digital" (2)3. The growing digitisation process was directly reflected in the popular culture of the time, so much so that digital technologies found themselves at the centre of many popular horror narratives, such as The Blair Witch Project (1999) and The Ring (2002). In these narratives, technology is shown to outlive the human being, whom is susceptible to death induced in part, by the technology itself. Meanwhile, the digital and technological medium in these horror narratives omnipresently and ominously record these deaths take place. Noticing this trend, Rombes explains how uneasy attitudes towards the digitised video are induced partly because it "leaves no traces" (4). For one, the digital video form boasts security in its duplicatable codebased material that cannot be broken, destroyed or lost unlike photochemical film or even

<sup>&</sup>lt;sup>3</sup> Discussing the emergence of terror of any sort during the turn of the millennium cannot escape connections to the 9/11 World Trade Center tragedy. It could be read that these terrifying semantics attached to video images and broadcasting in general arrived as the media became saturated with footage of death (Žižek, 2002). Matthew Leggatt goes as far as to call our moment of nostalgia, "the Age of Terror" where "today's culture is being shaped by a desire to escape into the past as a way of assimilating the horrors of the present" (n.p.).

discs, and yet simultaneously, it is also these very cloning capabilities that can cause such distress.

According to Rombes, the digital video medium has a tendency to "strip away the visible signs of a film's history" (9) and "scrub away" imperfections (Rombes 10), imperfections that are often a product of idiosyncratic, manual human craft. Instead, the appearance of the digital video medium is often "too perfect and too sharp in comparison to film" (Daly). The smoothness and clarity of high-definition technology are unpleasant precisely because they appear unnaturally crisp. This haunting digital quality of hyper-clarity and smoothness is involved in most forms of popular visual entertainment because massmarketed video is usually concerned with achieving a 'comfortable', accessible watching experience. Even television photographers such as Frank W. Ockenfells III. have commented that:

We're not using the highest-end [cameras] because people complained that they were too clear... Film was never this sharp. [High-definition digital is] sharper than real life... you can almost read what someone is thinking. It's kind of terrifying. (qtd. in Horaczek)

The presence of terror, generated by the overly-defined, and strangely perfect quality that comes with advanced digital imaging, demonstrates how its unnerving qualities can often overpower its impressive ones. This effect in television was seen as so unpleasant by many that it became colloquially coined as 'the soap opera effect' (Porter): a pejorative product of high-frame-rates that give on-screen characters a movement that simultaneously carries an eerie speed and unnatural drag — not because of lag or flaws in the code — but because of its perfection. Therefore, the aesthetic the high-definition digital camera creates can lead to a lack of depth and substance, conveying a semantic loss of organicness. Even in Rombes' choice of phrasing in the "scrubbing" and "stripping" away of digital video emphasises a human semantic that summons the subtraction of a kind of protective skin — insinuating the loss and eradication of an organic protective layer that leaves what is behind exposed. Interestingly, the removal of flaws and heightened 'authenticity' in hopes of making the digital image appear clearer and more lifelike can paradoxically result in a subsequent loss of realism, resulting in a more negative, unnerving response. Despite the digital video's clarity and binary neatness, the high-definition picture does not directly translate into one that is

<sup>&</sup>lt;sup>4</sup> In this sense, the term 'authenticity' is used to mean perceptions that are the most equivalent to human ocular sight.

aesthetically pleasing. Rather, it appears to emulate the opposite: a visual quality that is uncomfortable — or perhaps best described as uncanny to borrow Freud's term. In a sense, what occurs as high-definition becomes increasingly more detailed, is similar to the drop into the Uncanny Valley (see fig. 1) that humans experience when faced with robotics that are too lifelike and thus become sickeningly unnerving and uncomfortable to look at (Mori).

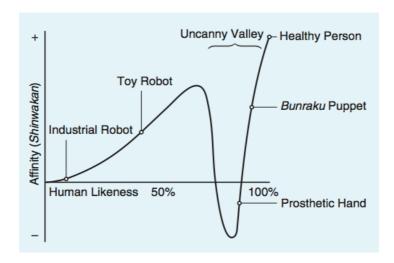


Fig 1. The Uncanny Valley. From Masahiro Mori; "The Uncanny Valley"; *IEEE Spectrum*, 12 Jun 2012, spectrum.ieee.org/automaton/robotics/humanoids/the-uncanny-valley.

This phenomenon of lost realism despite aesthetic clarity can be supplemented by Lev Manovich's readings in *The Language of New Media*. Recalling the digital as a "myth", Manovich responds critically to positive contemporary discourses supporting digital technology's ability to immortalise and duplicate images to an impressive degree of perfection:

In reality... there is actually much more degradation and loss of information between copies of digital images than between copies of traditional photographs... digital images rely on *lossy compression*. (54, original emphasis)

Like the digital photograph, it is often a necessary step for digital videos to have their data compressed to allow for faster playback or better storage and bandwidth purposes (Siegchrist). Lossy compression is therefore quite literally inextricable from the digital video

file when uploaded online<sup>5</sup>. Thus, despite optimisation, higher definitions, or the ability for the digital image to be duplicated and stored on multiple or even infinite devices, inherent to its structure is loss. Moreover, this loss that is built into the digital file is exacerbated by the growing anxieties and realities of bit rot, software obsolescence (Forman), and digital amnesia (*Digital Amnesia*). Digital file structures, then, behind the digital video image, are unnervingly vulnerable and lossy regardless of how secure or realistic they may appear. Even the way the digital file breaks down is far more sinister and unpredictable compared to former, analogue objects. As Bruce Sterling poetically stipulates; "When it piece of software decays, it doesn't degrade like a painting, slowly and nostalgically. When software fails it crashes; it means the Blue Screen of Death" (sic, n.p.). A clash forms between the appearance of the digital video form and the covert ephemerality and loss hidden beneath the perfection of its surface. As the digital image gets increasingly realistic and higher in definition, it will also possess both literal and phenomenological losses as the mediated experiences with perceiving these images grows more uncomfortable.

Hence, when we begin to notice the resurgence of grainier, lower-definition motifs, the enjoyment and satisfaction they elicit can be explained by looking at this observation oppositely. Obsolete and rudimentary imagery is far more natural, and in a sense, *honest*; they carry associations of Sterling's "slow and nostalgic" degradation. In imitating and using obsolete imagery then, the digital form is arguably able to relieve the uncomfortable and uncanny qualities of its hyper-clear digital aesthetic. In short, we can begin to see the comforting appeal and therefore demand for the decayed "nostalgia" aesthetic.

#### The parallel saturation of nostalgia

'Nostalgia' has been studied widely across many disciplines such as psychology, medical studies, literature, and perhaps most recently, media and communication. Previous attempts to define the concept have flocked to its Greek etymology, that of *nostos* (homecoming) and *algi*a (pain) (Autio 227). Similarly, many have also referenced its early status as a medical disorder diagnosed and developed by Swiss doctor Johannes Hofer who defined nostalgia as a physical ailment predominantly suffered by those in the army as an acutely physical, bodily

lare sinisterly lossy compression is a kind of data loss th

<sup>&</sup>lt;sup>5</sup> More sinisterly, lossy compression is a kind of data loss that usually cannot be seen or detected; it is a *hidden* kind of loss (sqa.org.uk).

pain (*The Future of Nostalgia* 19). The term therefore etymologically collides with the familiarity of home, return, yearning and significantly, also pain. Since these origins, nostalgia has become more commonly interpreted as a feeling of pleasant, sentimental remembering, often associated with strong visual, auditory or material cues. One such definition that built the foundations of this understanding was Fredric Jameson's famous "nostalgia cinema". Jameson posits that nostalgia is when "the apocalyptic suddenly turns into the decorative" (xvii), a description that allows us to see nostalgia as no longer just an emotion that is connected to a viscerally personal remembering, but can also be more superficial, stylised layer.

Befittingly, nostalgia as a form of modern day decoration that can be used to cover up the uncanny qualities of the digital image established earlier can be seen in the television form. Niemeyer and Wentz's observe that televisual nostalgia is "not what it used to be" and pull a quotation from *The Walking Dead* to describe how "Nostalgia, it's like a drug"; that "as well as a danger", nostalgia can also be a "cure" (142). In more recent digital video contexts, nostalgia becomes less about sickness but more about remedy. Triggers of nostalgia can therefore be read as providing a kind of 'cure' for digital platforms through the aesthetics of past obsolete and analogue objects. These objects, that are usually characterised by texture, bulkiness and depth, carry an appeal that is completely absent from the virtual and blackboxed digital interface. In fact, an entire popular trend within the field of user interface design of 'skeuomorphism' arose describing this very technique of digital designs often using older obsolete objects to provide familiarity and make for a better user experience on unfamiliar, new digital interfaces (Curtis). Some of the most well-known examples of skeuomorphism include the floppy disk "save" button on word processors and the bevel and shadow added to most electronic 'buttons' to mimic the depth of real ones. For both examples, using already established anti-virtual forms for the digital experience is more familiar and thus makes operating the interface more pleasant to use.

As well as borrowing the structural motifs of old media objects, skeuomorphism can also refer to the addition of virtual textures such as grain, blurs, imperfections and errors that are ordinarily found only in more rudimentary digital forms or analogue objects. To borrow an eloquent phrase from Simon Reynolds, digital forms are often designed to become "ersatz-analogue" (351). Whether "decorative" (Jameson) or "ersatz" (Reynolds), both critics describe the recurrence of nostalgia as an aesthetic gesture that can be layered, masked, and applied on top of another surface. The use of nostalgia can therefore be reconsidered as a

facsimile, affirming its potential role in contemporary popular culture as a kind of visual tactic that can, and does, disguise the digital appearance. Where digital displays once used denoising algorithms (Ellenberger, 2010; Dai, 2012) to make clearer images, there now seems to be an ironic pursuit to re-noise digital images with analogue imperfections and marks. Noise, like nostalgia, derives etymologically from 'nausea', or in other words, pain (Parikka 101). Serendipitously, both noise and nostalgia are similar then; both once carried negative connotations that have eventually become subverted and more attractive within realms of digital technology.

Svetlana Boym, in the seminal text, *The Future of Nostalgia*, offers a possible explanation for the renewed interest in nostalgia as a technique. Boym describes nostalgia as an emotion and feeling that arises during a cultural era that demands it. Publishing *The Future of Nostalgia* in 2001, her work collides with the turn of the millennium and the arguable height of computational preoccupations and technological fascination. In fact, Boym highlights how "outbreaks of nostalgia often follow revolutions" (xvi) and although not a revolution of autocracy and political order, the supposed "Digital Revolution" still signifies a revolutionary shift in cultures of ideology. Moreover, surprisingly few studies have given much attention to her concept of the "off-modern", what Boym names our current epoch. The term acknowledges that we are not modern, or even postmodern as Jameson's nostalgia era supposed. Instead, Boym's *off*-modernism poignantly sees our age as one that continually yearns for the appeals of nostalgia in tandem with the rise of digital technologies.

Off-modernism is characterised by how we "explore side shadows and back alleys rather than the straight road of progress", encapsulating both the "phantoms of [the] familiar...and facades" (*The Future of Nostalgia* xv). Greatly anticipatory of the swell towards greater digital influences and ever-increasing occurrences of nostalgia in her full-length work titled *The Off-modern* (2015), Boym explains how off-modernism is "a contemporary worldview that took shape in the 'zero' decade of the twenty-first century" ("The Off-modern Mirror"). It encompasses the "what ifs" of alternate histories, but also places a large emphasis on the longing of nostalgia through "estranging artistic techniques and... new gadgets" (*The Off-Modern* 8). This method of 'estranging' us, or shocking one out of their habituated perceptions (Shklovsky), occurs because, according to Boym, "erring allows us to touch - ever so tactfully - the exposed nerves of cultural and human potentiality" ("The Offmodern Mirror" 4). For her, focusing on images and objects filled with distortions, ruins, mistakes and counterbalances offer a kind of release:

The logic of edginess is opposed to that of the seamless appropriation of popular culture, or the synchronicity of computer memory. This is a logic that exposes wounds, cuts, scars, ruins, the afterimage of touch. ("The Off-modern Mirror" 4)

Hence, off-modernism places importance on how our (digital) identities can be reframed through ruined and marred visual cues that generate feelings of nostalgia *through* exposing the very underlying "cuts and scars", or even lossy compressions in the digital image. Remarkably, Boym notes that the entire term "off-modern" came to her "by accident, as I was duelling with my computer printer, turning it on and off" (5-6), connecting it directly with an error of a digital process. Therefore, to read the term quite literally as an opposition to the on-ness of technology, off-modernism boldly illustrates how nostalgia can be a way to experience "off"-ness, or an escape from the digital uncanniness described earlier. The off-modern movement pairs the perfect intrinsically with the imperfect; the smooth with the broken. It fuses together binaries: digital dissonance with its inseparable decay and growth; and delight in the contradiction of looking forward *through* mistakes and breaks.

The pleasure for a 'perfect image' of broken ruins can be also seen in the entire photography movement known as "ruin porn"; a trend where people capture abandoned buildings and old, vacated sites<sup>6</sup> (De Silva; Greco). The appeal of ruin porn springs from a contradictory yet present 'relief through ruins', whereby old ruined scenes are a kind of "antidote to the bleak reality of inevitable, complete destruction" (Lyons). With the recognition that nostalgic sensibilities of comfort can be generated through ruins and breakages, Boym allows us to see how seemingly morbid aesthetics of decay and death can be pleasantly nostalgic, and hence counterbalance, or 'cure', the unease of digital forms when they are used.

<sup>&</sup>lt;sup>6</sup> Perhaps coincidentally or significantly, one of the most popular sites for 'ruin porn' are abandoned theatres and cinemas; sites of visual culture and entertainment that this thesis also discusses.



Fig 2. An example of 'ruin porn'. From Yves Marchand & Romain Meffre; "The Ruins of Detroit"; Adam's Theatre, 2007, n.d., www.marchandmeffre.com/detroit/12.

In addition to his observations on the unnerving qualities of digital technologies, Rombes also studies this uprising of "nostalgic" aesthetics, aptly summarising it as a "secret desire for mistakes, for randomness…emerged at the dawn of the digital era, an era that promised precisely the opposite: clarity, high-definition, a sort of hyper-clarified reality" (1). This desire for mistakes – in an all-too-perfect realm of digital hyper-clarity – signals a kind of visual backwardness and therefore generates a feeling very similar to nostalgia. Similarly, Dominik Shrey also explores the curious uprising of these nostalgic 'mistake' motifs, naming the phenomenon "analogue nostalgia". Shrey defines "analogue nostalgia" as a technique where products of popular culture "quote certain characteristics typically associated with analogue inscription *within* digital media in a more or less self-reflexive fashion" (28, original emphasis). He posits that it is a technique of "defiant denunciations of digital production" (28) where "the purpose of this digitally simulated analogue decay… simulates exactly the life or 'soul' that the digital was always accused of lacking" (36).

<sup>&</sup>lt;sup>7</sup> Shrey borrows the term "analogue nostalgia" from Laura Marks' essay "Video's Body, Analog and Digital" (2000).

These critics and observations allow us then, to see the existence of what I will henceforth term "the nostalgia aesthetic": imagery that draws from texture, ruin, and decay derived from analogue and obsolete media objects, and in doing so, creates a pleasant feeling of nostalgia. With this technique, nostalgia can essentially be injected into the digital video picture, allowing aged and decaying visual cues to retrace the 'human touch' (Rombes) that is present in the analogue but lacking in digital. To take a further look at this effect in practice, I now turn to the case study of the digital video streaming platform and content-creator, Netflix.

"Darlin' you got to let me know / Should I stay or should I go?"

— The Clash

When studying the phenomenon of the nostalgia aesthetic in the realm of digital video, no example better comes to mind than the streaming service and platform, Netflix. Established in 1997, Netflix is a content producer, streaming service, and cultural front-runner in the visual entertainment industry (Oat 3) with "125 million memberships in over 190 countries" (media.netflix.com). Despite all the differing ways Netflix can be categorised, one thing is clear: they are an undeniably digital service producing *digital* content. The website's content is only accessible with an internet connection and only viewable on digital devices. The following analysis consolidates the uncomfortable underlying characteristics intrinsic to the platform's experience alongside the concurrent appearance of nostalgia that appears in its design and content, that works to provide "relief through ruins" (Boym). I theorise that the success of shows such as *Stranger Things* can be ascribed to how they are directly able to oppose and in some ways, compensate, for the uncanny qualities of the digital.

#### The Netflix Model

Netflix typifies the unnervingly hidden "lossy compression" found in the digital proposed by Lev Manovich through the way it organises its film and television files. Most overtly, the sheer size of Netflix's database means that it heavily compresses its file data, and moreover, with an AI that maintains the visual quality (Wong). Here, the perceptible definition goes unaffected, whilst the file data itself grows more vulnerable and lossy: as the compression rises, the video files turn strangely contradict. Furthermore, as a large collection of Netflix's content consists of third-party works licensed from other production studios, the service

itself is very volatile, where titles can be removed unexpectedly. Due to factors such as varying laws for different geolocations, or simply Netflix's loss of a certain television show or film's rights, titles within Netflix's database can disappear sporadically and spontaneously. Therefore, titles in the "My List" feature that function precisely to allow each user to catalogue and save content to watch later, can be prone to disappearance. This encapsulates the vulnerability of the digital video form, where videos have no guaranteed stability on Netflix and can obsolesce in an instant. Furthermore, Netflix can be considered as a company of loss and disappearance fundamentally in how it literally made redundant other forms of traditional broadcasting. Through its streaming on-demand format, Netflix's digital structure has contributed to the obsolescence of older companies and producers that operate on a more material level, such as the film production company, Paramount, and VHS rentalstore franchise, Blockbuster (Robehmed). This material loss even extends into the company's own historical progression. Netflix began as a rental service that offered a postal service of DVDs (Digital Video Discs) to homeowners through a monthly subscription system. In 2007 however, the last letter of the DVD acronym was dropped from their services as they transitioned swiftly into the fully digitised service we recognise today. Where they once stored countless old series and films in the form of discs and TV box sets, they now possess only computerised content; their digital video format rendered literal materials objects obsolete. Thus, from the outset, Netflix already semantically and historically exudes loss and disappearance.

#### The Netflix Design

A key component of the digital uncanniness we identified in the previous chapter was Rombes' postulation that the digital video "scrubbed away" an organic tactile texture present in analogue film. This scrubbing into increasingly crisp and clear definitions is seen in Netflix's new production policy initiated in 2014, which dictates that all their original content

<sup>-</sup>

<sup>&</sup>lt;sup>8</sup> The website also does little to warn the user about any titles that will be removed from the platform. Although they claim to provide a 30 day warning and expiration dates about the titles being taken down, this information is accessible in awkward and hidden corners of the website; for example, on the "Details" tab of a television show or film (<a href="https://help.netflix.com/en/node/41298">https://help.netflix.com/en/node/41298</a>) which is rarely accessed.

be filmed and rendered in no less than 4K image resolution ("Cameras and Image Capture"), reinforcing the hyper-clear visual quality of Netflix's digital display.

As an extension from Rombes, a lack of human touch and "warmth" can also be found within the design choices of the website interface that inseparably mediates the videowatching user experience (UX). Fundamentally, the Netflix interface<sup>9</sup> requires little human interaction. Everything is presented to the user under categories of convenience and personalisation, two factors that reduce the role of active exploration. For one, Netflix is famously known for its incredibly complex recommendation algorithm, which in its personalisation, arguably makes users more passive to looking for content themselves. By presenting the user with tailored lists for them to watch, a more organic exploration process diminishes, paving the way for digital mediation to interfere with the users' choice. The reduction of choice is also highlighted in Netflix's equally uncomfortable company bias for displaying its own content in more prominent locations on its website. The strategy of prioritising their content above others is not just an obvious form of vested interest, but also affects the autonomous act of choice through forgetting:

Our choices depend not only on our preferences but also on which options we are most aware of at the moment... when Netflix continues to prime users to think about [their own] offerings, a user who would opt for Breakfast at Tiffany's over the fifth season of House of Cards may not even think to look for the former, despite their underlying preference for it... the platform has every incentive to make you forget about all the movies it doesn't have. (Gilchrist and Luca) 10

Gilchrist and Luca also acknowledge that non-digital 'analogue' video providers such as Blockbuster could have done the same with title-promotion through strategic visual

<sup>&</sup>lt;sup>9</sup> A quality of Netflix is how well it is able to adapt across all mobile devices. However, due to space restrictions, this thesis will focus on the computer website interface rather than the mobile app interface.

<sup>&</sup>lt;sup>10</sup> The user of Netflix is also encouraged to 'forget' their original search when it is unavailable in the catalogue. Instead of just saying that a title does not exist in its system, Netflix directs users to 'Titles similar to...' what they search, again nudging them towards their original content and services, distracting from the *absence* of a title and the fact they were not able to cater to the user's initial request.

merchandising, but it is Netflix's position as both digital streamer and content creator which makes this situation more unique. The digital platform, unlike its store counterpart, has far more dominance and control in how it presents visual information. Whilst a consumer in a store can direct and avert their eyes in an infinite number of ways, a website provides everyone with the same hierarchy of information, and for Netflix, that means their own content is always front and centre<sup>11</sup>. It is not so much the fact Netflix is promoting its own content that is uncanny here, but rather the seamless and almost covert way it reduces human agency and encourages the acceptance of loss and forgetfulness, even "stripping away the visible signs of a film's history" to re-quote Rombes (9).

The absent user activity continues most saliently through Netflix's characteristic autoplay function, which allows watchers to remain stationary as successive episodes can continually and perpetually roll on. Unlike the film reel which needed to be manually changed when the strip ran to its end, or the week-by-week seriality of traditional television broadcasting that remained separated by time, the Netflix seek bar reaches the end of a TV episode, only to roll on to the next automatically, all while allowing the watcher to remain seated and still. In the case of a short-run series such as the eight-episode *Stranger Things*, the user only has a limited five seconds to exit the auto-play. This often leads to a binge-consumption of an entire narrative out of ease rather than choice, especially as all episodes of a Netflix Original television series is uploaded in bulk. It becomes far easier to continue rather than decease.

This promotion of binge-watching series also inadvertently destroys the separation between television and film. Mentioned earlier in the introduction, Netflix is an environment where television shows very easily merge to become eight, nine, or thirteen-hour cinematic experiences; "[streamed TV series] are filmed like movies (that is, all at once) and released like movies (again, all at once)" (Yates). The auto-play feature, making stopping cumbersome, encourages this 'filmifying' of the television show. Thus, the nature of Netflix's UX quite literally obliterates the difference between TV's discontinuous episodes and transforms the

Netflix now also embed autoplaving v

<sup>&</sup>lt;sup>11</sup> Netflix now also embed autoplaying video trailers of their own content in a banner at the top of the homepage. The video and sound play as soon as the page loads, causing the user to be confronted forcefully with Netflix's original content.

once binary nature of episodes into an eternally unfolding narrative. <sup>12</sup> In a sense, then, Netflix has also even contributed to the obsolescence of the television format as we know it. Even this lack of difference between the format of film and television contributes to the diminishing role of user choice, paving another route into a smooth, seamless and uncanny watching experience. "Netflix", as user experience designer Justin Ramedia states, "understands that when consuming media, you are at the mercy of one of the most important rules of interface design; Don't make me think". Although this can be interpreted as an efficient benefit in terms of good interface design, underneath this is the truth that digital technologies and mediation encourage thoughtlessness. The users are under its "mercy"; to use the interface is to also be confronted with its methods of digital control. It is not only "Don't make me think" operating here then, but also "Don't let me think". The reduction of choice coupled with the auto-playing feature in Netflix's UX almost directly reflects the digital fears Rombes detects in Cinema in the Digital Age<sup>13</sup>. All these interactive qualities linked to the website's choice interface design and aesthetics, arguably flaunt its seamlessness, continuity, and even in a convenience-sense, perfection. Nonetheless, the lossy characteristics attached to the service and the slow exclusion of the human user herself, carries an uncanniness with it, quite precisely because of just *how* automatic and seamless these features are.

Incisively cutting through this digital, seamless strangeness however, is the adoption of nostalgic imagery in subtle design choices within both the interface and Netflix's branding. For instance, the nostalgia aesthetic is buried in the company's recent 2017 logo redesign (see fig. 3). Unlike some of its other digital platform counterparts such as Instagram whose

\_

<sup>&</sup>lt;sup>12</sup> Netflix even presents every user with a "Watch It Again" category on their homepage. Whilst the website is known for its user-focused personal recommendation algorithm (and series of oddly-specific sub-genres tailored to their watch history (<a href="https://www.finder.com/netflix/genre-list">https://www.finder.com/netflix/genre-list</a>), every user has this category fairly high up on the page which encourages re-watching and repetition.

<sup>&</sup>lt;sup>13</sup> Almost like the fantastical video tape Rombes references in *The Ring* which must be played again and again to the extent that it outlives the human, Netflix rolls on no matter if the watcher is awake, asleep, or present at all. Responsively, Netflix created a solution with an intelligent feature that pauses video playback if the user has not interacted with the interface after a 3-episode period of time. At second glance however, this feature that seems to pause to communicate humanism, empathy, and attentiveness, is simply an extension of continuity in disguise. As it operates to keep one's place in a show or film in case the watcher has, indeed, fallen asleep; pausing playback keeps a more accurate spot, reducing inconvenience and promoting the user to return to watching continuously yet again.

camera emblem goes from more literal to increasingly abstract, the logo for Netflix evolves oppositely (see fig. 4), tending towards a more material object referent.



Fig 3. Netflix's new logo from Chris Welch; "Netflix isn't changing its logo, but has a new icon"; The Verge, 20 Jun. 2016, www.theverge.com/2016/6/20/11979948/netflix-new-icon-logo.



Fig 4. The evolution of digital platform logo designs. From Elizabeth Stinson; "Infographic: Netflix's New 'n' and the State of Logo Design." Wired, 23 Jun. 2016, www.wired.com/2016/06/infographic-netflixs-new-n-state-logo-design.

Remarkably, Elizabeth Stinson describes the logo redesign as "a red band that folds over itself like a strip of celluloid film, or maybe a red carpet". Going from an entire word in a text-based logo, now to just a one-letter emblem of an 'N', the logo is more object-based and skeuomorphic regarding the similarities to analogue filmstrips. Although Netflix is a digital company where this logo is designed to stand in as a digital *app* icon, it is the analogue qualities of an abstract film-reel that they lean on to brand themselves. Despite Netflix's digital progression, it frames itself visually through the very obsolete objects it is outmoding.

In *The Future of Nostalgia*, Boym observes the following about cyberspace:

Cyberspace now appears to be the newest frontier... Computer memory is independent of affect and the vicissitudes of time... it has no patina of history, and everything has the same digital texture. On the blue screen two scenarios of memory are possible: a total recall of undigested information bytes or an equally total amnesia that could occur in a heartbeat with a sudden technical failure. (347)

This is a perfectly apt description of the state of not only digital interfacing, but also the observations made about Netflix thus far. Boym highlights the absence of different textures within the digital, referring back to its hyper-clarity and smoothness that eventually becomes mundane. Being aware of the homogenous texture and the boredom locked within it offers another insight into the demand for nostalgic imagery that often depicts textures and irregular, imperfect ones at that. It is also befitting that Boym notes the "blue screen" of the digital, which echoes Bruce Sterling's earlier description of digital decay as the "blue screen of death" (n.p.). If the appearance of the digital then, is that of a cool blue hue — a blueness associated with death — it is significant to note the explicit *redness* of Netflix as a brand. Woven through its interface are also small red accents in the buttons and notifications (see fig. 5), maintaining a user experience that denies the blue-digital. It comes as no coincidence that this redness and warmth comes through so intensely in perhaps its most well-known nostalgic work out of all its Netflix Originals: *Stranger Things*.

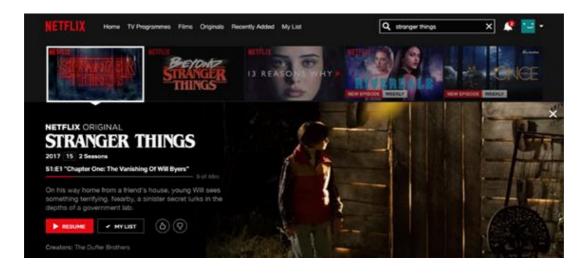


Fig 5. Stranger Things and Netflix's interface design illustrates the "redness" of anti-digital nostalgia. From "Stranger Things Search"; Netflix, n.d., www.netflix.com/search?q=stranger%20things&jbv=80057281&jbp=0&jbr=0.

#### The Netflix Original: Stranger Things

Simultaneous to the unnerving and unmistakably 'digital' features of Netflix, we can see the rise of nostalgia appearing in its originally-produced content. Of course, there will be, by nature, an association to pastness in the variety of old and classical film and television titles unofficially 'archived' in their catalogue. However, beside them are a plethora of newlyproduced titles made by Netflix themselves that appear similar in style. Within the great selection of Netflix Originals, there is a curiously domineering number of narratives that take place during eras of the past; especially eras that are visually iconic, such as the Fifties, Eighties and Nineties. These include, but are certainly not limited to, the 1980s sensibility of Stranger Things (2016-); the 1990s innocence of Everything Sucks! (2018-); the 1950s diners and milkshakes in Riverdale (2017-); the teeming musical 1970s energy in The Get Down (2016-2017); and the cassette tapes and polaroid photographs in 13 Reasons Why (2017-). Moving now from a macro to micro analysis, I now turn to the example of Stranger Things. This television series provides both visual and narrative examples of the nostalgia aesthetic taking place, quite literally showing how Netflix adopts nostalgic images. Delving deeper into this series allows us to see which visual motifs are emphasised on-screen in relation to a narrative; therefore, a series frames instances where images can be somewhat hierarchised by their narrative importance.

First streamed on Netflix in the summer of 2016, *Stranger Things* proceeded to wildly explode into an online phenomenon. The show falls within genres such as drama and adventure, but also horror, typifying the pairing of nostalgia with (digital) anxieties as previously explored by Rombes. *Stranger Things* centres around a group of children in 1983 midwestern America. One of the children is Will (Noah Schnapp), who goes mysteriously missing at the beginning of the show. His friends and family desperately attempt to find him, only to encounter a strange girl instead (Millie Brown), along with a whole host of equally supernatural happenings. The remainder of the show centres around the collective attempt to find Will, all while the characters get mixed-up in political conspiracies and a mystical, alternate reality-space called 'The Upside Down' where they believe Will has been taken to. Although the television show's success has been and can be attributed to many factors such as its narrative arcs, character, and cinematic quality, one of the show's clear dominant identifiers is its unmistakable nostalgic sensibility.

From the moment it begins, the show's nostalgia is blatant and almost hyperbolically heavy-handed. Filmic references to Eighties classics (*E.T, The Goonies, Ghostbusters*) are saturated into every episode; the soundtrack continually draws from artists such as The Clash and David Bowie; and even the casting choices draw paratextual parallels to Eighties culture with actresses such as Winona Ryder — known for her iconic Eighties roles in *Beetlejuice* (1988) and *Heathers* (1988)<sup>14</sup> — playing a main character. The show's nostalgia is so prominent and obvious to the level of self-awareness. This deeply stylised nostalgia therefore adds another layer to the immersion of the show, inviting the viewer to be both immersed *by* the accuracy of the show's nostalgic production that is based within an era many still remember, but is also heavily artificial and fictional due to just how many nostalgic references there are. The show becomes typified as just that: a constructed show; its accuracy as a filmic homage breaks any true realism or immersion. The role of the nostalgic references then, draws attention to the digital form, valorises and subverts it, and by extension, elides the uncomfortable bodily reactions involved in the digital watching process.

One way this dual-acting nostalgic immersion operates is through the show's title sequence. The title sequence of a television series is highly significant and implicitly nostalgic

<sup>&</sup>lt;sup>14</sup> A similar casting choice is made in *Stranger Things* Season 2 with Sean Austin introduced to join the main cast. His association with the 1985 film *The Goonies* is playfully referential, given the sheer number of visual cues and references tipped off to that very film throughout the first season.

in their form: they "not only open up the world of the television show they preface, but they also allow audiences to re-enter the familiar (Williams 61). The titles of *Stranger Things* are an entirely digitally animated sequence, depicting the disembodied letters from the words "Stranger Things" until they form the full title (see fig.6). The typeface, ITC Benguiat, immediately triggers a nostalgia quality, acting as the same font commonly used on mass paperback novels of the Eighties (see fig. 7). Subsequently, the show's title sequence is styled through an analogue-pastness that originates from a source that is foreign online: the book medium. This book-inspired analogue-pastness is reinforced as the titles transition into the episode title in the same typeface, written in the form of a book's chapter titles (see fig. 8). Thus, the entire show is relayed, yet again, in a kind of skeuomorphic manner, introduced with familiar typographic motifs from the older and more recognisable format of the book to transition the watcher into the show.



Fig 6. Stranger Things title typography. From Matt Duffer, and Ross Duffer; Stranger Things; 21 Laps Entertainment and Monkey Massacre, 2016.



Fig 7. ITC Benguiat, a type popular on '80s mass paperbacks. From Haleigh Foutch; ""Stranger Things': The Story Behind That Gorgeous Retro Font"; Collider, 14 Aug. 2016, collider.com/stranger-things-font-itc-benguiat/#ed-benguiat.

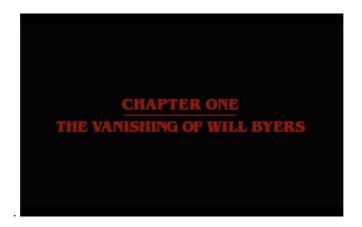


Fig 8. Literary influences. From "Chapter One: The Vanishing of Will Byers"; Stranger Things, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/title/80057281.

In addition, the nostalgia aesthetic can be further observed through the way the title lettering is animated. The digital letters appear to twitch, tremble, and glitch with the vulnerability of early digital pixelation. Michelle Dougherty, the creative director of the title sequence explains how "We referenced... inconsistencies, what you call mistakes. We wanted it to have this tactile feel... and we wanted it to feel organic" (qtd. in "How Stranger Things Got its Retro Title Sequences"). Next to that, the actual production of the title sequence involved using an analogue method called Kodaliths, which involved shining a neon torch light through physical stencils. This was then use as reference footage to fully animate the

effect digitally, translating the effect of illuminated lettering that shake with randomness and inconsistency ("How Stranger Things Got its Retro Title Sequences"). This effect of the digital reconstruction and reanimation of an analogue appearance speaks to the need to reconstitute accidents, the "human touch", and the small aesthetic errors absent and 'scrubbed away' from the crisp and high-definition screen image. With such a stylised and nostalgic opening, the show colours the remainder of the watching experience with a deeply nostalgic tone, along with valorising the digital method that was able to so accurately recreate the analogue effect. This technique enacts Dominik Shrey's "analogue remediation", preparing the watcher to transition into a digital watching experience with the style and idiosyncrasies of its material and textured counterpart whilst still promoting its own digital affordances.

As well as in *Stranger Things'* title sequences, we can also see similar nostalgic motifs and images appearing internally within the show. One of the most characteristic ways the TV series establishes a relationship with nostalgia is how it continually and recursively features dated and obsolete media objects. Not just functioning as age-accurate props to procure better Eighties realism, the obsolete objects nearly always play an active function in the plot; old and significantly *audio-visual* objects often influence the narrative. Everything from televisions, telephones, handheld radios and analogue cameras are continually handled by the cast of main characters and are integrated into the dialogue during climactic narrative moments. Moreover, it is significantly the *breaking* or malfunctioning of these objects that fashion them as significant within the plot as we will go on to explore.

Demonstrative of the unmissable presence and promotion of Boym's off-modern, nostalgic 'ruin', *Stranger Things*' media objects foreground erring and interruption within all the perfection of its accurately constructed Eighties aesthetic. The first-ever moment a media object appears in the show is a television's glitching, warbling screen (see fig. 9). This is the first sign of technology's malfunction and acts narratively as a kind of warning sign for the subsequent danger to come. Soon after, just before Will goes missing, his analogue telephone breaks in the middle of a call for help, which (indirectly) results in his disappearance. This telephone reappears as an essential marker of the supernatural nature of Will's disappearance. When Will's mother receives a strange phone call from a voice that sounds like his, the telephone spontaneously combusts, inciting the beginning of her pursuit to find him herself ("Chapter One: The Vanishing of Will Byers").



Figs. 9 and 10. Broken media objects take centre stage. From "Chapter One: The Vanishing of Will Byers"; Stranger Things, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/title/80057281.

As pictured, the media objects almost always take front and centre stage (see figs. 9 and 10), framed centrally and thus coded as important pieces of visual information. There are examples of these centrally-positioned broken media objects everywhere. In Episode 2 for instance, Mike (Finn Wolfhard) shows Eleven, the strange girl, around his house. He pulls viewer attention clearly towards the television through his dialogue: "This is my living room, it's mostly for watching TV. It's a 22 inch, that's like, 10 times bigger than Dustin's" ("Chapter Two: The Weirdo on Maple Street"). When Eleven is later left at home by herself, she goes back to this television, now an object we remember after the aforementioned emphasis, which then also begins to wildly glitch (see fig. 13). These objects that are foregrounded are always ones of ruin, objects that gain texture and tangibility by breaking.

Moreover, they do so in a heavily pronounced way, sometimes taking up the whole screen and fascinatingly, working oppositely to the covert loss and transparency of the digital video itself.



Figs. 11, 12 and 13. Pulling attention towards the broken television. From "Chapter Two: The Weirdo on Maple Street"; Stranger Things, season 1, episode 2, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/watch/80077369.

The sheer impact of these broken media objects is illustrated most colourfully however, in Season 1, Episode 4: "Chapter Four: The Body". In the previous episode, Will's body has been discovered in the town lake, sending the town into mourning. Episode 4 immediately follows on from this ending with a sequence where Eleven fiddles with Mike's walkie-talkie radio. Above a healthy serving of static, they (and we) hear the voice of Will bubble up through the noise; it is the first moment of hope after the devastating news. It therefore incites a moment of clear peripeteia, "a point in the plot at which a sudden reversal occurs" (oed.com), which directly follows the static and malfunctioning of a media object. Similarly, when Mike's sister, Nancy (Natalia Dyer) searches for her friend that also goes missing, she only realises that something supernatural is at stake after piecing together a torn, ripped and ruined film photograph, and finds a humanoid shape which could easily be mistaken as an error (see fig. 14). In the previous episode, Will's older brother's film camera is smashed to pieces and his photographs ripped to shreds. Only after this inciting action of another broken media object is Nancy encouraged to pick up the torn pieces and discover what happened to her friend. These ruins and errors within the media objects of Stranger Things catalyse action. They flaunt the tactile way analogue and early digital objects break, in ways current digital technologies never do; and again, the broken images are centrally-framed.



Fig. 14. Piecing back together the ripped, errored photograph. From "Chapter Four: The Body"; Stranger Things, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/watch/80077371.



Fig. 15. The exploding radio. From "Chapter Four: The Body"; Stranger Things, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/watch/80077371.



Figs. 16 and 17. Will in the rip in the wall. From "Chapter Four: The Body"; Stranger Things, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/watch/80077371.



Fig. 18. The tears continue on the body. From "Chapter Four: The Body"; Stranger Things, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/watch/80077371.

The truly interesting connection, however, is made at the end of the episode. Two scenes are corroborated together: on one side, the children attempt to communicate to Will through another (heath kit) radio; on the other side, Joyce, Will's mother, finds Will impossibly trapped in the wall of her house. As she claws at the wallpaper, she finds him imprisoned behind a crack in the wall, where what appears to be a pane of glass separates them. This crack in the wall mysteriously grows, moving fluidly with a life of its own, before eventually shrinking and disappearing, trapping her son. The inaccessibility and screen-like nature of the crack almost mirrors a virtual, simulated tear made by a digital screen. Desperate, she tries to reach him by taking an axe to hack at the wall, only to make a large rip through the surface of the *actual* wall, as light now pours in (see figs. 16 and 17). At the same time, the children at the heath kit radio hear Will's cries in parallel, until the radio violently crackles with static and explodes into flames, just like the telephone earlier, in a shocking explosion (see fig. 15).

In this scene, there are two concurrent breakages: one of the radio and one of the wall. As the two unfold simultaneously and the settings switch back and forth erratically, direct parallels are drawn between both the tear in the wall and the inaccessibility to Will with

the medium. Here, the 'mediums'<sup>15</sup> of the radio and the screen-like wall break as Joyce tries to reach her son, who is lost in a mysterious, inaccessible universe. The impact and need for breakages, destruction and visual tears is heightened when Will, a human, with his human-touch, is inaccessible. This climaxes in the final scene of the episode when the town's Sheriff (David Harbour), goes to the morgue to inspect Will's body. With a pocket knife, he makes a violent and rough incision through the torso of the dead body and the audience discovers synthetic stuffing spill out; the truth about Will's staged death is revealed (see fig. 18). Here, the centrally-positioned and narratively-emphasised ruins and tears are consistently connected with the human body and human 'warmth', and in a more abstract way, the inaccessible digital surface.



Fig. 19. The Upside Down. From "Chapter Eight: The Upside Down"; Stranger Things, season 1, episode 8, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/watch/80077375.

-

<sup>&</sup>lt;sup>15</sup> Significantly, this whole sequence of the characters communicating to Will evokes a kind of séance. By connoting to the other meaning of a medium, a person who can communicate with the dead, the literal media here are emphasised.

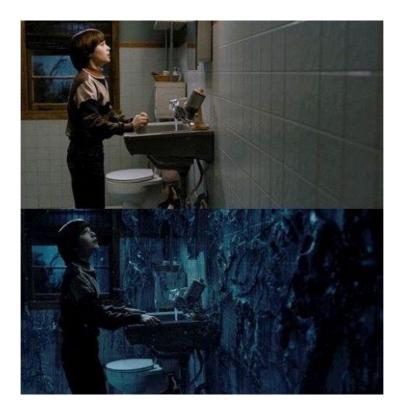


Fig. 20 and 21. Reality flickers into the Upside Down. From "Chapter Eight: The Upside Down"; Stranger Things, season 1, episode 8, 21 Laps Entertainment and Monkey Massacre; Netflix, www.netflix.com/watch/80077375.

Even more visually illustrative of this concurrency between nostalgia and ruins in *Stranger Things* is its setting. As mentioned previously, the environment of *Stranger Things* is split between the regular 'normal' world, and the mystical 'Upside Down'. The Upside Down is described as the literal opposite to reality which translates in how it appears. It is stylised in the show to look like a shadow<sup>16</sup> of the real world (see figs 19, 20 and 21). These images are familiar; the Upside Down eerily mirrors the abandoned sites of 'ruin porn' as seen in the previous chapter. Drenched in decay, this Upside Down space, then, perfectly demonstrates Boym's off-modern landscape. If read as the *off* to the 'regular' world's *on*, the Upside Down is a mystical space of rips and ruin with a serendipitously *blue* hue, that electric colour of the digital that contrasts with the warm browns and yellows in the colour palette of the scenes that occur in the regular world. The Upside Down and the regular world in *Stranger Things* may be structured like binary realms, but like the shadow of a blue light that glows from a screen, the Upside Down can only be assessed through physical tears (or 'gates' as they call

<sup>&</sup>lt;sup>16</sup> The Upside Down is quite literally based off the *Dungeons & Dragons* "Vale of Shadows".

them in the show) that are connected to the real world. Significantly, communication only passes between the two worlds in the show *through* the breaking media objects. When monsters and people from the Upside Down pass over the equivalent spaces in the paralleling 'real world', lights flicker and electricity warbles. Out of the two binary modes of 'Upside Down' (off), and 'Right-side Up' (on), media is what connects them, and not just any media, but media that is disturbed by interference.

The analysis of Stranger Things shows us that the role of the tear, breakage, decay and ruin are all made fundamental to the pacing and narrative events of Stranger Things. Appearing in media objects and various surfaces within the scenes, they are all points of action that become heavily important to the narrative. Within the realm of the show itself, these ruins and even death, often lead to clarity and illumination, and survival and rescue. On a wider scale, the role of the immediately breaking, obsolete media object emphasises mortality and tangibility through their tactile breakages and defunctive qualities. As the characters clutch broken media objects to will them to work, the action transfers a simulated tactility into the screen. These moments are all greatly stylised, in an echo of "the apocalyptic becomes decorative" (Jameson xvii), with all this occurring of course, underneath the inaccessible surface of the laptop or computer screen from which audiences are watching. The Netflix video platform playing Stranger Things is digitally perfect in its crisp, ultra-realistic 4K display, and yet, behind its aesthetics, both the file structures and the uncanniness of this disguise is lossy. The appearance of Stranger Things itself however, is anything but uncannily realistic; its media objects are consistently broken and imperfect and its setting is so nostalgicallyconstructed, the watcher knows it can never be true.

We can almost read the techniques of *Stranger Things* on Netflix with the help of Andy Warhol's Marilyn Diptych (see fig. 21). On one side, Monroe's image is multiplied again and again; every version as bright, clean and perfect as the next. On the opposite side, the ink eventually runs dry as every print fades and disappears into oblivion. These two sides are analogous of the digital and the non-digital: the ever-replicating, unnerving perfection of digital Netflix videos and interfaces on the left, and the more organically 'dying' image of ruin promoted in *Stranger Things* on the right. In a sense, the right-side is the more visually-pleasing and less uncanny version of the psychedelic paint of the left, in pictorially showing the eventual 'mortality' and disappearance of the ink. Similarly, *Stranger Things* does not shy away from the dying and obsolescing media object, unlike Netflix's digital file, and digital files in general, that look perfect every time although they are also vulnerable to bit rot and

digital amnesia. In the digital videos of today, dying and broken media objects become reassociated not as sinister objects, but as hopeful ones, and therefore carry a kind of security and even comfort that is subsequently transplanted into the digital watching experience. In the digital universe of Netflix and its seamless, detailed definition, the broken nostalgic object is the remedy and the cure<sup>17</sup>.



Fig. 21. Andy Warhol; "Marilyn Diptych"; 1962; Tate, 2016, www.tate.org.uk/art/artworks/warholmarilyn-diptych-t03093.

-

<sup>&</sup>lt;sup>17</sup> In another Netflix Original production, *Black Mirror's* Season 3, Episode 4 named "San Junipero", this link is reinforced explicitly. The series is consistently set in the future, focusing on our relationship with future technologies. In this unique episode that is built on a nostalgic 'past' style and setting, the plot quite literally shows how nostalgic settings and sentiments can provide comfort to the elderly in a digital age even more technological than ours as a kind of "nostalgia therapy".

## CONCLUSION

When we read nostalgia, it can be very easy to sentimentalise the concept and see it as a way to dwell on the past. Historically, through the explorations into previous, we can see nostalgia as often having an association with revival and re-experience. Interestingly, however, as we find on digital platforms such as Netflix, nostalgia is redefined through the decidedly less sentimental aesthetics of ruin, error, and decay. They are usually based within the fearsome qualities of digital environments, such as Netflix, that are uncanny, inherently lossy (Manovich) and terrorsome (Rombes). Netflix, a platform nostalgia resides upon that is indicative of the rented, cloud-based nature of digital data files, is uncomfortable and unfamiliar. Working contrarily, nostalgia becomes a technique adopted and contained within this digital platform. By using Boym's off-modernism to read this technique, this nostalgia aesthetic effect can be understood as a symptom of the growing vulnerabilities surrounding digital and analogue media obsolescence alike, demonstrating how the use of nostalgia is far more complex than just an 'anti-modern' mentality. Rather, off-modernism foregrounds the complex blurring of the digital/analogue and on/off binaries. We instead, face an attraction towards the ruins of older media objects which is exacerbated, if not triggered, by the wake of digital platforms.

Typified in this thesis' examples, this off-modern nostalgia technique is demonstrated in *Stranger Things* through the summoning of decaying and breaking media objects on the lossy and fragile digital platform of Netflix. Its title sequence, visual style and paratextual references all carry the textures of obsolete media. Significantly, the old, often analogue, media objects emphasised within the television series break spectacularly or degrade slowly, representing a finite, *human* kind of death opposite to the ever-duplicatable digital video form. However, digital file structures are volatile to obsolescence, disappearance, and an outmoding as newer formats and updates transform our digital images with every refresh—in ways we cannot always see or expect. Despite how fast, hard, and uncontrollable the progression of increasingly detailed and intricate digital technologies become, nostalgia acts as a familiar and comfortable cushion to fall back on. Nostalgia, even when typified by the destruction of past media objects and their myriad visual imperfections, can still be recreated to a perfect degree using the digital.

As we can see then, studying multiple layers of analysis side-by-side and simultaneously is deftly important as well as rewarding. By studying not just the historical

discourses surrounding the digital video form or nostalgia; nor just a close, textural reading of a TV show; nor simply an interface analysis of one website; but rather all these in tandem truly allows us to appreciate the intertwined interaction of the seemingly counterintuitive return to nostalgic earlier media. These layers are heavily reliant on one another and studying them as such is both illuminating and instructive. Further expansion could be gained in taking each element in isolation and delving deeper into psychological processes, phenomenological interactions and more technical attempts to explore skeuomorphic user experiences. However, for now, unlocking even some of these overlapping complexities and drawing attention to their philosophical and theoretical and humanistic workings is the primary *raison d'êtres* of this study. Of course, this kind of analysis can never fully illustrate every interweaving and antagonising element involved in the digital/nostalgic relationship, but it can offer a measured insight into how these subjects can be approached — in present and in future.

Perhaps this fascination for the overt appearances of media death and ruin in digital technology acts as a kind of secure and constant *memento mori* within daily popular culture, a reminder of the human body's mortality in a digital age where the user, watcher and consumer can too often feel disconnected. Choice paralysis and attention economies vie for the time of individuals, and all too often, the proliferation of increasingly more videos, images, and moving text renders one passive. In moments where one sees the exploding, dying and ruined media object form, there is an arguable re-engagement with the body. Yet, this process is also paradoxical and self-exacerbating; the longer we spend drawn to and attracted to 'estranging' nostalgic textures and motifs on digital platforms, the more they are normalised once more.

Of one thing we can be sure: nostalgia is here to stay. Despite our vertiginous progression into thinning, ever-more crisp technologies that may one day become completely immaterial as we know it, the nostalgia aesthetic is unlikely to wane. As long as there is an appeal for the living digital form, there too, will be a desire for the nostalgic, dying media object.

## **WORKS CITED**

- "About Netflix". *Media Center Netflix*, n.d., media.netflix.com/en/about-netflix. Accessed 22 Apr. 2018.
- Adams, Sam. "Just How Unoriginal Are Hollywood Movies And Does It Matter?" *IndieWire*, 9 June 2015, www.indiewire.com/2015/06/just-how-unoriginal-are-hollywood-movies-and-does-it-matter-130883/. Accessed 23 May 2018.
- Adorno, Theodore, and Max Horkheimer. "The Culture Industry: Enlightenment as Mass Deception." *Dialectic of Enlightenment*, Continuum, 1993.
- Archer, John. "Netflix Beats Amazon Prime And Others In Five-Way Video Streaming Shoot Out." Forbes, 22 May 2018, www.forbes.com/sites/johnarcher/2018/05/22/netflix-beats-amazon-prime-and-others-in-five-way-video-streaming-shoot-out/#701824fb6b38. Accessed 23 May 2018.
- Autio, Minna. "Nostalgia", *The Wiley Blackwell Encyclopedia of Consumption and Consumer Studies*, edited by D.T. Cook and J.M. Ryan, 2015, p. 227, doi:10.1002/9781118989463.wbeccs186.
- Bartholeyns, Gil. "The Instant Past: Nostalgia and Digital Retro Photography." *Media and Nostalgia*, edited by Katharina Niemeyer, Palgrave Macmillan, London, 2014, pp. 51-69, doi.org/10.1057/9781137375889\_4.
- Bate, David. "The Digital Condition of Photography: Cameras, Computers and Display." *The Photographic Image in Digital Culture*, edited by Martin Lister, Routledge, 2013, pp. 77-94.
- Bosman, Julie. "The Dog-Eared Paperback, Newly Endangered in an E-Book Age." *The New York Times*, 2 Sept. 2011, www.nytimes.com/2011/09/03/business/media/mass-market-paperbacks-fading-from-shelves.html. Accessed 23 May 2018.
- Boym, Svetlana. "History Out-of-Sync." *The Off-Modern*, Bloomsbury Academic, 2017, pp. 3–8. *Bloomsbury Collections*, 5 May 2018, dx.doi.org/10.5040/9781501328961.ch-001. Accessed 23 Apr. 2018.

- ---. The Off-modern. Bloomsbury Academic, 2017.
- ---. "The Off-modern Mirror." *Journal e-flux*, 2010, www.e-flux.com/journal/19/67475/the-off-modern-mirror/. Accessed 23 Apr. 2018.
- Caoduro, Elena. "Photo Filter Apps: Understanding Analogue Nostalgia in the New Media Ecology." *Networking Knowledge: Journal of the MeCCSA Postgraduate Network*, vol. 7, no. 2, 2014, ojs.meccsa.org.uk/index.php/netknow/article/view/338. Accessed 23 May 2018.
- "Cameras and Image Capture." Netflix Partner Help Center, n.d., partnerhelp.netflixstudios.com/hc/en-us/articles/360000579527-Cameras-and-Image-Capture. Accessed 22 May 2018.
- Chapman, James. "Researching Film and History: Sources, Methods, Approaches." *The SAGE Handbook of Visual Research Methods*, edited by Eric Margolis and Luc Pauwels, SAGE, 2011, pp. 359-371.
- "Chapter One: The Vanishing of Will Byers." *Stranger Things*, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre. *Netflix*, www.netflix.com/title/80057281.
- "Chapter Two: The Weirdo on Maple Street." *Stranger Things*, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre. *Netflix*, www.netflix.com/watch/80077369.
- "Chapter Four: The Body." *Stranger Things*, season 1, episode 4, 21 Laps Entertainment and Monkey Massacre. *Netflix*, www.netflix.com/watch/80077371.
- Curtis, Ambrose. "Rhetoric of Flat Design and Skeuomorphism In Apple's iOS Graphical User Interface." *Open Access Master's Theses*, 2015, digitalcommons.uri.edu/theses/638.
- Dai, Jingjing. "Digital image and video denoising in multimedia applications". Ph.D. Thesis, Hong Kong University of Science and Technology, 2012.
- Daly, Kristen. "New Mode of Cinema: How Digital Technologies are Changing Aesthetics and Style." *Kinephanos*, n.d., kinephanos.ca/2009/new-mode-of-cinema-how-digital-technologies-are-changing-aesthetics-and-style/. Accessed 17 Apr. 2018.

- De Silva, Shayari. "Beyond Ruin Porn: What's Behind Our Obsession with Decay?" *ArchDaily*, 15 Aug. 2014, www.archdaily.com/537712/beyond-ruin-porn-what-s-behind-our-obsession-with-decay/. Accessed 3 June 2018.
- Digital Amnesia. Directed by Bregtje van der Haak, written by Marijntje Denters, Vrijzinnig Protestantse Radio Omroep (VPRO), 2015.
- Duffer Matt, and Ross Duffer, creators. *Stranger Things*. 21 Laps Entertainment and Monkey Massacre, 2016.
- Ellenberger, James. "Noise Reduction in Digital Imaging—An Exploration of the State of The Art." University of Colorado, 2010, pdfs.semanticscholar.org/7495/10e5d3f03649a98c2c0b90b7f500ac455f63. Accessed 25 May 2018.
- Fisher, Mark. Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures. Zero Books, 2014.
- Forman, Jason. "Repair and Software: Updates, Obsolescence, and Mobile Culture's Operating Systems." *Continent*, vol 6, no. 1, 2017, pp. 20-24, continentcontinent.cc/index.php/continent/article/view/275. Accessed 25 May 2018.
- Freud, Sigmund. The Uncanny. Penguin UK, 2003.
- Greco, JoAnn. "The Psychology of Ruin Porn'. *CityLab*, 6 Jan. 2012, www.theatlanticcities.com/design/2012/01/psychology-ruin-porn/886/. Accessed 20 June 2018.
- Gilchrist, Duncan, and Michael Luca. 'How Netflix's Content Strategy Is Reshaping Movie Culture'. *Harvard Business Review*, 31 Aug. 2017, hbr.org/2017/08/how-netflixs-content-strategy-is-reshaping-movie-culture. Accessed 18 May 2018.
- Horaczek, Stan. "Interview: Photographer Frank W. Ockenfels III On Shooting Breaking Bad." *Popular Photography*, 12 Aug. 2013, www.popphoto.com/photos/2013/08/interview-photographer-frank-w-ockenfels-iii-shooting-breaking-bad. Accessed 22 Apr. 2018.

- "How does Netflix license TV shows and movies?" Netflix Help Centre, n.d., help.netflix.com/en/node/4976. Accessed 22 Apr. 2018.
- Jameson, Fredric. Postmodernism, or, The Cultural Logic of Late Capitalism. Verso, 1991.
- Jenkins, Henry. Convergence Culture: Where Old and New Media Collide. New York University Press, 2006.
- Kinsella, Elizabeth. "Hermeneutics and Critical Hermeneutics: Exploring Possibilities within the Art of Interpretation." Forum Qualitative Sozialforschung / Forum: Qualitative Sozial Research [Online], vol. 7, no. 3, 2006, http://dx.doi.org/10.17169/fqs-7.3.145.

  Accessed 30 Apr. 2018.
- Leggatt, Michael. Cultural and Political Nostalgia in the Age of Terror. Routledge, 2017.
- Lyons, Siobhan. "Debbie Does Decay: What "Ruin Porn" Tells Us about Ruins and Porn." The Conversation, 18 Aug. 2015, the conversation.com/debbie-does-decay-what-ruin-porn-tells-us-about-ruins-and-porn-45776. Accessed 20 June 2018.
- "Lossy Compression." *Scottish Qualifications Association*, n.d., www.sqa.org.uk/e-learning/BitVect01CD/page\_85.htm. Accessed 20 June 2018.
- Manovich, Lev. "Post-media Aesthetics." *Manovich*, 2001, manovich.net/index.php/projects/post-media-aesthetics. Accessed 10 Apr. 2018.
- ---. 'What Is Digital Cinema?' *The Digital Dialectic: New Essays on New Media*, edited by Peter Lunenfeld, 3rd ed., The MIT Press, 2001.
- Marks, Laura. "Video's Body, Analog and Digital". *Touch: Sensuous Theory and Multisensory Media.* U of Minnesota Press, 2002, pp. 147-160.
- Mori, Masahiro. "The Uncanny Valley", translated by Karl F. MacDorman and Norri Kageki. IEEE Spectrum, 12 Jun 2012, spectrum.ieee.org/automaton/robotics/humanoids/the-uncanny-valley. Accessed 22 May 2018.
- Niemeyer, Katharina, and Daniela Wentz. "Nostalgia Is Not What It Used to Be: Serial Nostalgia and Nostalgic Television Series." *Media and Nostalgia*, edited by Katharina

- Niemeyer, Palgrave Macmillan, 2014, pp. 129–38. *Link Springer*, doi:10.1057/9781137375889\_10.
- Nivens, Jake. "Aesthetic Excellence: How Cinematography Transformed TV." *The Guardian*, 1 Mar. 2018, theguardian.com/tv-and-radio/2018/mar/01/tv-that-doesnt-look-like-tv-how-cinematography-relit-the-small-screen. Accessed 12 Mar. 2018.
- Oat, Elena. "Analysis of Netflix architecture and business model." *Seminar on Internet Working*, Aalto University, 2013, www.cse.tkk.fi/fi/opinnot/T-109.4300/2015/luennot-files/oat.pdf. Accessed 10 May 2018.
- Parikka, Jussi. "Mapping Noise and Accidents". What is Media Archaeology?. Polity Press, 2012, pp. 90-112.
- "peripeteia, n." *OED Online*, Oxford University Press, March 2018, www.oed.com/view/Entry/141011. Accessed 3 June 2018.
- Perez, Sarah. "On-demand streaming now accounts for the majority of audio consumption, says Nielsen." *Techcrunch*, 4 Jan. 2018, techcrunch.com/2018/01/04/on-demand-streaming-now-accounts-for-the-majority-of-audio-consumption-says-nielsen/?guccounter=1. Accessed 4 June 2018.
- Porter, Jon. "The truth behind motion smoothing, and why you might want to leave it on after all." *Techradar*, 10 Oct. 2017, www.techradar.com/news/the-truth-behind-motion-smoothing-and-why-you-might-want-to-leave-it-on-after-all. Accessed 22 May 2018.
- Poynton, Charles. Digital Video and HD: Algorithms and Interfaces. Elsevier, 2012.
- Reynolds, Simon. Retromania: Pop Culture's Addiction to Its Own Past. Faber & Faber, 2011.
- Ramedia, Justin. "How Netflix started the UX revolution: The glorious end to traditional cable service as we know it." *Medium,* blog.prototypr.io/how-netflix-started-the-ux-revolution-6ff3ea60bfa3. Accessed 20 Mar 2018.
- Robehmed, Natalie. "Netflix Zombies: How Adam Sandler, Dave Chappelle And More Revived Direct-To-Video." *Forbes,* 12 June 2017, www.forbes.com/sites/natalierobehmed/2017/06/12/netflix-zombies-how-adam-

- sandler-dave-chappelle-and-more-are-making-millions-from-streaming/#1331afb85d61. Accessed 20 May 2018.
- Rombes, Nicholas. Cinema in the Digital Age. Wallflower Press, 2009.
- "San Junipero". *Black Mirror*, season 3, episode 3, House of Tomorrow, 21 Oct. 2016. *Netflix*, www.netflix.com/watch/80104625
- Sconce, Jeffrey. Haunted Media: Electronic Presence from Telegraphy to Television. Duke University Press, 2000.
- Shklovsky, Viktor. "Art as Technique [1917]" *The Critical Tradition: Classic Texts and Contemporary Trends*, New York, vol. 3, 2007, pp. 774-784. *Google Scholar*, warwick.ac.uk/fac/arts/english/people/postgraduate/enrdar/teaching/modesofread ing/art\_as\_technique\_shklovsky.docx. Accessed 10 June 2018.
- Siegchrist, Gretchen. "What Is Video Compression?" *Lifewire*, 1 June 2018, www.lifewire.com/what-is-video-compression-1082036. Accessed 10 June 2018.
- Sperb, Jason. Flickers of Film: Nostalgia in the Time of Digital Cinema. Rutgers University Press, 2015.
- Sterling, Bruce. "Digital Decay". Preserving the Immaterial: A Conference on Variable Media, Conference Guggenheim Museum, 30 March 2001, Solomon R. Guggenheim Museum, New York. Keynote Address. *Medium*, medium.com/@bruces/digital-decay-2001-b0db0ca4be3c. Accessed 12 Mar. 2018.
- Stinson, Elizabeth. "Infographic: Netflix's New 'n' And The State Of Logo Design." *Wired,* 23 June 2016, www.wired.com/2016/06/infographic-netflixs-new-n-state-logo-design/. Accessed 21 May 2018.
- Tryon, Chuck. On-Demand Culture: Digital Delivery and the Future of Movies. Rutgers University Press, 2013.
- Vox. "How Stranger Things got its retro title sequence." *Youtube*, 16 Aug. 2016, youtu.be/\_allp\_ygGB4.

- Williams, Kathleen. "The Wonder Years: Nostalgia, Memory and Pastness in Television Credits." *Alphaville: Journal of Film and Screen Media*, vol. 12, 2016, pp. 59–77, cora.ucc.ie/handle/10468/6014. Accessed on 4 May 2018.
- Wong, Joon Ian. "Netflix's new AI tweaks each scene individually to make video look good even on slow internet." *Quartz*, 28 Feb. 2017, qz.com/920857/netflix-nflx-uses-ai-in-its-new-codec-to-compress-video-scene-by-scene/. Accessed 12 June 2018.
- Yates, Brett. "Generation Y: Skeuomorphic television". *Mountain Times*, 23 Mar. 2016, mountaintimes.info/skeuomorphic-television/. Accessed 26 Apr. 2018.
- Žižek, Slavoj. Welcome to the Desert of the Real. Verso, 2002.