Building Digital Estates: Multiscreening, Technology Management and Ephemeral Television

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In the late-1990's and mid-2000's, a number of television and new media scholars debated the future of television viewing. At the centre of this debate sat the notion of convergence and the prospect of different media technologies coming together into a single box that would be multifunctional and replace the established dominance of the television set (see, for example, Nash, 1996; Murray 1997; Owen, 2000; Deery, 2003; Flew, 2005). Perhaps most wide reaching of these was Henry Jenkins' (2006: 2-4) model of 'convergence culture', which placed the emphasis away from just technology and towards a wider integration of multiple devices in industrial, economic and social contexts. Although the smartphone functions as the current epitome of a multifunctional media device, these visions of convergent technology, of a single box that brings together every imaginable form of media device, have not fully emerged. Instead, fifteen years after these proclamations, digital media consumption still consists of a set of interconnected media devices, each serving their own unique purpose. However, the capabilities of these devices and the relationships formed between them have opened up a range of screen experiences that have significantly altered the nature of television viewing. Increasingly, the spaces in which television and other screen media are experienced, especially the home, are becoming explicitly, and carefully managed, 'multiscreen' spaces.

This article will explore the findings of an interdisciplinary research project that sought to explore how the multiplication of digital screen technologies shape, and are shaped by, the social, spatial and temporal dynamics of the household. Perhaps unsurprisingly, television scholarship has recently turned attention towards the proliferation of screens within the daily lives of audiences. Daniel Hassoun (2014) has labelled this 'simultaneous media use', though the most common term in both academic and industry discourse has been 'second

screens'. In the same edited volume, Hey Jin Lee and Mark Andrejevic (2014: 41) argue for 'second screen' as the '2012 buzzword of the year', whilst Ethan Tussey (2014) interrogates the range of 'second screen' apps emerging from the US television industry (see also Evans, 2015; Wilson, 2016). Whilst fitting our research in some ways, this term also contains connotations that do not fully reflect the findings of our own research or the entire range of relationships that form between multiple screen technologies. Instead, we adopt the slightly broader term of 'multiscreen' for two main reasons. Firstly, our focus here is the household, rather than individual viewers, within the tradition of work that has explored how media and digital technologies are integrated into household spaces and routines (see Morley, 1986; Silverstone and Hirsch, 1992; Lally, 2002; Holloway and Green, 2008). As such we are interested in groupings of technologies, which we describe as 'digital estates', and how they are managed. Labelling this activity 'second screen' implies a limitation in those groupings to only two devices; put simply, audience members (and especially a household) may use more than two screens. Secondly, the term 'second screen' immediately denotes a hierarchy, with digital technologies as 'second' to the television set and we were keen to not impose such a hierarchy on our sample households. As Evelien D'heer and Cédric Courtois (2016: 9) have argued, the television can act as 'both a primary and a secondary screen'. We were interested in exploring the various relationships between screen devices that might emerge, which may, or may not, place the television set at their centre. We wanted to be open to the possibility of the *television* being a secondary, or even tertiary, screen.

This article will begin by examining the relevance of the term 'digital estate' to understanding both the UK television industry's multiscreen strategies and the realities of audiences' multiscreen use. The increasing multiplication of screen technologies raises questions regarding the standard audience research methods that have primarily been used within television studies and the television industry. Here we will present an alternative, interdisciplinary approach that combines television studies and human-computer interaction (HCI) in order to monitor audience activity, and so gain greater insight into the realities of multiscreen behaviour. By employing a technologically-enabled observational

approach we can reveal and explore the centrality of fleeting, ephemeral and passive experiences to these domestic 'digital estates'. In doing so, we will address 'ephemeral' television from the perspective of audience experience. An 'ephemeral' experience could be taken to be one that is brief, its ephemerality tied to its momentary duration. However, we use the term 'ephemeral' to discuss experiences that are fleeting in the sense that they do not become 'events' that are then noticed and significant in the lives of those experiencing them. In our research 'ephemeral television' equates to television that is forgettable or inconsequential for its audiences. Such moments may see television as background or 'ambient' (see McCarthy, 2001), but, as we shall demonstrate, they may also be a deliberate choice, intended by our sample to be forgettable without slipping into the background of their daily lives. This will allow us to challenge the construction of 'passivity' as negative and digital technologies as particularly 'active' technologies within television and media audience research.

The emergence of multiscreen 'digital estates'

The concept of 'digital estate' offers a useful framework for interrogating multiscreen spaces in terms of both recent UK television industry strategy and the corresponding changes in audience habits that have shaped, and been shaped by, such strategy. The term initially emerged as a way for UK public service broadcaster Channel 4 to articulate a realignment and rebranding of its linear broadcast and online services. This realignment sat within a broader trend within UK television's adoption of digital media technologies. After an initial period of digital expansion that saw the major broadcasters simply create an online presence via websites, the industry's attention turned to exploring the potential of online spaces for the distribution of high definition video. This initially took the form of experiments in transmedia storytelling (Jenkins, 2006), such as the BBC's extension of its premium drama brand *Spooks* (2002-2011) into a series of games as a way to 'test out' the then new broadband infrastructures's capacity for high bandwidth content such as video (see Evans, 2011: 184). These initial attempts echoed Henry Jenkins' (2006: 95) idea of a story told over multiple platforms, in which the 'narrative [is] so large that it cannot be contained within a single medium'. However, the UK industry's

attention quickly shifted towards issues of distribution and access in relation to more traditional television content.

Since the mid-2000s, each of the UK broadcasters have followed strategies of proliferating distribution, working to ensure that their broadcast content is available across all forms of screen technology. The initial wave of online catch up services, including Channel 4's 40D (now All4), Sky's Sky Player (now Sky Go) and the BBC's iPlayer, were redeveloped to allow access across different mobile devices and operating systems. More recently this proliferation has been followed by processes of integration and it is here that the concept of 'digital estates' has emerged, both in the rhetoric of key executives and in distributionrelated strategies. When Channel 4's video on demand service 40D was rebranded as All4, Chief Executive David Abraham (2014: online) described it as 'a complete reframing of our digital estate, to provide a more joined-up online content and brand experience. Linear brands will be seamlessly reinforced in this new environment for the first time in television'. Abraham clearly positioned all of Channel 4's services, both traditional linear broadcast television and online, as a coherent whole, a single 'estate'. This framing continued at All4's launch, when Richard Davidson-Houston (2015: online), Head of All 4 and Digital Content, described it as incorporating 'classic Box Sets, catch up TV, live TV channels, original Short programmes, TV premieres and bonus content'. Rather than acting as a television broadcaster, Channel 4 positioned themselves as managers of a digital estate encompassing multiple technologies and multiple textual forms, but retaining a single organizing logic and brand identity.

Channel 4's framing of themselves as purveyors of a 'digital estate' rather than as a television broadcaster is echoed in the strategies of other major UK broadcasters. In their annual report for 2014, Sky (2014: 19) discussed how 'for the very first time we moved away from linear viewing as the default option' and increasingly use the term 'digital estate' in job postings and individual role profiles. ITV have followed Channel 4's rebranding technique by re-christening their online player as the 'ITV Hub', a name with connotations of being a central point in a network of interconnected access points. At the BBC, the on demand

service iPlayer has become an increasingly central part of the corporation's operations, moving to a prominent position on its website and, most significantly, becoming the only home of the BBC Three 'channel' in February 2016. When explaining this move, controller of BBC Three Damien Kavanagh (2014: online) firmly stated that 'BBC Three would not close. I repeat, BBC Three would not close'. This shift was carefully positioned as an evolution, and not a cessation, of what BBC Three was, echoing the UK television industry's repositioning of themselves as managers of large multiplatform estates in which online forms of distribution and content are increasingly positioned as equal to, if not indistinguishable from, linear broadcast activities.

The concept of 'digital estates' is therefore gaining increasing relevance for understanding the UK television industry's transformation into multiscreen providers and current content and distribution strategies. The concept of 'estate' is particularly important here, conjuring up not only connotations of multiple outlets integrated into a coherent unit but also strategies of asset management. However, these 'digital estates' require both industry organisations and audiences to take a certain amount of control over which device gets used for what content, where and when. Digital estates are as much about what audiences actually do as they are about the ideal experiences that broadcasters design them for. The connection between digital technologies and audience behaviour has been central to the industry's positioning of their digital estate strategies. Sky have claimed that their 'aim is to put Sky at the head of the "connected household" (Sky, 2014: 20), firmly positioning the multiplatform expansion of television as both industrial and domestic. When making the announcement about BBC Three, the BBC's Director of Television, Danny Cohen (2014: online), justified it as follows:

there is a very big gap emerging between the viewing habits of the 16-24's and older audiences...Do we sit back as a legacy company and watch as generational change bites away at our impact or do we take a place at the forefront of that change?

The evolution of audience behaviour, particularly in terms of younger audiences, has been positioned as a justification for the development of digital estates

wherein the television set is simply one of many storytelling spaces or distribution channels and, in some cases, a secondary one. As a consequence, audiences increasingly need to manage and navigate domestic digital estates, comprising different technologies and content forms and bringing together multiple types of experiences. Turning to how 'digital estates' manifest within the daily lives of audiences, however, challenges any idea of audiences moving seamlessly between and across the assets of a broadcaster's digital estate whilst also complicates another connotation of the term 'estate': the creation of something that is lasting and significant enough to be remembered.

Multiscreening in daily life: Capturing ephemeral television experiences

The importance placed on audience behaviour in the development of industrial digital estates means that understanding how these technologies are actually being used by audiences is essential. However, much of the work produced by both the industry (see, for instance Ofcom's Communications Market reports, on which Cohen's above claims are based) and academics (Tussey, 2014; Evans and McDonald, 2014; Greer and Ferguson, 2015; Wilson, 2016; D'heer and Courtois, 2016) is based on reporting methods such as questionnaires, interviews or focus groups. Whilst these methods are highly useful, they are also open to reliability issues as individuals may misremember or simply assume they do something more or less than they actually do. This is particularly the case with television and newer digital technologies. Although such technologies may contain memorable 'event' (Dayan and Katz, 1992) moments, they equally encompass highly mundane or ephemeral behaviours. It is difficult to keep track of every website one visits and when, just as it can be difficult to remember every piece of content one watches on television. In particular, the direct and nuanced temporal relationship between different pieces of content can be easily forgotten or misremembered. Sheryl Wilson (2016: 183) observes this issue in her own research on second screen use in which focus groups participants 'commented that they had to "think hard" to recall what they did on a daily basis'. As alternatives to reporting methods, more observational techniques have occasionally been utilised within television studies (see for example Morley

1980; Hobson 1982) and some industry research companies, such as commercial television's marketing body Thinkbox's Screen Life study (Thinkbox, 2013). Such research, however, is highly resource intensive and, as such, remains rare. The Understanding Multiscreen Households project, funded by Horizon Digital Economy Research at the University of Nottingham, sought to build upon and expand more observational research by utilising technology to monitor and log television and internet based behaviour. Helen Wood (2007: 494) has previously demonstrated the potential for technology to facilitate observational research by combining screen recordings of television sets with audio recordings of conversations within a sample's living rooms. This interdisciplinary project builds on her work and called on expertise from television studies and HCI to create a logging system that could more easily capture, record and sync audience behaviour. This in turn allowed a more detailed analysis of the relationship between screen technologies and content forms and how that behaviour is bound up in the temporal, social and spatial dynamics of domestic 'digital estates'.

Cameras were placed in the living rooms of 5 sample households for a period of between three days and one month¹. One camera was aimed at the television set in order to capture any television, film or gaming content being engaged with. Two additional cameras were focused on the seating area in order to capture who was watching, the portable devices being used and any interaction between viewers. The cameras were triggered by motion sensors, which made it possible to automatically identify the time periods in which the television screen was turned on and when people were in the living room area. In addition, a secondary wireless internet network was created in each house which logged the URL of every website visited, when it was accessed and on which device². The project generated an extremely large dataset consisting of 1,086.5 hours of video (divided into one-minute long segments) and 63 days worth of continuous

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¹ The discrepancy in timeframes resulted from participant availability and initial technical difficulties in ensuring the reliability of the logging system.

² The households' original wireless networks remained active, to provide participants with a non-logged connection if they did not wish their web activity to be part of the research, but we found that participant's rarely used it. For more information on the logging system employed in this project, see Shipp et. al. 2014.

internet logging (resulting in many thousands of lines of data). Each period of observation and logging was followed by a focus group with participants to reflect on both the research process and initial findings.

Each dataset featured timecodes to facilitate syncing between them. The timecodes generated from the video data were filtered to identify those that matched up with recorded internet use. Thumbnail images for each video were then scanned manually to find instances of household members using multiple screen devices including laptops, smartphones and tablets whilst watching television. The data streams could then be aligned in order to determine what was being watched on the television and which websites were being accessed. This allowed us to not only identify specific moments of multiscreen use, firmly pairing up television-based and website-based content, but also position such moments within the broader textual, technological, social, spatial and temporal dynamics of each household. Such nuanced synchronisation is impossible through reporting methods but offered us a clearer picture of *actual* rather than *reported* multiscreen behaviour that could then be twinned with the more established method of focus groups.

Audience research methods that borrow from ethnographic traditions are not without their limitations, most notably the risk that participants would 'play up' to the cameras. We have no way of confirming if this is the case or not, though participants commented in focus groups that they frequently forgot the cameras were there. There were also technical limitations to the data that we could capture. For ethical reasons we focused the cameras only on the communal space of the living room, rather than private spaces such as bedrooms, though internet data was captured throughout each house. Mobile internet networks operate as closed systems meaning that it was technically impossible to capture any activity that took place on participants' smartphones over 3G or 4G networks. Similarly we, naturally, could not capture any multiscreen behaviour that happened 'offline', for instance doing work on a laptop. However, the video footage did allow us to identify moments when participants were using devices without any corresponding data logging; similarly, the logging data revealed activities on

devices outside of the living room. We were subsequently able to explore such moments in the focus groups, with video footage serving to prompt participants' memories. The focus groups therefore served as a way to contextualise and expand upon the video and logging data we had collected. Finally, due to the complex and experimental nature of the methodology, our sample was small, consisting of three student households and two couples with a total of eighteen participants (fourteen women and four men). Despite these limitations, however, our methodology generated a highly detailed dataset of actual audience behaviour.

The project's original aim was to explore moments of multiscreen behaviour that function in similar terms to transmedia storytelling, to look at when and how audiences used a second screen device to look at content related to whatever they were watching on the television. Our intention was to map how audiences managed their digital estates to navigate these transmedia narrative journeys, for instance from television set to social media to website and back again. What actually emerged was relatively little such behaviour. Our findings instead demonstrated that whilst the notion of a 'digital estate' is as relevant to domestic settings as it is to the television industry, these estates and their management primarily involved the creation of disconnected, ephemeral and forgettable multiplatform experiences. On some occasions, participants did use the multiple technologies of their digital estates to build on and investigate the content seen on the television screen. This predominantly involved using their smartphones to looking up certain actors on databases such as IMDb or sports personalities on Wikipedia. The most complex example of such behaviour involved one participant using her laptop to show the others in the room a YouTube video related to an experiment seen on BBC science programme Horizon. However, such moments were extremely rare and moments when television and digital technologies were used together in distracted, passive and ephemeral ways were far more common.

Digital estate as ephemeral: The value of passive engagement

Syncing up the camera footage with the internet logging revealed that although multiscreen behaviour was prevalent, any connection between the content on different screens was often absent. The ability to log, and so analyse, this behaviour became a particular advantage of the technology-driven observation approach that this project took over more traditional 'reporting' methods. The *absence* of direct connections between the various devices being used therefore became our key research finding. The difficulties of recalling multiscreen behaviour with accuracy became apparent in the focus groups, when participants often had little recollection of specific moments of multiscreen use during focus groups, even when shown examples of them. As one participant commented in discussion with the interviewer:

- INT: What's it like seeing the images, does it help you remember anything?
- 3.2F: Yes, it's probably reminded me I wouldn't have remembered that I'd watched it without the picture.

The devices within our sample digital estates were predominantly used together not to construct focused, attentive screen experiences, but in ways that were ephemeral and forgettable.

This sense of multiscreen television experiences being important, but also inconsequential and ephemeral became apparent through numerous instances within our sample. All samples had the television on for significant portions of their time at home, indicating the importance of the technology within both their domestic digital estates and their daily lives. However, in the vast majority of examples during which the multiple media technologies of digital estates were brought together *content* had a more variable status. Moments of multiscreening behaviour were primarily characterised not through the specific content on the television set but as the creation of 'easy' media experiences. One participant, for instance, discussed the content he chose for a less involved viewing experience:

INT: *Storage Hunters* is on Dave, so you watch that live, is that something you regularly watch then?

3.5M: During the day it will just be like rubbish TV while we're doing something else... you don't have to concentrate but you can watch it, but you don't have to keep following what's on.³

A participant in another focus group made a similar comment when he said 'I think I tend to use a laptop or iPad if what was on TV was less engaging, like if I was, say it was the news on in the background.' (1.2M). Certain genres of content, most notably reality programmes that are frequently repeated and news, were highlighted as 'easy' to watch and so facilitated multiscreen behaviour.

The emphasis in these quotes on content that requires little concentration is highly reminiscent of John Ellis' (1992: 128) theory of the television 'glance':

TV does not encourage the same degree of spectator concentration. There is no surrounding darkness, no anonymity of the fellow viewers, no large image, no lack of movement amongst the spectators, no rapt attention. TV is not usually the only thing going on, sometimes it is not even the principal thing. TV is treated casually rather than concentratedly.

Such modes of viewing are often used to denigrate television as passive or problematic. From the very beginning of audience research there has been a concern over the potential for media texts to create 'passive' experiences. Early 'effects' research demonstrated this most clearly, taking its cue from Adorno and Horkheimer (1997 (1944)) to argue that audiences are the passive recipients of media messages. Even subsequent work that usefully challenged this position has simultaneously perpetuated a value association that connoted 'passivity' as 'bad' through assertions that audiences are not, and cannot be, passive. Rather than confronting this basic connection, scholars instead turned to demonstrating how television audiences are not 'passive' at all. The cultural studies approach that emerged in the 1970s and 1980s, for instance, prioritised audiences' ability to actively question, choose between, and resist the messages presented to them by media (see, for example, Hall, 1989; Morley, 1980, 1992; Buckingham, 1987; Lewis 1991). More recent work that has turned away from 'general' audiences

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³ Each participant will be identified alphanumerically. The first number will denote their household number. The second will denote their personal number within that household's focus group. The final letter will identify whether they are male or female.

has done so by focusing on interrogating more explicitly 'active' or 'productive' groups such as the wealth of work around fan communities (for a few examples, see Jenkins, 1992; Booth, 2010; Stein, 2015), or interrogations of new media or participatory culture (for a few examples, see Livingstone, 2002; Brooker, 2004; Jenkins, 2006; Jenkins, Ford and Green, 2013). Throughout such scholarship, the default assumption that passive, distracted viewing behaviours are 'bad', non-existent or simply uninteresting remains. We do not wish to challenge this work and its rightful assertion about audience agency in terms of choice over, and interpretation of, media messages. Instead we wish to reclaim 'passive' and ephemeral behaviour as something for further interrogation. The disconnected and forgettable experiences that dominated our sample do not fit within the general approach of television or media audience research but their examination can offer significant insights into the daily practices of audiences.

In addition to challenging the negative connotations that get associated with 'passive' or forgettable televisual experiences by placing them as a key part of their daily life and the way they managed their domestic digital estates, our sample also expanded these associations to include technologies that are normally placed against television in an active/passive binary. As computer-based technologies such as the laptop, tablet and smartphone are integrated into both the industrial and domestic spheres of television engagement they bring their comparative capabilities and use into greater relief. Even more so than a television set, a smartphone is on almost constantly (see boyd, 2012), and its use was defined by our participants through ease, but not necessarily active attention. Several participants, for instance, described evaluating technology based on the *lack* of activity required to use it and how easily it fits into a particular moment of use. One commented how:

if I've got my laptop there I'll use that instead of my phone [to access the internet]. But if I'm laying down and then I want to look at the news I won't go and get my laptop from my room, I'll just look at it on my phone. But then if we're watching a film I won't use my laptop really because it's too bright while we've got the lights dim (3.5M)

Another described how 'I think because I've got the iPad, it's a lot easier to sit there and surf, and watch because it's not like an imposing thing' (1.1F). In another quote, a participant offered a decidedly 'glance'-like description of their use of Facebook: 'I just have Facebook open usually, I'm not doing loads on it. I always have my phone just here.' (3.1F). This ease of access led to participants seeing their use of digital technologies as just as ephemeral as their use of television. Another member of the same household, when confronted with video of her using her phone, clearly had little recollection of what she had been doing on it. When she was told she been on social media, she replied: 'Yes, I think so, something on Facebook or something' (3.4F). For these participants, making use of more 'active' or 'interactive' technologies did not necessarily make it a more meaningful or less ephemeral experience. Whilst they would have been required to press buttons and so physically and mechanically 'interact' with the content on their phones, it was positioned as having a similar status as ephemeral moments of television.

These behaviours and experiences offer a contradictory position to the value judgements that can be placed on comparisons between television and more recent digital technologies. Ellen Seiter (1999: 120), for instances, recognises how computer technologies are framed as 'educational, virtuous and new' whereas television is 'entertaining in a stale, commercialized, violent way' (see also Lally, 2002: 59; Evans, 2011: 95) Sheila Murphy (2011: 106) echoes this position when discussing the status of videogames as 'television':

Instead of just drawing gamers into the virtual worlds represented, onscreen contemporary video games also extend the space of the game out into the space traditionally reserved for televisual spectatorship and consumption. In doing so, contemporary video game systems mark that space out as one of action and engagement, rather than the inaction and passive reception that is stereotypically associated with television viewing.

In opening her book, Murphy (2011: 3) brings games and television together but through the caveat of 'interactive television', rather than the (implied) inherently non-interactive broadcast 'television'. This distinction between technologies that

are passively 'watched', such as broadcast television, and those that are more actively 'used' or 'played' tends to privilege the latter over the former, with television receiving the associations of being 'easy' and therefore less valuable than more 'interactive' forms.

Throughout the history of scholarship around television, or media, audiences, there remains a dismissal of 'passive' forms of engagement that stems from the fundamental focus of audience research on issues of interpretation and, ultimately, ideology. Scholarship that positions 'passive' media as negative stems from the position that they result in audiences who will not seek to challenge the dominant messages presented to them through that media. Scholarship that defends viewers as 'active' does so with the intent to position audiences as capable of making their own meanings and challenging such dominant ideologies. Even scholarship that seeks to complicate any simplistic division between 'active' and 'passive' modes of engagement similarly maintain this critical focus on interpretation. Debra Clarke (2000: online), for instance, argues that 'To be active in one's reading of a text is not in itself empowering nor should it even imply the capacity to resist'. More recently Alison Oddey and Christine White (2009: 10) have questioned the negative connotations of 'passive' screen media through a focus on semiotics: 'If we assume that passive is watching and receiving wisdom, what is active about reading that is different from the activity of watching a film? The same translation and interpretation process occurs – a process of communication.' Notions of audience 'activity' or 'passivity' are predominantly associated with how mediated messages are interpreted. 'Passive' behaviours, where little to no effort is perceived on the part of the audience such as simply 'watching television', are therefore positioned as dangerous or ignored.

Our sample's behaviour offered a further challenge to a straightforward association of television with passivity and digital technologies with activity and the corresponding value associations that go alongside. In our sample, choices over *behaviour*, rather than interpretation, were shaped by passivity and ephemerality. The status of 'passive' engagement here is a complex one. As the

above examples indicate, such moments may still be an active choice on the part of the audience. They may make a conscious choice to have a passive, forgettable, ephemeral experience, one that is merely designed to provide distraction. From the plethora of television, gaming and online content options available to our sample from a television set, laptops, tablets and smartphones they often chose to seek out experiences that were fleeting, forgettable and easy. When discussing television, Sheryl Wilson (2016: 182) notes that 'there is no single mode of attention that can be attributed to the audience or to essential qualities inherent in the medium itself; sometimes viewing is distracted, and sometimes it is fully engaged'. This is a highly valuable perspective to take and can even be taken further. Our sample regularly simply wanted to watch television. They equally wanted similar experiences with digital technologies and used such devices alongside the television set to create deliberately inattentive, ephemeral experiences. Most importantly, however, these experiences were a central part of their daily lives and their relationship to televisual and digital media technologies. There is a need to recognise and, in moving forward, interrogate the value of consciously passive mediated experiences for audiences, especially within the context of the greater agency facilitated by the emergence of domestic digital estates. 'Passivity' here is not associated with audiences lacking control over their media behaviours or the impact of those behaviours. Instead it is about how, within the construction and management of multiscreen domestic digital estates, notions of ephemeral and ultimately passive behaviour become key.

Conclusion

The UK television industry is increasingly being characterised by a shift towards multiplatform 'digital estates' of content in which different kinds of media technology, service and content are being brought together into a single, managed 'estate' of assets. The term 'digital estate' ultimately proves useful in offering a framework for understanding how audiences integrate multiple screen devices into their daily lives and offers two key contributions to television studies. Firstly, it points to the potential to develop interdisciplinary methods for examining actual audience behaviour that is increasingly multiplatform,

changeable and ephemeral. A reliance on questionnaires and focus groups as television studies' key methodologies places boundaries around the kinds of data we can gather on what are increasingly complex television-related behaviours. By using technology to facilitate the observation of our sample we were able to capture moments that those same participants would not have recalled had we just spoken to them after the fact. Crucially, this also allowed us to capture the absence of behaviour that is often touted by the industry as fundamentally altering audiences' relationship to television. The ability to sync up automatically generated data streams allows us to capture a more refined sense of how our sample were behaving, linking specific moments of web activity to specific moments of television viewing. The ephemerality of these moments, as demonstrated through participants' lack of recall, ensured that they were only apparent via more observational methods. Although our research was only based on a small sample, it points to the value in exploring interdisciplinary approaches for understanding the more ephemeral, forgettable moments of television engagement.

Secondly, the idea of a digital estate, in which each 'asset' maintains equal or near-equal status disrupts the pre-existing hierarchies that have emerged between different screen technologies. For the television industry, this has involved digital and online technologies being placed as centrally as those of broadcast. From the domestic perspective, this has allowed us to challenge the hierarchies of value that associate broadcast television with more passive, ephemeral experiences and digital technologies with more active, significant and therefore 'better' ones. Whilst we do not wish to claim that all television viewing follows this pattern, it is vital to recognise the place of ephemeral and ultimately passive behaviours within multiscreen households. From our sample it becomes apparent that the television set, laptop, tablet and smartphone all open up modes of passive, ephemeral experience and that, crucially, these experiences may be valued by audiences. By acknowledging, and opening the door for further interrogation of such moments it becomes possible to consider the value and pleasures involved that both television and digital media audiences gain from simply sitting back and watching.

Acknowledgements

This project was funded by the Horizon Digital Economy Research Institute, an RCUK funded research hub at the University of Nottingham. The authors would like to acknowledge Sarah Martindale and Stuart Reeves who took part in initial stages of the research, contributed to the development of the logging system used in the research and helped organise the early sample households.

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