

## A (Very) Brief History of Time: From Analogue to Digital

In December of 1903, Thomas Alva Edison and Edwin S. Porter's *The Great Train Robbery* made its debut at Huber's Museum in New York City. Touted by Edison's production company as 'a highly sensationalized headliner', (Anon 1903: 896) it popularised a number of innovative filmmaking techniques. The film recounts the story of a band of thieves whose attempt to rob a train is foiled when their hostage, the station-master, regains consciousness to send a distress call via telegraph. The message alerts nearby authorities which leads to the outlaws' eventual demise in the climactic scene. Unlike most films of this period—which, due a combination of technological limitations and established storytelling conventions,<sup>1</sup> tended to depict single-shot linear events—much of *The Great Train Robbery*'s action takes place 'simultaneously' and across several distant locales: the station, the train, the saloon, and the nearby woods.

Due to its multifaceted narrative structure, *The Great Train Robbery* required a very different visual grammar to its predecessors, one that could convey spatio-temporal disrupture coherently to its audience. Now widely regarded as a pivotal moment in the development of cinematic narrative, the twelve-minute film received considerable popular and critical acclaim for its inventive formal structure as well as its pioneering use of parallel editing (also referred to as cross-cutting).<sup>2</sup> For example, film historian Charles Musser has described *The Great Train Robbery* as 'a remarkable film not simply because it was commercially successful or incorporated American myths into the repertoire of screen

entertainment, but because it incorporates so many trends, genres, and strategies fundamental to cinematic practice at that time' (2004a: 90). Musser's account is one of many that draws attention to the inventive formal composition of this much-celebrated western.

On 6 November 2001, almost a century later, American television network Fox Broadcasting premiered their much-hyped new spy drama *24*. The show, which stars Kiefer Sutherland as Jack Bauer, a senior agent of the fictional Counter Terrorist Unit (CTU), is presented in real-time with each of the twenty-four episodes equivalent to one hour of the season's 'a day in the life' narrative arc. Like Edison and Porter's *The Great Train Robbery*, Fox's conspiracy thriller received similar praise for its innovative approach to storytelling and inventive use of formal techniques. Commending *24*'s groundbreaking style, one reviewer wrote at the time:

How do we see so much in one hour? Bouncing from Jack's team to Palmer headquarters, the crisp and compelling debut episode often uses a split-screen effect, showing two or three concurrent developments at once. It sizzles along on a potent mix of clever editing, terse dialogue and moody direction recalling everything from film noir classics to Hitchcock's espionage stories. (Dawidziak 2001: E1)

Another journalist, excited by the show's longer narrative potential, described *24*'s real-time premise as, 'an idea that is so inspired and yet so obvious that you wonder why no one thought of it before', concluding with a rhetorical but insightful question: 'Why fight TV's time limitations when you can use them to your advantage?' (Bianco 2001: 1D).

Regardless of their hyperbolic tone, these reviews, along with countless others that appeared around the same time, suggest that the show's fundamental appeal is in its ambitious and innovative mediation of time. In many ways, this recalls much of the scholarly discourse surrounding Edison and Porter's landmark film. Indeed, there are some vivid parallels between these two texts and their conditions of production. For one thing, the narratives of both *The Great Train Robbery* and *24* are driven by their uses of contemporary technologies. In the former, it is the spatio-temporal defining apparatus of the train and the telegraph respectively that motivate and resolve the action, while in the latter it is the cell phone, the closed circuit TV, the Internet, and satellite technology that connect the disparate locales and fuel the unusual present tense premise of the show.

Whilst these two texts are separated by almost a century, and although they are the products of specific media and distinctly different artistic and cultural contexts, they nevertheless suggest a pattern in which narrative form becomes particularly malleable during moments of industrial, technological, and/or economic instability. This is not to suggest that narrative form is not an ongoing and continually evolving process, but rather, that the capabilities offered by new technologies coupled with the ever-shifting conditions of production, distribution and exhibition that characterise these periods not only enable but also encourage the creation of new narrative forms. In much the same way that *The Great Train Robbery* tapped into the early twentieth century experience of simultaneity—an experience engendered by the arrival of the telephone, telegraph, and locomotive—24 embodies and articulates the ‘digital time’ (or to be more precise, the real-time) of its own particular era, in this instance through the spatio-temporal instantaneity of cell phones, GPS, satellite communications, and the Internet.

If early cinema was a locus of temporal exploration and experimentation, critical accounts of this period can therefore offer a useful framework for considering more recent developments in television narrative. It is thus worth reviewing some of these debates in greater detail, not least because they share a number of the same critical concerns—namely a concern with the relationship between time, technology and narrative form. More importantly, though, a closer examination of this period will help to demonstrate a pattern in which narrative form and the general perception of time become highly malleable during periods of intense technological and industrial transformation.

Before doing so, however, it is important to stress that despite any contextual similarities between early cinema and the contemporary television industry, there are of course significant differences. Given the main focus of this book, which is ultimately concerned with the relationship between technology and narrative form within contemporary US TV drama, it is therefore important to acknowledge the key material dissimilarities of these two periods: specifically, the differences between analogue (early cinema) and digital (contemporary television) media technologies. Although scholarship often frames early cinema as part of a modernist discourse (and by that token, would locate contemporary television as part of a post-modernist one) I would argue that a more useful terminology in this debate would be that of *analogue time* and *digital time*. There are two key reasons for this. Firstly, this binary foregrounds

the material significance of technology in the relationship between time and narrative, enabling an analysis that is attentive to the issue of ‘medium specificity’. By medium specificity, I am referring to the affordances inherent in particular media technologies (and industrial configurations), which privilege certain production practices. Consider, for example, the introduction of cable TV in the United States in the 1980s and the subsequent spread of niche programming. In this instance, a specific technology (coaxial cable) helped foster the development of new textual forms (niche programming) and industrial configurations (specialist networks such as MTV).

The second value of this analogue/digital binary is that it helps to refine the conceptual focus thereby avoiding a potentially generalised and problematic discussion around modernist and post-modernist perceptions of time. Although I do engage with some key works on modern and post-modern time in the remainder of this chapter, an emphasis on analogue and digital time is a much more effective way to frame the discussion due to the industrial, technological and textual focus of this book.

### EARLY CINEMATIC (ANALOGUE) TIME

In the introduction to his groundbreaking study, *The Culture of Time and Space: 1880–1918* (1983), Stephen Kern outlines his thesis that technology profoundly shaped popular perceptions of time and space at the dawn of the twentieth century. As he explains:

[A] series of sweeping changes in technology and culture created distinctive new modes of thinking about and experiencing time and space. Technological innovations including the telephone, wireless telegraph, x-ray, cinema, bicycle, automobile, and airplane established the material foundation for this reorientation. (1983: 1)

Elsewhere, French philosopher Michel Serres has similarly noted that ‘as soon as one can build them and theorize about them—steam or combustion engines, chemical, electrical and turbine engines, and so forth—the notion of time changes (1982: 72). Crucial here, and imperative to this study as a whole, is the idea that these technological, scientific and cultural developments were connected to the emergence of new spatio-temporal narrative forms and experiences. In order to demonstrate this, Kern

argues that a number of key technologies in this period—in particular the telegraph, the telephone, and the locomotive—gave rise to new experiences of temporal and spatial ‘simultaneity’. These, in turn, left a distinct impression upon the narratives produced in this era. Kern supports this claim with reference to a number of innovative and experimental texts including the stream-of-conscious, temporally compressed prose of James Joyce’s *Ulysses* (1922), and the depiction of perpetual motion in the canvases of futurist painter Giacomo Balla. Clearly, the perception and expression of time had begun to change significantly around the dawn of the twentieth century. As Kern notes:

The structure of history, the uninterrupted forward movement of clocks, the procession of days, seasons and years, and simple common sense tell us that time is irreversible and moves forward at a steady rate. Yet these features of traditional time were also challenged as artists and intellectuals envisioned times that reversed themselves, moved at irregular rhythms, and even came to a dead stop. In the *fin de siècle*, time’s arrow did not always fly straight and true. (Kern 1983: 29)

As we have already seen, and as the example of *The Great Train Robbery* clearly demonstrates, the emerging perception of simultaneity that was explored in the work of writers such as Joyce and artists such as Balla also made a distinct impression upon cinema from very early on. Arriving shortly after the telephone, the locomotive and the telegraph (all of which were invented in the early to mid nineteenth century, but did not become widespread until much later on), cinema was primely placed to document, articulate, and play with the period’s newly imagined temporalities. As a result, film is an ideal medium through which we can explore the various links between technological innovation, reconfigured perceptions of time and space, and the development of new narrative forms. Like many other innovations of the modern age, the film played a substantial and complicated role in this matter. On the one hand, cinema has itself helped to shape these reconfigurations, whilst on the other hand it has mediated and expressed these new possibilities. For now, I want to take a closer look at the role that cinema has been perceived to play within this set of relations, how it has both created and articulated new ideas of time, and how scholars such as Kern have sought to explain these phenomena. Doing so will further highlight the significant parallels that connect early cinema and contemporary television, namely that both

periods are characterised by rapid technological innovation, economic and industrial transformation, and of course, significant changes in the narrative, distribution and exhibition of media within these respective eras.

Since its very inception, cinema has been defined and conceptualised by its inherent relationship with time. This is not simply due to the medium's ability to indexically record, store and re-present a passage of time, but can also be witnessed in its precursory form as a scientific device. Film historians routinely trace the antecedents of cinema to scientific figures such as Eadweard Muybridge, Étienne-Jules Marey, and Thomas Edison. For Muybridge and Marey, their respective sequential photographic apparatus enabled them to view, re-view, and isolate moments in time for the purposes of scientific scrutiny. In particular, both were fascinated with the study of physiology; the new possibilities presented by time-lapse photography allowed them to track and analyse movement with great precision. Although Marey would later reject cinema as he believed that it was unable to contribute anything new to our knowledge of time,<sup>3</sup> the medium clearly originated with these pioneers and was widely regarded as a technology of scientific enlightenment, one that fundamentally redefined the popular imagination of time and space.

Even once cinema moved out of the laboratory and into mainstream popular culture, it continued to be defined by its relationship to time. According to film historian Tom Gunning, the overwhelming majority of early films (at least until around 1908) '[had] one basic temporality... [an] intense form of present tense' (2004: 44), one shot, one take, and due to material limitations, usually no longer than one minute. This dominant mode, which he termed a 'cinema of attractions', often featured short vaudeville acts or 'scenics' that had little if any narrative complexity. The appeal, first and foremost, was the very spectacle and novelty of cinema itself, its ability to re-present a passage of time. Given its frequent appearance in the vaudeville roster, spectators could just have easily watched the original act rather than view its celluloid counterpart. As Mary Ann Doane has argued, even the mundane subject matter of these 'actualités' helped foreground the medium's temporal attraction:

The first films could easily risk banality in their subject matter since their fascination was indissociably linked with their sheer representation of movement through time. The more familiar, everyday, and recognizable the activity, the more appreciable the pure act of its re-presentation. (1996: 338)

The ways in which these early films were presented also suggests a high degree of spectatorial interest in the medium's temporal capabilities. The showmen that exhibited these early works would often intentionally manipulate the film's chronological order much to the delight of audiences. For instance, at the end of the Lumière Brothers' minute-long *Démolition d'un Mur* (1896) (English title: *Demolition of a Wall*) exhibitors would often reverse the projector, thereby disrupting the otherwise unstoppable trajectory of time. Audiences were captivated as the plumes of smoke and debris receded back into the crumbled remains, and watched in awe as the wall defiantly rose again. This was such a common trick of the trade that the film's BFI DVD release even included this backwards version.<sup>4</sup> To paraphrase Kern (1983: 29), this was just one instance in which time's arrow did not always fly straight and true.

As these examples suggest, the distribution and exhibition context of early film is a potentially useful site in which to explore the development of narrative temporalities. Miriam Hansen (1991), for instance, has written about the fragmentation characteristic of the pre-nickelodeon era, where film was just one part of a larger programme of attractions within the vaudeville circuit and travelling fairs. Consequently, in Hansen's account, narrative continuity was disrupted by this mode of exhibition and as a result the spectatorial address was more comparable to the distracted televisual 'glance' than it was to the concentrated cinematic 'gaze' that has since become more commonplace. Likewise, in his essay "Now You See It Now You Don't": The Temporality of the Cinema of Attractions' (2004) Gunning draws a similar conclusion in which he emphasises the significant links between narrative and exhibition. In his account of the emergence of cinematic narrative, he writes that '[D. W.] Griffith and his contemporaries [...] were engaged in redefinition rather than a discovery of film—a redefinition shaped by an economic reorganization attempting to regulate the film industry in the wake of the enormous expansion of nickelodeon exhibition' concluding that, 'it was at this point in history and within this intersection of economic and social forces that film 'discovered' its narrative vocation' (2004: 42). What these scholarly accounts suggest is that the material (or rather, analogue) basis of filmmaking, whether this pertains to the modes of production or the sites of exhibition, played a definitive role in the development of narrative form. Likewise, in *The Transformation of Cinema, 1907–1915*, Eileen Bowser (1990) provides a specific example of how early film technology (in this instance, exhibition technology) had a direct impact

upon narrative form. Due to the limited runtime of film reels, filmmakers would '[plan] for the break in the construction of the film', explains Bowser (1990: 200).

To achieve a sense of completion in itself, each reel would reach a kind of conclusion at the end. Similar motives were at work even when all the reels were released together, because they might be shown with a break for the changes. It was thought desirable to end each reel in a kind of climax that would carry over the break. The next reel would begin more slowly, to build up the interest once again and draw the spectator into the mood of the film. The structure of the multi-reel film was formed in the early years, and the climax or completion of an episode at the end of a reel continued long after it was made necessary by these conditions, a clear example of how exhibition practice can have an effect on the formal structure of films. (1990: 200)

During cinema's earlier years, celluloid was at the cutting edge of media technology, but in retrospect it is easy to see its temporal limitations, to appreciate what it could and could not achieve in regards to the specificity of the medium and its handling of time. For example, cinema, unlike more recent electronic and digital media (such as television), was not a medium suited to liveness. Although it clearly engaged with the period's emerging temporality of simultaneity (for instance, in *The Great Train Robbery*), the time it took to process film meant that analogue cinema could not reach the level of real-time simultaneity that contemporary digital technologies have since achieved. Film programmes often began with newsreels, but these could only show events that had been shot, processed, edited, duplicated and then physically transported to exhibition sites. As such, their content was not nearly as immediate as the narrative simultaneity of their fictional counterparts.

Working with film, even until recently, was a somewhat cumbersome and tricky process in which the speed of editing and range of edit types were severely limited in comparison to today's editing apparatus. Although splicing film is a fairly straightforward procedure, it is a much more permanent and time-consuming process than working with digital files on a non-linear editing system.<sup>5</sup> Indeed, popular digital editing software such as Apple Final Cut Pro or Avid Media Composer allow users to manipulate footage in a variety of ways and with the greatest of ease, all without ever compromising the original material. In short,



the temporalities of early cinema, like any other medium, can be understood in relation to its specific industrial-technological composition. Ultimately, analogue simultaneity and digital simultaneity are two very distinct phenomena and thus provide two very different models of production and narrative expression.

The unprecedented level of change that cinema experienced in its early years—with one account claiming that the number of nickelodeons in the United States doubled between 1907 and 1908 to around 8000 theatres (Bowser 1990)—coupled with the perceived impact this had on the development of narrative form, underscores the need to consider contemporary narratives in their own distributional and technological contexts. Digital technologies, as I argue below, have played an integral role in the reconfigurations currently taking place within the media industries. Indeed, in a very short space of time the exhibition and distribution of television has experienced a degree of expansion and transformation comparable to, if not greater than, that faced by early cinema. The DVD box set, the Internet, smart phones and tablets, and the laptop all offer relatively new (digital) sites for the exhibition of television, in the process encouraging the production of new textual forms such as webisodes, mobisodes, apps and games.<sup>6</sup>

To some extent, these fruitful parallels between early cinema and contemporary media industries have been explored elsewhere. William Uricchio (2004), for instance, has suggested that we can learn from these technological histories, and that any similarities are not necessarily coincidental. In his analysis of the analogue media technologies of modernity, he asserts that these ‘issues resonate with the new digital media technologies and, more generally, with our historical vision of media development’ (Uricchio 2004: 123). Meanwhile, other scholars such as Carolyn Marvin (1988), and Lisa Gitelman and Geoffrey B. Pingree (2004) have produced detailed histories documenting the specific moments in which ‘new’ technologies emerge and the complex circumstances of their adoption. In doing so, such accounts reveal the intricacies and often unpredictable uses that greet ‘new’ media, and in the process help dispel the myth of the teleological development of technology, or for that matter, narrative. The following chapters will therefore endeavour to provide an equally detailed and nuanced analysis whilst similarly avoiding the potential pitfalls of technological determinism highlighted in these earlier accounts.

## TEMPORALITIES OF THE LATE TWENTIETH AND EARLY TWENTY-FIRST CENTURY

The majority of the discussion so far has focused upon early cinematic (analogue) time, but at this point I want to think more specifically about the ways in which time has been conceptualised in the late twentieth and early twenty-first century; the period from which the case studies in the coming chapters emerge. If, as Kern and Uricchio have argued, early cinematic narratives were defined by the cultural conditions and various analogue technologies of modernity, what equivalents might be shaping the form of television in the current era of TVIII? In order to answer this question, it is necessary to first identify some of the principal traits of contemporary time before exploring these in relation to the specificity of digital media.

David Harvey's definitive work in this field, *The Condition of Postmodernity* (1990), is perhaps the best place to begin. Though Harvey's study examines a number of different critical ideas, the experience and organisation of time is a key theme in his work. Specifically, Harvey describes how late capitalism has led to an increased momentum in the production, distribution and consumption of goods, as evidenced by the phenomenal growth of relevant industries and products such as fast food, disposable goods, and various other ephemeral services.<sup>7</sup> Acceleration is thus a fundamental trait and capitalist logic of contemporary Western societies that goes some way to explaining the increasingly fast and varied distribution of media content that characterises television in the era of TVIII. Though critics might argue that Harvey's analysis of the organisation and experience of time in the age of late capitalism is somewhat broad and abstract, like Kern he manages to link these contemporary perceptions of time and space to material processes of industrialisation and the structure and organisation of economic institutions. 'Objective conceptions of time and space are necessarily created through material practices and processes that serve to reproduce social life', explains Harvey (1990: 204). In other words, if the structures of late capitalism enable the accelerated production, distribution and consumption of goods, social life accelerates accordingly.

In addition to the accelerative nature of postmodern time, Harvey points towards the emergence of a more schizophrenic and fragmented conceptualization of past, present and future. 'Such a break down of the temporal order', he writes:

[...] Gives rise to a peculiar treatment of the past. Eschewing the idea of progress, postmodernism abandons all sense of historical continuity and memory, while simultaneously developing an incredible ability to plunder history and absorb whatever it finds there as some aspect of the present. (1990: 54)

Such a notion of fragmented time clearly resonates with many TVIII series, for instance, the complex and convoluted narrative structures of programmes such as *Lost* and *FlashForward*. In the former, stories are told with a particular emphasis on past and future events through the use of flashbacks and flash-forwards, with these fragmented, parallel narratives forming a core part of the show's dramatic tension. Moreover, *Lost*'s success as a metatextual, transmedia franchise, with ancillary narratives that include videogames, online role-playing games (RPGs) and alternate reality games (ARGs), books, webisodes and mobisodes, only serves to reinforce this twenty-first-century notion of a schizophrenic temporality. It can be difficult enough to comprehend and piece together the narrative order of a programme such as *Lost* without the addition of paratextual content, a point that I explore more thoroughly in Chap. 5.<sup>8</sup>

Harvey is not alone in his observations about the accelerated and fragmented temporalities that characterise this period of late capitalism. Scott Lash and John Urry (1994), for example, similarly attribute the increasing velocity of time to the intensification of capitalist economies. More importantly, however, they explicitly link this notion of acceleration to other broad cultural developments, particularly in the field of computer technology. According to Lash and Urry, the widespread diffusion of computers has produced a temporality that is 'instantaneous' and 'beyond the realm of human consciousness' (1994: 242). The authors take this argument further still when they suggest that clock-time (the time by which modernism operated) is no longer as relevant as both labour and recreation become increasingly organised around the instantaneous time of the microchip. Thus, in their account at least, technology once again makes the principle contribution to the reconfiguration of time and space, in this instance in the form of 'computime'.

Interestingly, in the same study Lash and Urry claim that contemporary scientific and technological developments have led to an equally imperceptible form of time at the other end of the spectrum: 'glacial time'. This interest and awareness of historical time, they suggest, can be traced to a variety of contemporary scientific breakthroughs

including the human genome project and carbon dating, as well as a growing interest in the ecology movement. To some extent, it might be argued that this phenomenon of glacial time has already permeated a range of cultural texts. For instance, there have been a considerable number of programmes in US television in recent years that deal with themes of fate, destiny, legacy and/or a sense of broader historical purpose. The list includes *Lost*, *Carnivàle*, *Terminator: The Sarah Connor Chronicles*, *Heroes*, *Jericho* (CBS, 2006–2008), and *The Walking Dead* (AMC, 2010–present) to name just a few.<sup>9</sup> While acceleration often dominates critical debates about time in the late twentieth century, it is clearly just one of many temporalities.<sup>10</sup> Indeed, the three narrative modes that I have outlined in the introduction map quite neatly with the three temporalities identified by socio-cultural theorists such as Harvey, Lash and Urry: namely, acceleration, complexity and slowness/retrospection.

Although these accounts were written long before the changes that are currently shaping the contemporary US television industry had come into full force, and although most (with the exception of Lash and Urry's 'comptime') do not specifically address *digital* time, these accounts nevertheless have critical value as they demonstrate yet another historical precedent in which the relationship between technology and time is subject to constant transformation.<sup>11</sup> As much as we can learn from these critical debates around analogue time, I want to think more specifically now about the unique properties of digital media. The question is this: how have digital technologies been discussed in the context of these debates about the structure and experience of time, and what differences do they reveal when compared to analogue media?

Whereas a significant number of scholars have addressed the relationship between time and *analogue* media, with many of these accounts outlined above, far less has been written about the relationship between time and *digital* media. Even in comparative accounts of analogue and digital media, time is rarely a central concern. Instead, many of these accounts simply delineate these different media in terms of their mode of representation (i.e. between the actual *Mona Lisa* and a digital photograph of the *Mona Lisa*). For instance, in 'Transparent Technology: The Swan Song of Electronics', computer historian Timothy Binkley maintains that the fundamental difference between these two forms is that 'analogue media are physical' whereas 'digital technologies are conceptual' (1995: 427). Later, he expands on this, describing the processes of

these respective media as that of ‘transcription’ and ‘conversion’ (Binkley 1995: 430). In other words, analogue media involve a physical impression whilst digital media are simply a binary emulation. In any case, the critical focus of Binkley’s account is clearly less concerned with time and more about issues of representation and authenticity.

Along similar lines, Douglas Davis (1995) has written about the fidelity of analogue and digital recordings, arguing that digital production has not only enabled new art forms, but has also led to complex new networks of distribution. Rather than specifically examining the relationship between digital media and perceptions of time however, these accounts, along with countless others, tend to prioritise issues of quality, authenticity, and the aura of digital media, evoking Walter Benjamin’s seminal essay, ‘The Work of Art in the Age of Mechanical Reproduction’ (1968) in the process.

However, Davis’s account does gesture towards some issues more pertinent to the discussion at hand. For instance, at one point he discusses the potential consequences of the growing storage capacities and the increasing efficiency of retrieval systems that structure digital media. This, I would argue, is a key trait of digital technologies, and that the vast archival potential facilitated by binary code has engendered a curious and contradictory relationship with the past, one that both accurately records but also potentially distorts and reconfigures history (a tension that I explore further in my discussion of *Mad Men* in Chap. 8). Davis’s account makes a number of allusions to this notion of digital memory. In one instance he points out ‘that any video, audio, or photographic work of art can be endlessly reproduced without degradation, always the same, always perfect’ (Davis 1995: 382), resulting in a more precise and permanent record of the past. Yet he later refers to the possibility of a more interactive and manipulative reconfiguration of history and illustrates this with the example of Ted Turner’s colourisation of black-and-white film classics (Davis 1995: 382). Davis thus draws our attention to the ability of digital media technologies to re-define our perception of the past, yet his suggestion that they constitute a more permanent record of history immune to the ravages of time is not necessarily in line with more recent claims that we are entering into a digital dark age (Sample 2015) in which our record of the present will be lost due to the ephemerality and fragility of digital media.

While many of these critiques of digital media stem from computer sciences, a handful of media scholars have explored some of these same

issues, most notably by examining how new media technologies are redefining our relationship to the past. For instance, Charles Acland's edited volume *Residual Media* (2007) features a diverse collection of essays that examine different aspects concerning the residual nature of media and the relationship between contemporary technologies and the past. In his essay 'Embedded Memories', for instance, Will Straw argues that the Internet has helped to reinvigorate 'early forms of material culture' (2004: 4). As he elaborates:

It is not simply that the Internet, as a new medium, refashions the past within the languages of the present, so that vestiges of the past may be kept alive. Like most new media, in fact, the Internet has strengthened the cultural weight of the past, increasing its intelligibility and accessibility. On the Internet, the past is produced as a field of ever greater coherence, through the gathering together of disparate artefacts into sets or collections, and through the commentary and annotation that cluster around such agglomerations, made possible in part by high-capacity storage mechanisms. (Straw 2004: 4)

Elsewhere, Jay David Bolter and Richard Grusin (1999) have argued against the once prevalent assumption that new media technologies constitute a radical break from the past. Like the work by Uricchio (2004), Marvin (1988), and Gitelman and Pingree (2004) cited above, their notion of remediation draws attention to the various continuities that exist between media technologies and textualities past and present. Although I would agree that new media technologies share many similarities with their predecessors, it is important to also recognise that they can and often do introduce key differences—differences that contribute to a reconfiguration of spatio-temporal perception, as critics such as Straw have suggested (2004). There is no doubt that early (analogue) technologies produced particular temporal experiences and artistic expressions. By this same token, contemporary (digital) technologies have engendered their own specific perception of time and space. As David Cook maintains, '[it] is obvious that the world has a quite different sense of time and space in digital reality [...] than in classical times' (2003).

These works by Acland (2007), and Bolter and Grusin (1999) have examined the relationship between different media and the past, and in doing so they demonstrate the significant role that technology (and media) play in the construction, organisation and perception of time.

Though these particular accounts focus on media in its broadest definitional sense, others have focused more specifically on television and its relationship to the past. For instance, Derek Kompare's *Rerun Nation: How Repeats Invented American Television* (2005) offers a detailed critique of the phenomenon of TV repetition. In this account, Kompare engages with a number of issues pertinent to my own study, such as televisual nostalgia and the impact of the TV DVD box set. This latter mode of digital distribution, he claims, has had a considerable effect upon the television industry in a number of different ways. 'The boxset,' he explains, 'is a nexus point of twenty-first century media change' (2005: 200). Discussing the effect that this new platform has had upon the temporal regimes of television, Kompare notes that:

It fulfils the decades-long relationship between television and its viewers, completing the circle through the material purchase – rather than only the ephemeral viewing – of broadcast texts. DVD boxsets have become the ultimate bearers of televisual repetition, placing television programming in a more direct, repetitive, and acquisitive relationship with its viewers. (2005: 200)

It is clear, then, that new digital technologies such as the DVD box set have had a discernible effect upon the temporal regimes of TVIII. If the medium's industrial, technological and temporal composition has transformed in recent years, it is therefore inevitable that its narratives have also transformed.

### TELEVISUAL (DIGITAL) TIME

So far, I have drawn on a diverse body of research from a variety of different disciplines in order to construct this brief history of the relationship between technology and time. However, I want to direct the focus of the remaining part of this chapter more specifically toward television. In doing so, I begin with a broad outline of the medium's temporal origins, before examining how media scholars have more recently theorised the introduction and impact of digital technologies.

If we were to summarise (early) cinema's core temporal disposition—bearing in mind its apparent fascination with the technologies of the telegraph, telephone, and locomotive—simultaneity might be the obvious answer. Yet, as William Uricchio has argued, during this period

‘simultaneity stood as a powerful anticipation which cinema could simulate but never deliver’ (2004: 132). Indeed, as detailed above, film emerged as a medium more suited to the storage, analysis, and sheer representation of time, and as Uricchio points out, could never contend with ‘the presses’ sense of immediacy’ (2004: 124). Thus, neither simultaneity nor liveness were true attributes of the medium, especially given the lengthy developing times and the high costs associated with producing the multiple film prints that would have been required in order to realise this goal. Rather, as Uricchio claims, TV was more fit for this purpose: ‘Television, rooted in simultaneity, in a technologically enabled sense of proximity and contiguity, might seem to fulfil precisely those criteria missing in cinema’ (2004: 135). Whereas film exhibition has come to depend upon the exclusivity and cutting-edge appeal of its products, television—at least during the classic network era (or TVI)—has instead more commonly been linked to temporal modes of simultaneity, immediacy, dailiness, and (re)‘cyclicity’.<sup>12</sup> These particular temporal traits have arguably become even more pronounced given the near-instantaneous processing power (immediacy, simultaneity) and increased storage capacities (re-cyclicity) that have been enhanced by the arrival of digital technologies.<sup>13</sup>

Uricchio’s account is especially insightful here as it foregrounds the capabilities of the technology within the relationship between television and narrative form. With the exception of accounts such as those by Uricchio (2004) and Kompare (2005), much of the scholarship examining televisual time has either focused primarily on the centrality of liveness (Levine 2008; Lury 2005; Marriott 2007; Scannell 2014)<sup>14</sup> or has sought to draw attention to how TV has been integrated into, and helped reinforce, existing social structures of time. Perhaps the most notable contribution to the latter is Roger Silverstone’s seminal account of television’s function within ‘the routines and rhythms of everyday life’ (1994: 20). At times, Silverstone comes close to establishing a material connection between the temporalities of television and narrative form in the same manner as Kern and Uricchio, or in the way that the more recent industrial-textual scholarship discussed in the previous chapter has managed to do so. For example, at one point he writes that ‘narrative patterns themselves, the essential recursiveness of beginning, middles and ends, and of action and characterisation, offer a homological expression of, and a model for, the paramount narrativity of experience’ (Silverstone 1994: 20). However, Silverstone never really unpacks or substantiates this claim.



While Silverstone later dedicates an entire chapter of his study to an analysis of television as technological form, he never returns to his earlier discussion of narrative structure. Moreover, the intentionally broad scope of Silverstone's analysis, which is dominated by a discussion of the domestic space(s) occupied by television, leaves little room to perform close textual analysis in the way that I do in the following chapters. To be fair, Silverstone is more interested in institutional and social structures and less concerned with textual forms. In other words, his study is not so much an industrial-textual analysis as it is an industrial-cultural one.

Elsewhere, Paddy Scannell (1996) has also written about the regimes of televisual time and identifies a number of useful categories including cyclical, daily, linear, live/event, natural, and phenomenological to name a few. Scannell offers some close textual reading to illustrate these modes but tends to privilege genres that inevitably match these temporal regimes, in particular, news, soap operas (both 'daily' and 'cyclical' time), and sports events ('live/event' time) whilst overlooking others.<sup>15</sup> There are other limitations with Scannell's account, at least in the context of this study. Most notably, there is a very limited analysis of fictional programming and, like Silverstone, Scannell often relies upon rather abstract categorisations of time, often failing to evidence these with specific examples.

Despite their different conceptual framing, and regardless of their primary emphasis upon the classic network era (TVI) and the multichannel era (TVII), these works still highlight a number of important ways that television is temporally conceived and constructed. For example, both accounts draw attention to the way in which the medium can be divided into discreet temporal parts; prime time, day time, late night, weekday, weekend, winter, summer, and so forth. Indeed, industrial logic is built around these kinds of temporal divisions, as networks value, rationalise, and programme their products according to any given combination of the above. For example, Scannell observes that the television calendar 'naturally falls into two divisions: the indoor months of autumn and winter, and the outdoor months of spring and summer' (1996: 154). This phenomenon, he goes on to explain, is rooted in a pre-television era, in which radio manufacturers found that:

[T]he sale of radio sets increased sharply as winter came on [...] By the twenties, output was being planned on a quarterly basis, and the autumn

season was always carefully designed to woo the ‘fireside listener’ with a varied menu of new plays, concerts and variety programmes. (1996: 154)

This seasonal programme structure continued, as television overtook radio to become the dominant medium, and is a practice that still holds true today. In the United States, the ‘fireside listener’ is still courted by the major networks who air new pilots and continue existing franchises primarily in the autumnal months—though, as I discuss in later chapters, the seasonal window has evolved so that an increasing number of series now premiere in January. As such, Scannell’s account shows that radio, as opposed to cinema, is perhaps a more accurate technological and temporal precedent for television.<sup>16</sup>

While Scannell attributes the development of television’s temporal regimes to industrial logics inherited from radio, Amanda D. Lotz (2007a) makes a compelling case for an entirely different process driving the medium’s temporal development. In her article on the television up-fronts, the short pre-season window in which producers and networks buy and sell programming and commercial airtime, Lotz notes that ‘the practice of presenting a new “season” of programming and then selling nearly all its advertising time began in the 1960s’ (2007a: 551). Citing an earlier publication by Erwin Ephron, a television industry professional, Lotz suggests that the invention of the television season ‘occurred by chance when the weak third-place network ABC decided to premiere all of its programs in the week following the Labor Day holiday in 1962—the same week new car models were unveiled and advertised’ (2007a: 551). According to this account, the season emerged not so much in relation to the natural time of winter and summer, but rather as a result of incidental economic practices.

Regardless of how television came to standardise its temporal regimes, the season has remained a core feature. Unlike the less regular and shorter seasonal durations in Britain (which tend to run for six to twelve episodes), the US season typically comprises twenty to twenty-four episodes (or approximately twelve episodes per season on cable). These kinds of durations no doubt have a clear impact upon narrative form (see Newman, 2006; Smith 2013). For example, longer season durations may enable longer story arcs, providing more scope for serial narratives—though the prevalence of serial storytelling on cable television, where seasons typically run for twelve episodes, suggests that the opposite may also be true. Still, as I detail in the coming chapters, even the season has

undergone a significant degree of transformation during the turbulent era of TVIII.

Given the critical focus of this book, it is important that we should also consult what is perhaps the most significant text on television and time, Raymond Williams's *Television: Technology and Cultural Form* (1974). In this ground-breaking study, Williams offers a number of original observations on television. The real legacy of this work, however, is his concept of 'flow', the recognition of a meta-level of experience and meaning beyond the individual text. 'This phenomenon', he writes, 'is then perhaps the defining characteristic of broadcasting, simultaneously as a technology and as a cultural form' (1974: 80). Williams goes on to elaborate:

In all communications systems before broadcasting, the essential items were discrete. A book or a pamphlet was taken and read as a specific item. A meeting occurred at a particular date and place. A play was performed in a particular theatre at a set hour. The difference in broadcasting is not only that these events, or events resembling them, are available inside the home, by the operation of a switch. It is that the real programme that is offered is a *sequence* or set of alternative sequences of these and similar events, which are then available in a single dimension and in a single operation [emphasis in original]. (1974: 80–81)

Whereas film scholars often conduct textual analysis on a text-by-text basis, and while this was indeed the trend in television studies until Williams published his thesis in the early 1970s, TV requires a more careful and nuanced approach due to its multifaceted and sequential nature. Rarely are television texts consumed in isolation. Unlike films they tend to be interrupted by commercial sponsors, and even when they are broadcast on a public service station or streamed online, they are often preceded and followed by interstitial titles, logos, promos, and continuity voiceovers. The economy of commercial television means that programming, and even the individual text, is constructed in such a way as to keep the viewer engaged in the flow of content—this logic applies to both broadcast television and online television. The 'cliffhanger' is one way that producers try to ensure that audiences will return after the commercial break or for next week's episode. The recap and the 'next time on ...' promo are two examples of this persistence of televisual flow.

These are just a few of the medium's many textual strategies that will be explored over the coming chapters.

Yet the liveness, synchronicity, and simultaneity that have been integral to the very definition of television during Williams's time have, to some extent, been weakened by the vast expansion, digitization, fragmentation, and flexibility of flows in the era of TVIII (see Lury 2011). How then are we to understand the development of contemporary narratives within this context? Moreover, how has the transition from analogue to digital impacted television narrative? One way to answer these questions would be to consider the sequence of texts as part of a 'technological flow' (i.e. to focus on how narratives function across or within different platforms). Indeed, in recent years a number of scholars have adopted this approach, exploring how industrial convergence, DVDs, DVRs, streaming and mobile devices have all complicated the question of textual flow and narrative form (see, for instance, Caldwell 2004).

In 'Flows to Files: Conceiving twenty-first Century Media' (2002), Derek Kompare does just this. Through a comparison of analogue and digital modes of television distribution and consumption, Kompare draws out a number of fundamental differences between these two media processes. 'At the beginning of the twenty-first century', he writes,

[M]uch so-called 'mass' electronic communication, including television, does not always 'flow'. It can arrive in our perceptions in discrete, malleable packages rather than a constant stream. We can stop it, repeat it, rearrange it, edit it, catalogue it, and discard it. (Kompare 2002: 1)

Thus, digital technologies have significantly redefined the very notion of television 'flow', shaping how we interact with the text, and by extension, the ways in which we experience and understand narrative form. Most importantly, though, these new arrangements have also laid the foundations for the new production practices and emergent narrative forms of TVIII.

A similar work in this field is Barbara Klinger's *Beyond The Multiplex: Cinema, New Technologies, and the Home* (2006), parts of which examine the ritual of repeat viewings, the practice of video collection, and the temporal manipulation offered by DVD and VCR players. Her analysis raises a number of pertinent questions concerning nostalgia, memory, and the construction of viewer identity, the first two of which will be addressed in my analysis of *Mad Men* in Chap. 8. Writing about the

influence of these technologies upon the viewer's experience of the narrative, Klinger suggests:

Playback devices that enable film repetition exercise dramatic effects on text and viewer, shaping the narrative experience and its place within the viewer's imagination. Armed with a remote control, any home viewer can manipulate a film with glee, fast-forwarding, rewinding, or otherwise interrupting narrative chronology to refashion the film according to his or her desires. (2006: 138–139)

Yet this instance in which technology reconfigures narrative form occurs at the point of reception rather than at the point of production. As such, this constitutes an example of 'user' flow rather than the 'programmed' or 'industrial' flows that I am more concerned with in this book. Indeed, the BBC's development of 'object based broadcasting' in which content can be automatically assembled and delivered in different permutations depending on a number of contextual factors, is a good example of how digital technologies and workflows are complicating narrative form from the very point of production (Churnside 2013).

Klinger's study offers a compelling account of how technology can transform our viewing experience and in some cases the temporality of a text, but it is worth noting that her primary concern is with how cinematic texts, rather than televisual texts, are disrupted and reconfigured within the confines of the home. Klinger's analysis does, however, resonate with a number of the critical ideas discussed above, including the notion that the flexibility and archivability of digital media transforms our relationship to the text. Although Klinger locates these practices as a continuation of analogue forms such as the library or the photo album, using Walter Benjamin's essay 'Unpacking My Library' as the basis for her analysis, and though I would not dispute these historical continuities, digital technologies have nevertheless caused significant changes to how media is now produced, distributed, exhibited, and consumed. Lotz makes this very point in the introduction to *The Television Will Not Be Revolutionized* (2007b) by beginning with an anecdote that highlights the difficulties typically associated with recording television onto the now obsolete format of VHS. The contrast between this older analogue technology and its newer digital iteration is significant within the context of the current media industry. With the arrival of DVRs such as TiVo and Sky+ in the late 1990s and early 2000s, entire seasons of

programming can now be recorded with the press of a button or, in the case of the former, DVRs can use algorithms to automatically record programming based upon user habits, aided by embedded metadata such as genre, director and/or actor. While many digital technologies have been modelled upon their analogue forerunners, in Lotz's account it is the *convenience* of these devices that radically transforms how consumers engage with television in the digital era, not least for their ability to time-shift the otherwise meticulously planned schedules of broadcast television.

Like Klinger, Lotz offers an equally detailed analysis of the new temporal experiences engendered by DVDs, in this instance specifically addressing the consumption of television box sets. 'The opportunity to compress viewing' she writes, 'allow[s] better memory of meaningful details that might be forgotten if viewing was stretched over months and suggest[s] the new potential viewing pleasures that might develop from the possibility of condensed viewing' (2007b: 62)—a mode of viewing that has increased significantly in tandem with the growth of streaming service Netflix which has adopted a model of releasing complete seasons of their original programmes all at once. With these increased opportunities for bingeing, the complex and rich narrative universe of a series such as *Lost* clearly benefits, increasing the viewing pleasure, perhaps even encouraging the production of these narrative forms in the first place.

Accounts such as those by Klinger and Lotz are insightful, but they focus on industrial and technological developments without necessarily using specific examples to illustrate how these factors bear upon textual form. In other words, they differ in the industrial-textual concern that underpins historical poetics and informs my own approach. As noted earlier, there are, however, a number of scholarly accounts that have sought to strike a more even balance between industrial and textual analysis within the field of television studies, including Caldwell (1995), Nelson (1997) and Shimpach (2010). In addition to these works, Michael Z. Newman (2006) has proposed a poetics of television narrative which similarly combines industrial and textual analysis. Newman does this specifically in relation to the prime time scripted drama of the past twenty-five years and in doing so identifies a number of useful and unique temporal categories that draw attention to the formal composition of these programmes. Newman's television poetics is divided into three parts, covering the micro level ('beats'; the individual scenes of any given episode), the middle level (the entire episode) and the macro level

(the longer narrative arc/season). Of particular use, Newman demonstrates how each of these elements is shaped by institutional factors. For example, he notes that the duration and rhythm of beats are defined by impending commercial breaks, often resulting in cliff-hangers.

Later in the same article, Newman notes the increasing use of parallel storytelling, a trope that is integral to the structure of many of the temporally complex shows discussed later in this book. Importantly, and as Newman explains, his approach is designed specifically to address texts within the media environment at the time of writing, a landscape characterised by ‘the introduction of more than one hundred new channels, pervasive new structures of media ownership and synergy, and transformations in the technologies of media production and distribution’ (2006: 16). In short, Newman’s account of beats, episodes and arcs demonstrates the value of an industrial-textual approach to the analysis of the narrative temporalities of TVIII.

Similarly, in her analysis of series and serials, Angela Ndalanian proposes a number of links between the texts and contexts of early TVIII. She writes:

The conglomeration of the entertainment industry has resulted in an industry that has multiple media interests. The outcome has been new convergences between diverse entertainment forms—comic books, computer games, theme-park attractions and television programmes. All these configurations have formal repercussions. Even when part of the same conglomerate, subsidiary companies must still vie for audience attention by offering their own media-specific experiences, and they attempt to ensure success and a faithful audience by relying on serial logic. (2005: 85)

In many ways, this recalls some of the scholarship on early cinema in which narrative was similarly understood in relation to the economic, cultural, and technological conditions of its time. While Ndalanian claims that (televisual) seriality becomes the dominant narrative mode during periods of intense technological and economic competition, in his essay on mobile television, ‘Little Players, Big Shows’ (2007), Max Dawson has pointed toward a distinctly different phenomenon at the other end of the spectrum. In examining the way that narrative has adapted to the development of the third screen<sup>17</sup> he suggests that ‘to “mobilize” television is to “miniaturize” it: literally to shrink established media properties to sizes, scales, and *durations* appropriate to the new diminutive devices’

[emphasis added] (2007: 231). Although the idea that new technologies have redefined narrative or aesthetic form has a long critical tradition (see other historical accounts of widescreen, colour, sound, and home video players),<sup>18</sup> Dawson identifies the unique industrial strategy of ‘unbundling’, a practice that has become commonplace in the era of TVIII. Simply put, unbundling is a consequence of media convergence in which segments of a text are extracted and repurposed across the new digital landscape of TVIII. In the industrial-textual trend, Dawson maintains that television shows are often constructed in such a way as to make them more susceptible to being broken down into smaller bite-sized parts that can then be profitably distributed via other channels such as the Internet or on mobile devices. Whereas Ndalianis highlights the emergence of new long-form textualities such as the serial, Dawson draws attention to the development of new kinds of short-form content such as the unbundled episode recap. Either way, these two studies demonstrate the broad spectrum of narrative temporalities that have emerged within TVIII.<sup>19</sup>

### CONCLUSION: THE PLURALITIES OF DIGITAL TIME

As many of the works cited here suggest, time (particularly in the digital era) is a complex and multifaceted phenomenon. Harvey’s work, for instance, outlines the way in which post-modern time has become increasingly schizophrenic and fragmented in tandem with broader socio-economic shifts. Elsewhere, Lash and Urry have argued for a bifurcation in late twentieth-century temporal perceptions prompted by various technological and scientific developments. They describe two diametrically opposed experiences of contemporary time, both of which exist outside of the spectrum of human perception. Firstly, according to Lash and Urry, there is the instantaneous speed of computime, measured in imperceptible units of picoseconds and microseconds. Secondly, there is the much slower pace of glacial time, measured in equally imperceptible units, this time in generations, eras and epochs. In addition to these two temporal extremes, other scholars such as Barbara Adam (2004) have argued that the contemporary world is comprised of multiple and overlapping times, of different rhythms, cadences and temporal regimes that permeate our daily lives. Whereas simultaneity was the single dominant temporality of the late nineteenth and early twentieth centuries, time in the twenty-first century is more of a temporal medley, a mixture of fast and slow, of repetition and arrhythmia, and of linear and achronological time.



Although many of these debates around temporality stem from other disciplines, recent scholarship within the field of media studies has also shown an interest in this area. Like Kern, and Lash and Urry, media scholars such as Kompare, Lotz and Klinger have, each in their own way, argued that digital technologies have significantly complicated established industrial norms and have subsequently produced new perceptions of time and narrative form. As such, it is clearly worth further exploring the connection between technology, time, and narrative in order to understand the role that they play in the development of new textual forms.

While much of the existing critical attention has tended to focus on acceleration or fragmentation, the arrival of digital technologies has clearly altered our relationship with the past in significant ways. Over the last ten to fifteen years there has been a steadily growing body of literature concerned with media and the past, including work on digital memory (Garde-Hansen, Hoskins and Reading 2009; Hoskins 2018), remediation (Bolter and Grusin 1999); repetition (Kompare 2005); and residual media (Acland 2007).

Taking a cue from Kern's work on narrative (analogue) time in the late nineteenth and early twentieth centuries, the following chapters will explore the digital temporalities of the early twenty-first century and their subsequent textual productions. Like Kern, I do this by constructing an analysis that pays particular attention to the technological contexts of contemporary media industries and how this digital environment interacts, shapes, and reconfigures narrative form.

## NOTES

1. In his analysis of early American film, Charles Musser has argued that the development of cinematic form was contingent upon a number of factors, but specifically a 'dialectic between changing modes of production and representation' (Musser 2004b: 104). In other words, the development of film narrative depended upon both cinematic apparatus and modes of representation.
2. Porter had previously employed parallel editing that same year in *Life of an American Fireman* (1903). However, the commercial and critical success of *The Great Train Robbery* helped establish it, especially in scholarly accounts, as the forerunner of cinematic narrative. Elsewhere, Charles Musser has argued that 'the common belief that *The Great Train Robbery* was an isolated break-through is inaccurate' (2004a: 91) rather

this editing technique had appeared in a number of other films around the same time, including *The Escaped Lunatic* and *The Runaway Match* a.k.a. *An Elopement a la Mode* (both 1903).

3. For Marey, cinema was too closely representative of reality. He believed that rather than revealing some undiscovered truth, it merely repeated time.
4. This version can be found on *Early Cinema: Primitives and Pioneers, Vol 1. [1895]*, BFI.
5. Even the term ‘non-linear editing’ (or NLE, as it is abbreviated within the industry), should give some indication of the inherently different temporalities between analogue and digital media workflows.
6. ‘Webisode’ and ‘mobisode’ are contractions of ‘web episode’ and ‘mobile episode’ respectively. They tend to be distinct from full television episodes that are streamed online or watched on a mobile device in that they tend to be much shorter in duration, very often in the form of edited highlights or bonus content.
7. When Harvey talks of ephemeral services, he refers to products that have little or no material basis, a limited shelf life, and hence encourage a greater speed of consumption. Examples of these kind of ephemeral services would include film and television.
8. It is worth noting that complex narrative temporalities have emerged at various points throughout the history of film and television. For example, the pioneering use of flashbacks that appeared in *Citizen Kane* (1941) or its regular occurrence in the film noir genre which was popular in Hollywood in the 1940s and 1950s. Indeed, many of these films were framed as flashbacks or were narrated achronologically, with Billy Wilder’s *Double Indemnity* (1944) an excellent example of this narrative trope. Although I argue that contemporary iterations of narrative complexity are linked to shifts in the industrial and technological composition of TVIII, it could be argued that film noir’s particular form of temporal complexity was also the manifestation of quite different contemporary factors such as post-war anxiety, threats to the place of men within society, and the emergence of psychoanalysis.
9. Of course, these might also read as manifestations of a post 9/11 anxiety.
10. Another important and frequently cited work on contemporary time is Manuel Castells’s *The Rise of the Network Society* (1996) which I briefly discuss in Chap. 4. In the same vein as Lash and Urry (1994), Castells argues that the introduction of networked technologies such as the Internet have led to a culture in which time has become instantaneous. Like Lash and Urry’s notion of computime, Castells talks of existing within a ‘non-time’ that is so immediate that it is imperceptible. This notion of a timeless time has become a popular idea amongst other critics

such as Paul Virilio (Virilio 1997), whose own preferred term is the ‘eternal present’.

11. Even Castells’s work on the network society, despite its association with the Internet, is not contingent upon the existence of digital technologies.
12. This is a term coined by Kay Richardson that refers to ‘the principle that particular programmes or segments recur on a regular, timed basis’ (1999: 24). More recently, William Uricchio (2010) has dubbed this scheduling practice as ‘interpenetration’. As Uricchio explains, interpenetration is ‘the practice of parsing out particular programmes over time and over the broadcast schedule (e.g. weekly or daily series)’ (2010: 32).
13. However, as I note in the introduction, John T. Caldwell has argued that the introduction of digital technologies has also weakened television’s status as a live medium. See, Caldwell (1995).
14. See also Karen Lury’s (2011) essay ‘The “Basis for Mutual Contempt”: The Loss of the Contingent in Digital Television’ in which she argues that digital technologies have actually challenged and undermined television’s ontological status as a medium of liveness.
15. Admittedly, my own focus is mainly limited to prime time scripted dramas since the early 2000s. However, Scannell’s account is much broader in its scope and televisual time constitutes just one part of his overall analysis. In other words, his goal is to provide a comprehensive overview of the function of television and all of its constituent parts. It is in the context of this critical objective that the absence of fictional programming stands out. By contrast, I am interested in a niche aspect of TV—namely, transformations in the medium’s technological and temporal configuration, and believe that the prime time scripted drama is the most effective way to examine these reconfigurations.
16. In particular, television was able to expand radio’s capacity for liveness, a temporal attribute that cinema could never deliver. However, while television emerged as a medium of liveness, as Uricchio (2004) notes, it has since transformed into something much more diverse in terms of its temporal composition. Rather than primarily a medium of liveness, it is also one of repetition and, at times, can be non-linear (in both its own temporal regimes and in the narratives of its recent programmes).
17. The third screen refers to the mobile, the laptop, and other smaller screens of this nature. The first and second screens are cinema and television respectively. However, second screen has become a more popular term in recent years to describe mobile, tablet and computer usage alongside television viewing.
18. For example, see Sean Cubitt’s pioneering study of home video culture (1991).

19. It is interesting to note that Dawson has more recently written about long-form, serial television, arguing that short form content actually provides a kind of paratextual scaffolding that helps support these ‘monumental serials’ (2011a, b).

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