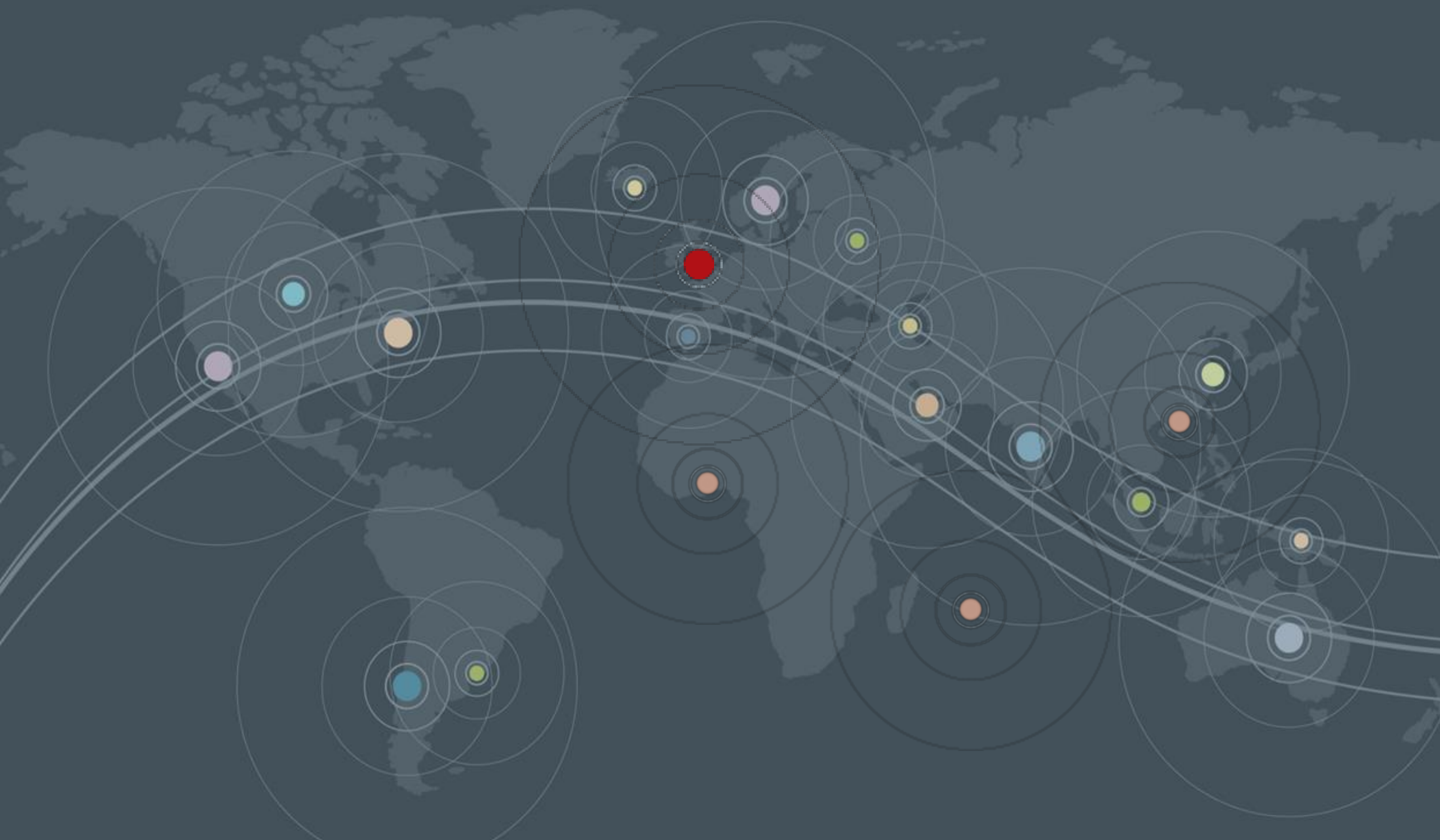
Cultural and Audience Contributions of the UK's Film, High-End TV, Video Games, and Animation Programming Sectors

Report presented to the BFI, Pinewood Group, Ukie, the British Film Commission and Pact by Olsberg•SPI with Nordicity



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1. EXECUTIVE SUMMARY

1.1. Introduction

This report is the second part of a study into the Cultural and Audience contributions of the UK's Film, High-End Television (HETV), Video Games and Animation Programming sectors, commissioned by the BFI, Pinewood Group, Ukie, the British Film Commission, and Pact. It exists as a complement to the recent report published by these organisations into the Economic Contribution of the UK Film, HETV, Video Games, and Animation Programming Sectors, to explore some of the more intangible benefits which these sectors generate for the UK.

In order to study them, we have identified the following as definitions for Cultural and Audience Value:

- Cultural Value is the value of cultural experiences, organisations, and the cultural sector to the individual and society;
- Audience Value, meanwhile, questions who engages with products, how often, and whether they understand them as being British in origin?

In this executive summary, we will highlight findings from our investigation, describing what we knew from existing research, and what our new analysis has told us.

1.2. Film

British film delivers a broad range of audience and cultural impacts. These are made both in the UK and around the world, and are clearly demonstrated by existing research previously undertaken into the sector and by the new analysis undertaken for this study.

1.2.1. What we knew already

- Existing studies point to the ability of British film to both reflect the concerns and interests of audiences, and to comment on the current state of society
- This reflection can lead to changes in the status quo – Stories We Tell Ourselves underlines the role of *Four Weddings and a Funeral* in changing perspectives on the gay community as the best example of this, and it represents a significant cultural contribution[1]
- The British public place significant value on film in general and British film in particular – 84% of Britons are interested or very interested in film, and 86% watch a film at least once a month
- A range of existing data show the interest in British film internationally, with film exports generating significant audience value in territories such as the US, France and Italy
- Recent data from the British Council also demonstrates a strong audience interest in China, where film was cited as the second most important source of information about the UK
- British Film is a major generator of soft power for the UK, with a recent House of Lords report noting the *James Bond* franchise as being particularly influential

[1] Both Stories We Tell Ourselves, undertaken for the UK Film Council, and Opening Our Eyes, a 2011 report for the British Film Institute, provided a strong basis for the new analysis undertaken for this study.

1.2.2. What we have now learned

- Our research underlines the premium which the British public places on British film – in 2014 this box office premium was worth £63 million, representing the additional cost that the British audience was willing to pay to access UK-made films at the cinema[2]
- The British public is also willing to pay to watch films at home – our research shows that the cost of faster internet to do this averages £12.25 per film watched
- Contrary to stereotypes, detailed research into the settings of British films shows they predominantly speak to current issues, with the vast majority of films certified for the Film Tax Relief during 2013 being contemporary in setting; this underlines British films' role in speaking to contemporary issues[3]
- The sector also takes part in global cultural dialogues, with the recent success of *Belle* forming part of a broader range of cultural products that explore the past treatment of ethnic minorities
- British films continue to be able to affect change with regard to contemporary issues – *The Act of Killing* and *No Fire Zone* both spoke to highly challenging and emotive topics, and generated visible change as a result
- From an audience perspective, British films continue to perform well at the US box office, underlining their strong audience value in that market
- This is further underlined through the significant tourism and diplomatic value British film generates worldwide – by building interest and trust in the UK, they perform a role of great importance

1.3. High-End TV

Like film, British television has achieved a worldwide audience over the last decades, and although HETV as it is currently defined is a relatively new sector, it is building on a rich heritage for British television, both domestically and internationally.

1.3.1. What we knew already

- British television drama is the second most popular form of entertainment on TV after film, and in 2013 HETV dramas placed second after live events (i.e. sport) with regard to audience size
- Television dramas attract significant numbers of screen tourists to production locations, a process which can continue – as in the case of Pride and Prejudice – decades after their original transmission

1.3.2. What we have now learned

- British HETV programmes attract significant audiences worldwide, who demonstrate a strong understanding of the programmes, and show deep engagement, maximising their cultural value

[2] Consumer surplus indicates the value placed on a product by a consumer which does not form part of the market price for that product

[3] 2013 certifications were chosen to allow a long enough time period for cultural and audience impacts to become clear following release – it was felt this would not be possible with 2014 films

- The global success of the 50th anniversary episode of *Doctor Who – The Day of the Doctor* points to the significant profile that can be achieved by British television, and the strong platform this creates for delivering audience and cultural impacts
- Programmes like *Sherlock* and *Downton Abbey* have also gathered large, committed fanbases worldwide, particularly in the US and China – these have resulted in the generation of additional cultural contributions, including comic books and musical tributes
- The vast majority of HETV projects are contemporary in setting, sitting against a general stereotype of costume drama
- Our research underlines the strong audience impacts of long-running dramas such as *Endeavour* and *Poirot*, which generate consistent audiences in the UK, and also have international followings in countries like Germany

1.4. Video Games

The British games sector has evolved rapidly in recent years, generating a range of new products, players, and impacts; the results of this growth are increasingly described through cultural studies, which we build on in this report.

1.4.1. What we knew already

- A key identified audience impact of games has been the 'performative' aspect of play, within which the game provides a structure for broader imagination – the British *Football Manager* franchise provides a strong example of this
- The 'challenge' motivation, whereby players look to get to the next level or beat the game, is also a strong motivation for players
- Games achieve a broad audience, which has rapidly increased in reach over the last decade – this demographic shift has been particularly spurred by the emergence of the smartphone
- This is not to say that all players engage in the same way – the depth of engagement shown by 'core' gamers tends to outweigh that of individuals engaged with more 'casual' games, of the types which proliferate on smartphones and tablets[4]

1.4.2. What we have now learned

- The British games sector has been enormously influential in the way the sector has developed since its inception – series like *Elite* and *Grand Theft Auto* have been crucial in determining the path the global industry has taken
- Our evaluation underlines the broad range of different products the UK sector develops – this ranges from the world's biggest selling game – *Grand Theft Auto V* – to the family friendly *LEGO Harry Potter* series, and highly-rated indie games such as *The Room 2*, *Joe Danger*, and *Stealth Bastard*
- All of these have clear, demonstrable markets, and highlight the broad range of consumers the UK games sector serves

[4] 'Core' is preferred as opposed to 'hardcore' throughout this report; though 'hardcore' is often used as a term for a regular gamer or difficult game, it is felt to be pejorative in nature

- This is further evidenced by the demographic divisions of the audience, which show that 18% of UK games players are aged 45-64
- The level of this engagement is demonstrated by an annualised social welfare of £18.5 billion for 2013, representing £713 per player, or £2.66 per hour of play
- Games series such as *Elite* also show a depth of audience engagement – the series' 2012 Kickstarter campaign underlining the long-running nature of its influence
- Games are increasingly used for broader educational and artistic projects, with strong anecdotal evidence that they help engage children with technical and programming skills

1.5. Key Findings – Animation[5]

British children's animation – forming the bulk of Animation Tax Relief (ATR) supported production to date – has generated a range of long-running cultural and audience benefits, with strong evidence of the value of age-appropriate programming from both before and after the ATR's introduction.

1.5.1. What we knew already

- Academic studies consistently show the long-running benefits which age-appropriate and educationally-designed children's programming can have for their audience's development and education
- Longitudinal studies of *Sesame Street* clearly show that the benefits which it has for language acquisition – as an example – continue to impact its audience as late as secondary school[6]
- Programmes such as *Teletubbies* in the UK also show this, helping with issues such as school-readiness, understanding societal norms, and media literacy

1.5.2. What we have now learned

- British animation generates strong audience and cultural value both domestically and in export markets; this is seen as boding well for future engagement with British culture as the audience grows
- Our research underlines that there are deep cultural differences between British and American storytelling traditions, underlining the importance of ensuring sufficient culturally-British programmes for a young audience
- This view is shared by parents, who show a strong preference for culturally-British programmes; these programmes also travel well, even when they disregard international storytelling norms
- This expressed preference is not, however, reflected in the consumer surplus analysis which suggests a value of £8.21 per household (with children) per annum is paid for such content; we believe that this reflects upstream commissioning decisions though, rather than parental choice

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[5] For the purposes of this report, animation follows the definition set down by the Animation Tax Relief, and will consequently focus on animated television programmes rather than considering the broader UK animation sector

[6] Though *Sesame Street* is a non-animated, US programme, it has the best basis of academic literature for exploring such impacts; similarly, *Teletubbies* was one of the most studied British programmes

2. INTRODUCTION

2.1. Aims of this Report

This report was commissioned by the British Film Institute (BFI), Pinewood Group, Ukie (UK Interactive Entertainment), the British Film Commission (BFC), and Pact. It exists as a complement to the *Economic Contribution of the UK's Film, High-End TV, Video Game, and Animation Sectors*, published by Olsberg•SPI with Nordicity in February 2015, expanding this research to consider a new range of benefits arising from the UK's screen sectors.

It will provide the reader with a comprehensive look at the non-economic contributions of the UK's four tax relief-supported screen sectors: film, high-end television (HETV), video games, and animation programming. These contributions are divided into two specific areas:

- Cultural – which we understand to be the value of cultural experience to the individual, and the instrumental, intrinsic, and inherent value of a thriving cultural sector to society; and,
- Audience – through which we will analyse the size, shape, and location of the audience for British cultural products, whether and how they understand products as British, and how this affects the cultural impact of products.

The specific frameworks through which we consider these two areas are described in more detail below.

It is worth noting that, for several of the sectors we study as part of this report, specific literature surrounding the cultural or audience impact of British products is not available. As a result of this, we have tended towards exploring the more general impacts of the sector's products, followed by a consultation and desk-research driven analysis of British products within this.

2.1.1. Culture

Cultural Value – as a theory – is currently a highly active area of academic research within the UK, in particular through the recently-completed Warwick Commission and the Arts and Humanities Research Council's ongoing Cultural Value Project. While both of these reviews are cutting-edge and make significant additions to the broader cultural debate, neither has a specific remit to discuss the cultural sectors which this report will address. As such, we believe it will offer a further, important contribution to the developing base of evidence around the value of culture to the British public, as well as the broader value of British culture in a global context.

The recent literature review on cultural value conducted on behalf of Arts Council England notes that there are three broad areas of investigation when considering the value of culture:

- The value of experiences to the individual;
- The value to the individual and society represented by cultural organisations; and,
- The value to society of a thriving cultural sector.[7]

As the review notes, "there is a good deal of literature at all three levels, yet little consensus as to optimal measurement approaches, and little understanding of how these three components of value interweave."[8] This highlights a key aim of this report from the cultural

[7] Wolf Brown, Understanding the Value and Impacts of Cultural Experiences (2014) p. 25
[8] *ibid*, p. 25

perspective – to gather and interrogate the current evidence basis, though without necessarily expecting the creation of a single data point to sum this evidence up.

2.1.2. The Audience

Whereas there are significant existing analyses of the cultural contribution of various creative sectors and subsectors – and consequently a series of clear definitions of what cultural contributions are – the question of the audience has tended to be subsumed within the question of cultural value. Our research has only uncovered limited existing analysis of the contribution to the audience of these sectors. As a result, we have not discovered a clear definition of 'the audience' through our desk research which we believe to be useful enough for this project; therefore we have developed our own.

Within this, the key questions are:

- Who engages with British film, HETV, video games, and animation programming?
- How often, and for what reason?
- In what countries are such products viewed?
- Are the products understood as British? And,
- How does this affect the cultural impacts of such products?

Inherently, this audience perspective is tied into the cultural contribution of British products – it is, of course, impossible to have cultural impacts without the products having an audience. It is also highly unlikely that we will be able to deliver a clear, unambiguous answer to each of these questions, as the data to answer such questions do not, for the most part, exist in a consistent fashion. Nonetheless, we feel that this approach will give us a framework to address the question of who the audience for British screen products are, and why they enjoy them.

2.1.3. Relationship with the Economic Contribution Study

This study is intended as a complement to the Economic Contribution of the UK Film, High-End Television, Video Games, and Animation Programming Report ("**Economic Contribution Study"**), recently published by the same partners and also written by SPI and Nordicity. It complements this by addressing some of the non-economic value generated by tax-relief supported screen production in the UK, both within the UK and – to the extent which it is possible – in other major territories.

Contextually, this is of major importance to sectoral stakeholders given the position of cultural impacts within the broader policy context. At the EU level, the state aid exception allowing for the tax reliefs is predicated on the cultural value which the projects supported by the incentives generate; as such, proving their cultural utility provides useful evidence for their ongoing existence. In a similar vein, the Green Book model for measuring the value of Government spending requires proof to justify intervention, and this form of study increases the evidence base.

Within the UK context in particular, the question of social welfare maximisation is also highly relevant. Maximisation of social welfare is a particular Government aim, and one in which there is a clear market failure in the area of culture; it is well known that the market does not allocate resources efficiently to meet all of the cultural aims a Government might have, and this is a reason for intervention. Proving the cultural value of intervention for the purposes of maximising social welfare therefore underlines the strong reasons we perceive exist for the continued investment of the Government in the screen sectors.

2.2. Study Scope and Objectives

Each of the areas of research which we have considered for the purposes of this project is of significant breadth – any number of potential cultural outputs exist from British screen content which we might have chosen to look at. Despite this, no particular framework presently exists – either for a consultancy or in the academic sphere – to present a single, authoritative and simple perspective on all of them. As such, our focus has been to highlight a number of specific contributions which we believe, from our research, to be of particular value to the UK, either culturally or commercially.

It is worth noting that these conclusions are not drawn from an academic project, but from a commercial one. Our aim has been to corral existing evidence from across the sectors, as well as to generate additional data and insights from the expansion and deployment of existing, proven methodologies. This research has raised particular questions which are likely to need addressing through further work, and which are highlighted below; in this, we recognise the role of this document in part as a first step in defining the boundaries of current work, and posing questions for future researchers.

Finally, it is important to understand that the boundaries of the research are, in many important ways, determined by the definitions set out in the tax reliefs themselves. We note, for example, the increasingly pervasive role of online video within the lives of the younger generations, but it is not the role of this study to consider these (with the exception of where they illuminate the defined sectors, such as YouTube or Twitch for Games). Rather, the focus is on the four sectors as they are currently constituted, looking at existing products and modes of cultural and audience impact.

Though we have considered the contributions of academic research as part of this project where possible, much of this is not entirely useful, or is focussed on a small range of potential benefits. Wellbeing research is a part of this, and while it is highly useful, broader qualitative and quantitative research is required to explain the full range of benefits derived to the UK and the audience from the screen sectors. Our Audience Response methodology, outlined below, is a key part of this, together with our use of contingent valuation work, desk research, consultations, and a number of case studies.

2.2.1. Quantitative Evaluation of Audience Response

Stories We Tell Ourselves – a 2009 UK Film Council report on the cultural value of British film – was noted by a number of early consultees as a very useful starting point for the investigation of cultural and audience values. We have, as a result, adapted a part of the methodology for use in our current research, studying the various impacts and responses to:

- The films which passed the cultural test in 2013;
- HETV which passed the cultural test in the first year (2013/14); and,
- A range of games released in 2013 or in the top 100 games for the year which, following our research, we believe would have been eligible for the Video Games Tax Relief (VGTR) for their production, had it existed.

Our analysis has focussed on the audience response to these productions, and has as a result used a methodological adaptation of the second methodological approach used in Stories We Tell Ourselves, which we have adapted and expanded into an Audience Response methodology. This is explored in further detail at the start of each relevant sector, below.

Though we had anticipated using this methodology to study each of the sectors eligible for the creative tax reliefs, unfortunately it did not prove feasible to study animation programming in this way. This reflects the younger target age groups for much British animation which, consequently, do not produce sufficient data for study.

2.3. UK Tax Reliefs, and the Definition of Qualifying Projects

2.3.1. Defining the Industries

Whereas the Economic Contribution Study considered the core industries, in this report we have more flexibility to analyse other impacts, reflecting the limited evidence base for some of the core sectors. Nonetheless, the definitions used for the purposes of the various tax reliefs continue to provide a solid framework for this – as well as a degree of continuity with the existing analysis. We will not, however, stick to these definitions for all our analysis particularly given the fact that useful, relevant existing research does not always cleave exactly to the definitions adopted by the Government for the industries in question.

This definition is most relevant for animation programming, where our analysis continues to be focussed on the programmes which are supported through the Animation Tax Relief (ATR). As a result of this, where we refer to 'Animation', this should be taken to imply an animated television programme which – given the focus of UK animation – is likely to be focussed on children as an audience.

2.3.2. Qualifying Projects

Qualification for the UK's tax reliefs is based on the certification of a project through either a sector-specific cultural test, or as an official co-production covered by bilateral co-production treaty or the European Convention on Cinematographic Co-Production. Passing the cultural test requires reaching a threshold value for available points – for film, this is now 18 out of 35 points, and for the other sectors 16 out of 31.[9]

The qualification tests for the new tax reliefs are based on those for film, and are structured into four key sections:

- Cultural content – with the project being set in the UK/EEA, having UK/EEA lead characters, being based on UK/EEA subject matter, and recorded in English or another UK indigenous language;[10]
- Cultural contribution – the project reflects British creativity, heritage, or diversity;
- Cultural hubs – at least 50% of production or post-production takes place in the UK; and,
- Cultural practitioners – leading creative talents for the project are British or EEA residents.

For all of the cultural tests, receiving 100% of the points in the cultural content section is enough to achieve certification. Producers can apply during the production process itself – receiving interim certification to be able to claim relief during production – but must also submit final certification after the completion of the project.

Where an official co-production treaty exists, and the project in question is eligible through this, then certification as a co-production is sufficient for access to the reliefs. Unofficial co-productions, however, still require a cultural test.

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[9] Historically, the film test also required 16 out of 31 points, but has recently been modernised with the addition of further possible points, and to allow European content in line with the newer tax reliefs
[10] EEA – European Economic Area

2.4. Analysing Cultural and Audience Contributions

There are, as we note, no commonly agreed frameworks for the aggregation of a single, all-encompassing perspective on the cultural and audience values of the products we consider in this report. Nonetheless, we consider the use of certain existing models to be valuable in helping to organise the evidence we have gathered and created during this project.

Foremost among these is the model proposed by John Holden at Demos, which describes the three kinds of value culture has as instrumental, institutional, and intrinsic. Within these:

- Instrumental describes the social and economic uses of cultural value, for example how culture can be used in tackling social exclusion;
- Institutional highlights how organisations can gain the trust and esteem of the public by user engagement; and,
- Intrinsic represents the unique value of culture as a sector, and is by its nature hard to define – O'Brien describes this as being "associated with ideas of aesthetic excellence and individual enjoyment. Intrinsic value is therefore highly subjective and is hard to fit into the language of outputs and outcomes associated with Holden's other two types of value."[11]

Though by no means a perfect model – indeed, it has been criticised by other researchers – we have found that this is still a useful approach to take in analysing the various contributions which we note. In particular, it is true to say that people do not, in general, access media for the purposes of secondary impacts: in general they do it to be entertained or, in some cases, educated. Nonetheless it is clear from research conducted by the British Council (among others) that such media plays an important role in shaping perceptions of the UK around the world.

In this regard, the role of British television culture in building interest and trust in the UK abroad – so-called 'soft power' – can be seen as an institutional value derived from these products. Meanwhile, the role of the screen sectors in shaping the "reflective individual and the engaged citizen" described by Crossick and Kaszynska can be seen as an instrumental outcome.[12] The particular element of this described by Crossick and Kaszynska can, for example, be seen clearly in the role of children's television – here represented through animation programming – in shaping future generations.

Intrinsic value is, as O'Brien notes, an altogether slipperier concept, but nonetheless one where we have attempted to build an evidence base. Primarily, such evidence has come through the construction of case studies, via desk research and consultations. In addition, it may be perceived that the various consumer surplus analyses contained within this report also highlight elements of intrinsic value, by revealing consumer preferences not directly demonstrated through market pricing.

The two sections below summarise the economic tools used throughout this report for the estimation of cultural and audience contributions.

2.4.1. Social welfare and consumer surplus

As part of the broad basis of evidence we developed for this study, we also sought to, wherever possible, quantify (in monetary terms) the cultural and audience value of the film,

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[11] O'Brien, D., Measuring the value of culture: a report to the Department for Culture Media and Sport (2010) p. 18

[12] Crossick, G., and Kaszynska, P., 'Under construction: Towards a framework for cultural value', in *Cultural Trends*, vol. 23, no. 2 (2014) p. 125

HETV, video games and broadcast animation sectors. This quantification was based on the framework of social-welfare analysis and the concept of consumer surplus.

Social welfare analysis is a framework that is widely used in the field of economics to assess the impact of a Government policy or regulation or to put a monetary value on the resources within an economy. When assessing Government policy or regulation, economists will often seek options that maximise social welfare (also referred to as social surplus).[13] In contrast to other economic variables such as employment or gross domestic product (GDP), social welfare refers to the sum of consumers' (or citizens') utility – i.e. the value or satisfaction they obtain from the consumption of goods or resources.[14] When social welfare is said to be maximised, then the resources within an economy are said to have achieved efficient allocation – that is, no individual can be made better off in social welfare terms without someone being made worse off.

Social welfare analysis and utility maximisation are particularly useful frameworks for the assessment of non-traded resources – i.e. non-market goods such as clean air, parks, green space or cultural institutions.[15] We can often infer the relative value that consumers place on traded goods (market goods) from prices at which those goods are exchanged at. If an economy consisted of only traded goods then the maximisation of social welfare would likely be synonymous with the maximisation of income or GDP. However in reality, an economy or society consists of numerous non-traded goods, including clean air, parks, green space and cultural institutions or symbols. For this reason, HM Treasury recommends that analysts adopt social welfare analysis whenever they are conducting cost-benefit analyses of Government policy.[16] This helps to ensure that *all* the costs and benefits of such a policy – including those associated with traded and non-traded goods – are taken into account.

The application of social welfare analysis is not confined to non-traded goods. The same analytical tools that comprise social welfare analysis can also be applied to quantify and assess the utility that consumers derive from traded goods. Standard economic theory predicts that consumers, behaving rationally, will only enter a market transaction if the utility they would derive from that transaction is equal to or greater than the market price. In most markets, therefore, there will be consumers who place a value on a traded good which exceeds the market price of that good. In other words, consumers' willingness to pay exceeds the market price. This difference between willingness to pay and market price is referred to as consumer surplus.

Most economic impact studies, including the Economic Contribution Study, quantify the producer surplus generated by a good or service.[17] Producer surplus refers to the monetary gain experienced by firms when they sell a good or service at a price above the marginal cost of producing that good or service. This producer surplus is synonymous with the value added generated by a particular good. It tells us the aggregate value of the market transactions generated by a good, however, it tells very little, if anything, about the overall monetary value that consumers place on that good.

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[13] Measuring the value of culture, p. 16.
[14] HM Treasury, The Green Book: Appraisal and Evaluation in Central Government (2010) p. 57.
[15] *ibid.*, p 57
[16] *ibid*, p. 4.
[17] To simplify our portrayal of the analysis in Economic Contribution of the UK's Film, High-End TV, Video Game and Animation Sectors, we assume that the marginal cost of output in these sectors is zero. Whilst marginal cost (i.e. the cost of reaching one more viewer) may not always be zero, in digital content industries it is often close to zero. When marginal cost is equal to zero then producer surplus is equivalent to industry revenue.

For example, it may be the case that consumers spend the same amount of income on the purchase of screen content in a given year than they do on the purchase of caffeinated beverages. However, it would be wrong to conclude that consumers place the same value on these two goods. Consumers' willingness to pay for screen content may be much higher than what they are willing to pay for caffeinated beverages. In other words, the monetary value that consumers place on screen content – and thereby the consumer surplus generated by screen content – would be much higher than that of caffeinated beverages.

From a public policy perspective, understanding consumer surplus in addition to producer surplus permits one to construct a more complete cost-benefit analysis of the policy in question and thereby better understand the relative value that consumers, and citizens, place on goods in the economy. A better understanding of this value – i.e. social welfare – permits public policy that better reflects consumers' and citizens' preferences. This, in turn, should lead to a better allocation of resources within the economy: one which better approaches maximum social welfare.

2.4.2. Methods for quantifying consumer surplus

The quantification of producer surplus, whilst not straightforward, is often easier than the quantification of consumer surplus because it is based on largely observable data. The quantification of producer surplus requires data on market prices and suppliers' cost structure, in particular their marginal cost or production or supply.

The quantification of consumer surplus, however, is often based on prices and values that are not directly observable. As a result, analysts have developed a variety of techniques to estimate consumers' willingness to pay. These techniques include the following:

- **Stated preference models:** As the name suggests, stated preference models use specially constructed surveys to elicit consumers to report their willingness to pay for (or willingness to accept foregoing something for) a good.[18] This can be done using contingent valuation methods, which directly ask consumers what their willingness to pay or accept is, or through choice modelling techniques which deduce willingness to pay or accept from consumers' choice or ranking of alternatives or product attributes.[19]
- **Revealed preference models:** This approach seeks to infer consumers' willingness to pay or accept by observing proxies in similar or related markets.[20] For example, house prices are often used to infer the value that consumers place on parks and green space.[21] Travel cost or time value studies are another type of revealed preference model, whereby, the time that consumers devote to non-traded goods or activities are used as a proxy for their value.[22]
- **Subjective well-being:** This is an emerging approach that relies upon surveys of the relationship between income and well-being to derive monetary estimates of consumer surplus.[23]

[18] HM Treasury (2011), p. 57.
[19] ibid, p.57
[20] ibid, p.57
[21] ibid, p.57
[22] ibid, p.57
[23] ibid, p.58

In this report, we use both stated preference and revealed preference models to estimate the consumer surplus generated by screen content in the UK, providing a more rounded perspective on the contribution of these sectors to the audience.

3. THE FILM SECTOR

3.1. Introduction

This section of the report considers the cultural and audience impacts of the UK's film sector, using a variety of methodologies and techniques. The sector described broadly reflects that which is eligible for the Film Tax Relief (FTR), but – recognising the greater flexibility of this report compared to the Economic Contribution Study – was not required to be entirely wedded to this definition of the film industry in the UK.

Though the cultural and audience impacts of the film sector are well described in a series of reports and analyses, there are few examples of this being drawn together in a single analysis. As such, this chapter will consider the various already-documented impacts, together with additional data generation and analysis to refresh the existing literature, and to consider the impacts of the films certified in 2013, the same year covered by the Economic Contribution Study.

3.2. Literature Review

As the sector with the longest track record in the UK, it is perhaps unsurprising that film has the largest volume of existing public research of all those studied for this report. Much of the data we have looked at comes from reports by the British Council and the BFI, as these provide a strong basis of research for the cultural and audience contributions of UK film. Some academic work has also been considered, to provide additional evidence not generally explored through other sources.

This section will concentrate on existing evidence relating to the cultural and audience contributions of British film, and is split into two sections, considering:

- Domestic impacts, and
- British film overseas.

Case studies are also used to examine specific issues of interest.

3.2.1. Culture and Audience Value in the UK

Throughout our research process, consultees have underlined that there are two reports of particular importance when it comes to demonstrating the cultural and audience contributions of film in the UK – Stories We Tell Ourselves and Opening Our Eyes.

4.2.1.1 Stories We Tell Ourselves

Stories We Tell Ourselves was published by the UK Film Council in 2009, and explored the cultural impact of UK film over a 60 year period, from 1946-2006. Its core methodology was to consider two parallel lists of British films:

- The first list consisted of an 'intuitive sample' of 200 films which were "generally regarded by professional observers as significant and of lasting value,"[24]
- Against these were compared a set of 200 randomly chosen British films, to act as a control group for the purposes of the analysis.

[24] Narval Media, etc… *Stories We Tell Ourselves* (2009) p. 5

The results of this analysis tended to challenge some of the assumptions about the dominant themes of British cinema – most of the productions in both lists had a contemporary setting, while far more were set in "the long 19th century" (1800-1914) than World War II. Furthermore, the study noted that while films in the random sample tended to reinforce British values, those which were curated tended to challenge or satirise these.

The report concluded that there were four key categories of cultural impact:

- Censorship and notoriety – including the furious critical and public response to *A Clockwork Orange*, and the censorship by a wartime Government of *The Life and Death of Colonel Blimp*;
- Quotations and citations in other media, such as references to *Chariots of Fire* – in particular its score – across a range of media from *The Simpsons* to *Will and Grace* (and, latterly, in the opening ceremony of the London 2012 Olympic Games);
- 'Zeitgeist moments', "where films have captured the spirit and preoccupations of their times, influenced change and earned a place in popular culture" – the Indian release of *Bend it like Beckham*, which inspired the creation of an all-women national football league, is seen here as an example; and,[25]
- Cumulative impact, where productions have defined shared cultural ideas and feelings, and contributed to long-term social and cultural change – the changing attitudes towards the gay community engendered by *Four Weddings and a Funeral* are highlighted here.

The study also explored the cultural impacts of national and minority films in the UK, noting in particular the rise of films about black and Asian British people in the 1980s, with *My Beautiful Laundrette* highlighted as a breakout. Cross-over successes, representing a wider range of genres and a more mixed ethnicity then followed, including *East is East* and *Bend it like Beckham*. *Stories We Tell Ourselves* therefore highlights the changing nature of the relationship between film and society in Britain, showing how UK cinema evolved to reflect the society which it described, and with which it was conversing.

Stories We Tell Ourselves ended by noting the changing model of film consumption from the audience, in particular the increasing role of digital delivery, then exemplified by the DVD market. As we note elsewhere, how the audience engages with film is an issue which has continued to evolve in the years since the report was written, with the emergence of SVoD services like Netflix, as well as the splintering of the cinema market, presenting new challenges for producers and policymakers. For the present report, the lack of data from newer models of film circulation presents an increasing challenge.

Taken as a whole, Stories We Tell Ourselves is a key text in analysing the role and nature of cultural and audience impacts for British cinema. Though its focus is on the domestic – as well as on a limited range of productions – by highlighting the particular channels of impact for film, it has tremendous value for the researcher. Furthermore, its model of evaluation, though undeveloped in the years since the report was initially developed, has provided a useful starting point for our current investigation.[26]

[25] Narval Media, Stories We Tell Ourselves, p. 6

[26] We have utilised and expanded the second model of quantitative study used in *Stories We Tell Ourselves* for our *Audience Response* methodology

4.2.1.2 Opening Our Eyes

Published in 2011 by the BFI, Opening Our Eyes provides the second major piece of research on the cultural contribution of British films, considering a range of aspects, a number of which we consider as being 'audience' contributions for the purposes of this report. Opening Our Eyes picks up from the end of Stories We Tell Ourselves, adding elements including online surveys, case studies, paired depth interviews, and telephone interviews to consider in greater depth the audience value of film in the UK, and the impacts film has had on British society and attitudes.

The study concluded that the British public viewed a cumulative five billion films across all platforms per year, with 86% watching one film on TV per month, and 63% on a DVD or Blu-ray. On a monthly basis, 30% went to the cinema, 23% watched a film downloaded or streamed on the internet, and 11% watched on a mobile device.[27] Perhaps unsurprisingly, the study determined that older people (over 55s) were significantly less likely to watch films on newer platforms – including DVDs – while ethnic minorities are more avid consumers of film both at the cinema and on digital platforms.

The high level of engagement of the British public with film was underlined through the report, which concluded that 84% of the public were either fairly interested or very interested in film as an activity.[28] This placed film above a range of other activities including music, literature, museums, and sport, and behind only television and UK news (both 88%) as preferred activities. In terms of artistic value, the respondents to the survey felt that film was on a par with literature and classical music, while the study also concluded that "interest in film correlates with a higher than average interest in other arts and entertainments and with an active interest in the world."[29] Taken together, these data underline the particular role of film within the British psyche, both as a means of entertainment and a driver of cultural interest and communication.

With regard to the contribution of films to community and a sense of place, Opening Our Eyes highlighted a strong level of support for making British films – 88% agreed that it was important, and 78% supported Lottery funding.[30] Similarly, 84% of those surveyed felt British films were an important part of British culture, while 77% felt that the success of British films abroad fostered a sense of national pride.[31] However, while respondents agreed that British films should be true to life, there was a perspective that productions focussed too much on London and the rich, ignoring other issues such as disability. Minority ethnic groups also tended to feel that white Britons were over-represented in productions, though White British respondents did not agree.

In considering whether films were 'British' or not, Opening Our Eyes notes the sophisticated and complex means through which the audience comes to a judgement. Films with British stories or set in the UK were viewed as British even where they were US financed, while nuanced judgements were reached in borderline cases, such as that of *Slumdog Millionaire*. Here, the film was perceived, on balance, as being non-British, though "some interviewees saw it as a British film set in a non-UK location."[32] Such a case highlights the complexities of

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[27] Northern Alliance and Ipsos MediaCT, *Opening Our Eyes* (July 2011) p. 6
[28] *ibid* p. 19
[29] *ibid*, p. 2
[30] *ibid*, p. 42
[31] *ibid*, p. 42
[32] *ibid*, p. 46

determining national origin, particularly in a situation where there exist subtle degrees of difference.

Nonetheless, the report concludes that British films are culturally distinct from American ones – the only unprompted comparison consultees made. Humour, grittiness, and a down-to-earth plot were highlighted as being traits of stereotypically British films, with *Wallace & Gromit: The Curse of the Were-Rabbit* rated as the most British film on the consultants' list.[33]

Summing up the value of films to the audience, Opening Our Eyes highlights the particular emotional impact of a specific film – whether 'feel good', moving, or upsetting – as being especially profound. The report outlines that 49% of respondents noted a specific film as being thought-provoking or educational, while the long-term effects of particular films in reminding individuals of their childhood or adolescence was also strong.[34] It is noted that this capacity for reflection is not limited to arthouse productions, but can include mainstream, entertainment-focussed films, where perhaps such responses are not to be expected.

Overall, Opening Our Eyes can be seen to underline the central place of film production – in particular domestic film production – within the British cultural canon. Films provide a cultural contribution to the audience in a way which – while mainstream and often entertainment-focussed – can often be profound. The study underlines public support for British film, and notes the nuanced distinction which the audience makes between British and non-British productions. Finally, it also shows the sheer scale of the audience for film in the UK, though in a way which demonstrates the enormous diversity that it contains.

4.2.1.3 Premium for UK Products

In the previous sub-section, we examined the overall consumer surplus (i.e. audience value) placed on UK films by UK audiences across all platforms. However, when considering the question as to the cultural value of UK films, one approach would be to compare the value that UK audiences place on UK films in relation to non-UK films. Whilst data is not available on a film-by-film basis to quantify relative rates of consumer surplus, Oxford Economics developed an approach for the 2012 Economic Impacts Study under which box office receipts could be used to ascertain and quantify the cultural value of cultural premium associated with UK films.[35]

This approach and related modelling was based on the premise that consumers' spending on the purchase of cinema tickets provides a signal as to the benefits that consumers expect to derive from those films. If one assumes that, on average, UK films and films from other countries (namely the US) offer the same level of entertainment benefit (all other things being equal) any additional box office revenue earned by UK films in the UK can be viewed as a monetary valuation of the additional benefit that Britons derive from viewing UK films – i.e. films that feature UK stories, settings and performers.[36] This additional monetary valuation can be viewed as the monetary estimate of the cultural value of UK film.[37]

To assess and quantify the cultural value of UK films in monetary terms, Oxford Economics first examined the probability that a film would earn more box office revenue in the UK

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[33] *ibid*, p. 46
[34] *ibid*, pp. 38-39
[35] Oxford Economics, The Economic Impact of the UK Film Industry (2012), p. 79-83.
[36] *ibid* p. 79
[37] *ibid* p. 79

compared to the US. Since the US market is five times larger than the UK market, it would be very unlikely for a film to earn a higher box office in the UK than in the US. Indeed, Oxford Economics found that only 5% of films released in the UK between 2000 and 2011 earned a higher box office in the UK than in the US.[38] However, Oxford Economics also found that the probability of a film earning more box office in the UK compared to the US rose significantly once the country of origin was taken into account.[39] Indeed, Oxford Economics found that the probability of a UK-made film earning more in the UK compared to the US was 30% as opposed to 5% (for all films).[40] The fact that UK films have a greater likelihood of earning more box office revenue in the UK than in the US provides evidence that UK audiences do gravitate towards UK content – in relation to the general audience appeal of that content (as indicated by the US box office).

In addition to the probability analysis, Oxford Economics conducted a more rigorous econometric analysis of the relative box office performance of UK films. This econometric analysis used UK films' box office performance in the US as a 'control' group that could be used to remove the purely entertainment value of UK films.[41] The econometric model also controlled for any preferences that US audiences may show for American films, and might thereby make the US market a somewhat inaccurate control group for the entertainment or 'popular appeal' of UK films.[42]

Based on data for 2,582 films released in the UK between January 2000 and February 2012, Oxford Economics' econometric modelling indicated that the UK films earned a box office premium of 30% in the UK above and beyond what their general entertainment value or popular appeal would predict they would earn.[43] In other words, UK audiences were willing to pay 30% more for UK films, presumably on account of their indigenous appeal – i.e. cultural value.

In 2014, UK-made films earned £274 million at UK cinemas. A 30% cultural premium would imply that the cultural value of these films was £63 million. In other words, if these films had not been UK-made films they would have only earned £211 million at the UK box office. However, because they featured UK stories, settings and performers, UK audiences were willing to pay an additional 30%, or £63 million, to view them (30% × £210m = £63m).

4.2.1.4 Other Research

While this literature review focuses on the more qualitative aspects of cultural value research, it is worth noting the current trend towards more quantitative studies of aspects of this value. A particular area of interest for researchers at the moment is subjective wellbeing, which seeks to demonstrate the value of culture to the population by means of a 'moneymetric' calculation. This shows the amount of additional spend on wellbeing which would have to be made by an individual or Government to achieve the positive impacts on the individual's health or welfare which spend on cultural, sporting activities, or other such activities achieves.

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[38] *ibid* p. 79
[39] *ibid* p. 79
[40] *ibid* p. 79
[41] *ibid* p. 102
[42] *Ibid*. In other words, if US audiences prefer American films then the US market cannot be used as proxy for the measurement of the entertainment value or popular appeal of a films.
[43] *ibid* pp. 81 and 102. This result was statistically significant and consistent with previous estimates of the cultural premium made by Oxford Economics in previous studies for the BFI (UK Film Council).

Subjective wellbeing was the focus of recent reports by Daniel Fujiwara, Laura Kudrna, and Paul Dolan for the Department for Culture, Media, and Sport (DCMS), Quantifying the Social Impacts of Culture and Sport and Quantifying and Valuing the Wellbeing Impacts of Culture and Sport. They consider the subjective wellbeing impacts of a range of cultural and sporting activities to the individual, and the gross value these generate for society. Issues studied include participating in a range of individual or team sports, participation in art, and being in the audience for film, exhibitions or plays. These are measured against self-reported health outcomes.

In the Wellbeing Impacts report, the monetary valuation of engagement of a weekly cinema visit was given at £418 per year, or £8.04 per week. The paper concluded that the wellbeing value to the individual of that cinema visit is worth – on average – £4.02 more than the price of admission.[44] The Social Impacts study concluded that the impact of cinema on the audience generated a cost saving for the NHS of £24.95 per annum, on an indicative basis.[45] Regular film attendance was also noted as having a 1.1% increase in the likelihood of an individual volunteering, though this was the lowest of all arts studied.[46]

Taken together, these data provide a strong base of evidence for the significant societal impacts of engagement with cinema, highlighting the great value which it provides for the audience. The authors do note, though, that more research is needed in this area.

A final piece of evidence regarding the nature and shape of the audience comes from the 2009 study Culture, Class, Distinction, edited by Tony Bennett. This work argues that cultural engagement for cinema is clearly demarcated by social class, with the 'higher classes' showing much greater affinity for cinema attendance than working classes. It is noted that higher class individuals can move between the mainstream and arthouse whereas manual workers "[express] a sense of the art-house space as remote in terms of age and class."[47]

In many ways, this conclusion would seem to correlate with those drawn through Opening Our Eyes regarding the fractured nature of the market for film product in the UK, though it is arguable that the class-based approach is somewhat lacking in nuance. Nonetheless, the sum of the available data demonstrates that the audience for cinematic product is, in many ways, quite splintered, and while there is a strong appreciation of British films, the question of what is British – and more pertinently, what reflects society – is highly dependent on the respondents' point of view.

4.2.1.5 Conclusions

Existing literature underlines the wide range of cultural contributions which have been made by British film in the UK, together with the audience impacts these have created. Stories We Tell Ourselves notes in particular the role film played in the mainstreaming of ethnic minority communities into British culture, both through the development of their own cinematic culture in the UK, and then through crossover hits. This underlines the power of film to drive the cultural conversation, also demonstrated through productions such as *Four Weddings and a Funeral*, at the same time as providing popular entertainment.

[44] Fujiwara, etc... Quantifying and Valuing the Wellbeing Impacts of Culture and Sport (April 2014) p. 27
[45] *ibid*, p. 20
[46] Fujiwara, etc... Quantifying the Social Impacts of Culture and Sport (April 2014), p. 25
[47] Bennett, T. etc... *Culture, Class, Distinction* (London, 2009) p. 141

Opening Our Eyes continues with this, also underlining the sheer scale of the cinematic audience in the UK, where 84% are interested in film, and 86% watch a film at least monthly – this level of interest is reflected in the Secret Cinema case study (below). Opening Our Eyes, though, also demonstrates the particular challenge of defining 'British' film from a popular cultural perspective. In the responses recorded to productions like *Slumdog Millionaire*, it is made clear that determining national origin is a subtle challenge for the public, which consequently impacts on the perceived cultural value. Nonetheless, our analysis suggests that the premium for UK cinema nets out at £63 million per year, based on 2014 figures.

More recent academic research demonstrates the social impacts of this cinema attendance. Through his work, Fujiwara underlines the wellbeing value of film (though we note that this does not extend to home viewing), the indicators being that it can save the NHS money.

Taken as a whole, the existing literature underlines the vast interest the British public has in UK film culture, and the wide range of public impacts it can have. Aside from being able to shape the conversation around issues such as homosexuality and race, cinema attendance can also help to increase the health of the nation. It is clear from this that the audience for British film is both broad and diverse, and that the cultural value they draw from film is similarly high.

3.2.2. Case Study: Secret Cinema

The particular audience impact of film is demonstrated strongly through an organisation like Secret Cinema, which arranges 'immersive cinema' experiences. Starting in the UK in 2007 with the film *Paranoid Park* (shown at Shipwright Yard), the company has created steadily more intricate experiences for its audience. This is exemplified by the 2014 screening of *Back to the Future*, for which a facsimile of the town of Hill Valley – the setting for the film – was built in the Queen Elizabeth Olympic Park.

While there were numerous issues with this production – resulting in the cancellation of the first night's screening just over an hour before the screening – in many way these tend to underline the enormous audience and cultural impacts both of the project, and of the films it has screened. These showed that people had travelled large distances – including from locations such as Cambodia, Tennessee, and Germany, spending money on costumes and hotel rooms, and taking time off work, to attend a 29-year old film.[48] Media commentary at the time of the cancellation noted that 65,000 tickets had been sold for the event, at a price of £53 each.

Despite these significant issues, the reviews for the event when it was finally opened were highly positive, with both The Guardian and The Telegraph giving it 4 out of 5 stars.[49] Furthermore, it is unlikely that the true scale of the audience impacts of Secret Cinema would have been uncovered without the challenges of the *Back to the Future* event. By showing the depth of audience engagement with the concept of immersive cinema, the furore that followed the cancellation of the screenings underlined the particular value that the audience places on the cinematic experience as a whole.

[48] Ellis-Petersen, H, "Great Scott! Secret Cinema's Back to the Future opening night cancelled" in *The Guardian* (14th July, 2014) and Bramley, EV, "Social media storm in wake of Secret Cinema's Back to the Future shambles", in *The Guardian* (25th July, 2014)

[49] Smith, P. "Secret Cinema presents Back to the Future, review: 'triumphant'", in *The Telegraph* (1st August, 2014) and Bradshaw, P. "Secret Cinema: Back to the Future review – fancy dress eccentricity", in *The Guardian* (31st July, 2014)

The next screening from Secret Cinema will be one of the *Star Wars* franchise – *The Empire Strikes Back*, starting on 4th June.

3.2.3. British Film Overseas

4.2.3.1 British Council – As Others See Us

Recent research from the British Council, As Others See Us highlights the central role which culture has in determining the attractiveness of a country, as perceived abroad. In this report – which surveyed 6,051 individuals across six countries – 'Cultural and historic attractions' were ranked as the most important driver of national attractiveness, with 61% of respondents highlighting their importance.[50] The arts were also noted as being of significant importance, at 52%, in 5th place overall; by contrast, 'Sporting teams, events, and achievements' gained only an 18% rating, and sat last in the survey of general factors.

As part of the study, the survey respondents were asked to rank the cultural assets which made the UK particularly attractive, and here film did less well. 17% of respondents highlighted film as an attractive asset for the UK, placing it in joint 12th position with sport.[51]

Nonetheless, the individual responses from the BRIC elements of the survey respondents suggest British film is of importance to their view of Britain, and has generated a significant cultural impact in Brazil and China. In China, 22% of respondents highlighted Film as making the UK particularly attractive to them, and in Brazil it was 21%, whereas the US and Germany placed British film much lower on their lists, drawing down the average. Film was also seen by Chinese respondents as the second most important source of information about the UK, with 28% ranking it as one of their two most important sources.[52]

4.2.3.2 Stories We Tell Ourselves

In addition to its conclusions on the domestic impact of British film, Stories We Tell Ourselves also notes the impact of these productions abroad – in parts of Europe, the Middle East, and the US. The particular attractions of British social realism and humour are noted in these countries, with the global successes of *The Full Monty* and *Brassed Off* highlighted. Nonetheless, there is a challenge faced by the dubbing of films into non-English markets, resulting in the dilution of 'Britishness' for some UK films, in particular those (such as *Bond* or *Harry Potter*) made with US involvement. The report argues that given their 'American' production characteristics, it might not be evident to the audience that such productions have any British involvement.

For Europe, *Stories We Tell Ourselves* looks in particular at the impact of British films in France, Italy, and Poland. In both France and Italy, it is noted that the social drama genre of directors such as Ken Loach and Mike Leigh travels particularly well, with social realist movies being "generally perceived as a model for national cinema" in France.[53] It is seen as noteworthy in France that social issues such as inequality and the loss of 'social capital' are dealt with in British films in a way in which French directors ignore. Given the feeling expressed in Opening Our Eyes that British films are too reflective of richer residents of

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[50] British Council, *As Others See Us* (2014) p.6; the Ipsos MORI survey on which the report is based was conducted in Brazil, China, Germany, India, India, the UK and the USA December 2013-January 2014
[51] *ibid*, p. 15; there were 16 possible responses in total, Television and Dance came joint bottom with 10%, Historic buildings/attractions came top with 44%
[52] *ibid*, unpublished data kindly provided to SPI by the British Council and analysed by SPI
[53] Stories We Tell Ourselves (2009), p. 67

London and the South East, this might be seen as a surprising conclusion, but it perhaps reflects also the niche domestic audience for many of the films which the French audience admires.

In the US, British films are noted as being similar to their own, but 'with a slight twist'. For example, "a film such as *The Bank Job*… which took $30 million at the box office, was a standard US film but with a 'special British twist'."[54] This tends to underline the question of identity for British films in the US – whereas lower budget productions tend to be seen as more British, regional accents get in the way of releases. Meanwhile, higher budget UK/US productions are often seen as domestic, limiting their potential cultural impact.

Stories We Tell Ourselves tends to underline the difficulties of British films in generating a US audience, despite noting that there is a growing, niche audience. The dichotomy of British films in the US market is perhaps best noted by the quote: "British cinema is a quality label according to some professionals, but not for all films. Furthermore, some distributors state that they would never market a film as British because people could be put off, fearing that they won't understand the accent."[55]

4.2.3.3 Soft Power

The central role which culture takes in the generation of cultural ties between countries – so-called 'soft power' – is underlined through a 2012 British Council publication, Trust Pays. Here, it is shown that increasing the number of cultural activities undertaken with the UK has a marked impact on the degree to which the population of a foreign country trusts the UK. The data show that base levels of trust, following cultural activities, can be increased by as much as 26% - trust from Pakistani respondents increased from 33% net for those without cultural relations with the UK to 59% net for those with.[56]

A recent report by the House of Lords, Persuasion and Power in the Modern World, underlines the role which the creative industries takes in the generation of such soft power. This document highlights the particular success of the UK's creative industries, including film, noting the *James Bond* franchise as being particular influential. Persuasion and Power notes that, "The UK's creative industries boost the UK's profile everywhere, especially among the global middle class with its discretionary spending power, appetite for media and cultural content, and increasing social influence."[57] Though this does not apply solely to film, taken with the results of the British Council study – which highlight the particular role of film in those countries with fast-growing middle classes – this can be taken to underline the particular cultural impact of British cinema content.

4.2.3.4 Screen Tourism

In recent work conducted for Creative England in association with VisitEngland, Olsberg•SPI undertook a quantitative analysis of the value of film and television tourism to filming locations in England outside London. This underlined the significant impact that screen

[54] *ibid*, p. 71
[55] *ibid*, p. 72
[56] British Council, *Trust Pays* (2012) p. 12; net trust is calculated from survey responses as a function of (Strongly trust + Trust) – (Strongly distrust + Distrust)
[57] House of Lords' Select Committee on Soft Power and the UK's Influence, Report of Session 2013-14, *Persuasion and Power in the Modern World* (2014), para. 256

products can have on audiences in encouraging them to visit locations – a phenomenon that can occur even before release and, in some cases, long afterwards.

The study considered a number of different locations where film production took place in England, including Alnwick Castle (the first two *Harry Potter* films), Puzzlewood (*Jack the Giant Slayer*), and Wollaton Hall (*The Dark Knight Rises*). Individual data from these sites underlines the impact which film has had on their attractiveness to tourists, with 20% of Alnwick Castle's domestic tourists, and 21.7% of those coming from overseas visiting solely because of the screen link.[58] Of these, the largest proportion of overseas visitors came from the US, Australia, Germany, and Spain.[59]

The study underlines the major impacts that screen products can have on tourism, demonstrating a significant audience contribution at the same time. The overall data underline, furthermore, that while more domestic than international tourists attend sites, the spend value of those international tourists is far greater. It also clearly shows that impacts can occur many years after the original release of films, with a film like 1998's *Shakespeare in Love* continuing to exert a demonstrable pull for Holkham.[60]

4.2.3.5 Conclusions

It is clear from the available studies that British culture has significant global value, and plays a strong role in transmitting British values around the world, and generating the soft power needed for the achievement of British trade and diplomatic aims. The case studies of *Submarine* and *The Illusionist* (below) both tend to show this also, focussing on the nations of the UK. Film – therefore – clearly has a place within this, but it is slightly more nuanced, and highly dependent on the preferences of the country receiving the product.

The data from the British Council underline the particular cultural contribution of British film in the BRIC countries, in particular China, where film is one of the most important sources of information about the UK. In more developed markets, though, it appears that the audience and cultural contributions are slightly weaker, though still apparent. This is particularly the case in the US, where the conclusions from Stories We Tell Ourselves underline the contradictory position of strength and weakness British films have in the marketplace.

3.2.4. Case Study: Submarine

Aside from providing a strong basis for British culture at a UK level, film can also be seen to have significant cultural value for the country's nations and regions, as the example of the Welsh film *Submarine* demonstrates. Set in Swansea, and based on a 2008 novel of the same name by Welsh novelist Joe Dunthorne, the coming of age story received significant cultural acclaim worldwide, and was cited by consultees as having major cultural impacts for Wales.

The film was critically acclaimed for its particularly Welsh characteristics – as one reviewer noted it is a "rare teen comedy where the kids aren't gorgeous, the hero isn't heroic and the object of desire has a lot of reasons why she isn't necessarily desirable."[61] Many of these are characteristics which – as we note in more detail for animation programming – set the traditional British or European storytelling model apart from that used in the US. As a result

[58] Olsberg•SPI, Quantifying Film and Television Tourism in England (March 2015) p. 54
[59] *ibid*, p. 56
[60] *ibid*, p. 68
[61] Moore, R., *Movie Review: "Submarine"*, accessed at http://rogersmovienation.com/2013/01/15/movie-review-submarine/

of this, the small but significant audience impact of the film in the US is particularly interesting.

This is also amply demonstrated by the reviews we see for the film on IMDb, which show a range of reviewers from different backgrounds engaging with the production. These include Canadians, Americans, Australians, but also Brazilian reviewers and a number from Pakistan. The majority of these reviews are highly positive, and many also demonstrate a significant degree of thought about the message and delivery of *Submarine.*

Taken as a whole, *Submarine* demonstrates a relatively narrow, but demonstrably deep level of audience engagement. Culturally, it is also of significant value as a way of telling a very Welsh story to a global community, and doing so in a way which has clearly resonated.

3.3. Audience Response

3.3.1. Methodology

As we note above, the methodology used for Stories We Tell Ourselves – a 2009 UK Film Council report – was noted by a number of consultees as being among the most advanced for judging the cultural impact of British films. Given the level of esteem in which it is held, the decision was taken to repurpose it for this current study, considering the cultural impacts which we can draw looking at the group of films certified for the Film Tax Relief during 2013. This year was chosen as it was the one used for the Economic Contribution Study, and was felt to have provided enough time for most of the productions to have gone through cinematic release and onto secondary media.

Limiting the analysis to a single certification year represents a significant departure from the original methodology, which as we note above had considered a curated set of 200 British films alongside 200 randomly-sampled films. For this analysis, we also only considered UK independent films, rather than the entire range of certified films, as this was felt to provide a more solid basis for cultural impacts.

In 2009, the methodology marked the 400 chosen films against a series of indicators, including period, location, genre, creative source, and ethnic representation, as well as its relationship to British identities, traditions, and values. In addition to this, 30 case studies were developed involving three elements, which were used to consider the impact of films, having been adapted from cultural studies of television:

- Original impact (box office and awards);
- Extended impact (DVD re-issues and restorations); and,
- Wider impact (citations in other media, evidence of esteem, impact on social/cultural behaviour, IMDb ratings, and number of YouTube clips).

Having evaluated the possibility of utilising a similar model, it was decided to focus this report on the latter element of the methodology. This reflected the fact that, in many cases, certified films were of indeterminate location and genre, and the time constraints of the project did not allow for each to be considered in detail. Similarly, it was determined that citations in other media would – with the exception of productions with a large-scale audience – not be feasible to achieve.

Instead, our adaptation of this methodology focussed on scoring the certified films against an expanded dataset of sources for wider impact, which added new sites such as Metacritic and Rotten Tomatoes to the original IMDb ratings. As these sites have different userbases, this provides us with a broader range of data points with which to identify audience impacts. By comparing professional and audience ratings – which Metacritic and Rotten Tomatoes both also allow for – we are also able to consider any divergence between popular opinion on productions and that of film reviewers.

Evaluation of the 'Britishness' of the leading films (by Box Office, domestically and in the US) was conducted on the basis of an internal discussion by the consultants. In doing this, we determined whether the films fitted the broad criteria set out in the original report, though without adopting the scoring model which was used in 2009.

Whereas our overall approach might be seen to limit the depth of the conclusions which we are able to draw regarding the largest productions, it does allow us to consider a much greater range of films than the original methodology might. Small, British independent films which would not have been seen as culturally relevant in the original model are, as a result, highlighted. This demonstrates the value of these to the audience they serve, whilst at the same time reflecting the increasing fracturing of the audience away from the traditional model of media as elite-to-many.

3.3.2. Results

4.3.2.1 Overview

The published list for 2013 certifications shows that there were 162 UK productions in receipt of interim or final certification that year. Of these, 141 were clearly not studio films, or were felt on balance not to be studio films; not all of these were available for study, as for a small number it was unclear which of a series of films with the same title they were. Of those which were clearly identifiable as the British films certified in 2013, it appears the vast majority have had an audience impact of some kind, as:

- 114 have a review score on IMDb, indicating that IMDb reviewers have given it at least a numerical review;
- 86 have an audience rating on Rotten Tomatoes; and,
- 20 have an audience score on Metacritic.

Audience ratings on the sites in question tend to outweigh professional reviews – 61 of the films have professional reviews on Rotten Tomatoes, and 34 on Metacritic.[62] However, this might be seen as reflective of the US-biased nature of the sites in question, as 115 of the 141 productions have some kind of discoverable citation in media, including UK press reviews not counted on aggregator sites.

These data strongly suggest a high level of engagement with a wide variety of UK films, including audience (if not professional) engagement with smaller British productions. It is noticeable that even small, short films often have a range of ratings and reviews on sites like IMDb. While it is possible that these are simply reflective of friends and family engagement, the fact that almost all films had some coverage tends to suggest that the interest in British films – even for those with a necessarily niche audience – runs deep.

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[62] Metacritic requires a minimum of four reviews to generate an audience rating, which is likely to explain why there are more professional than audience ratings

4.3.2.2 Leading 2013 Films

As part of our research, we considered the leading British independent films by Audience Rating – this was averaged out across the sites from which data were collected, with a number of films being discounted for having high ratings arising from only a small number of reviews. This leads to a top 10 of:

Table 1 - Leading 2013 independent films by Audience Rating

Film	Average Rating
Still Life	8.45
Common People	8.25
London The Modern Babylon	8.00
Belle	8.00
Lilting	7.80
Leave to Remain	7.65
The Imposter	7.63
In Search of Beethoven	7.55
The Stone Roses - Made of Stone (Stone Roses Documentary)	7.50
Ill Manors	7.50

Source: Olsberg•SPI/Nordicity

It is notable that these films represent a broad range of different genres, with a number of acclaimed documentaries included with fiction projects. Only two of the productions – *Belle* and *The Imposter* – generated a significant audience share though, as measured by box office. This is suggestive of the fact that some of the smaller films in the list will have generated deep audience impacts within a fairly narrow audience.

Correcting for this with a focus just on films where a clear US or UK box office is available, the top 5 list reads:

Table 2 - Leading 2013 independent films by Audience Rating where US or UK Box Office Data are available

Film	Average Rating
Belle	8.00
The Imposter	7.63
Song for Marion	7.33
Seven Psychopaths	7.23
Locke	7.20

Source: Olsberg•SPI/Nordicity

All of these films are strong, very culturally British stories, with the exception of *The Imposter*, which is set in Texas, following the story of a French con-man, which instead tends to reflect British creative skill in documentary filmmaking. The list is also broadly reflective of the leading UK independent films by box office in the US, which reads:

Table 3 - Leading 2013 independent films by US Box Office

Film	US Box Office (US$)
Quartet	$18,381,787
Seven Psychopaths	$15,024,049
Belle	$10,645,039
The Quiet Ones	$7,995,603
Believe	$6,206,566
The Christmas Candle	$1,909,642
Song for Marion (Unfinished Song)	$1,697,294
Locke	$1,361,423
Ginger and Rosa	$1,005,700
The Imposter	$892,409

Source: Olsberg•SPI/Nordicity analysis of IMDb and Box Office Mojo data

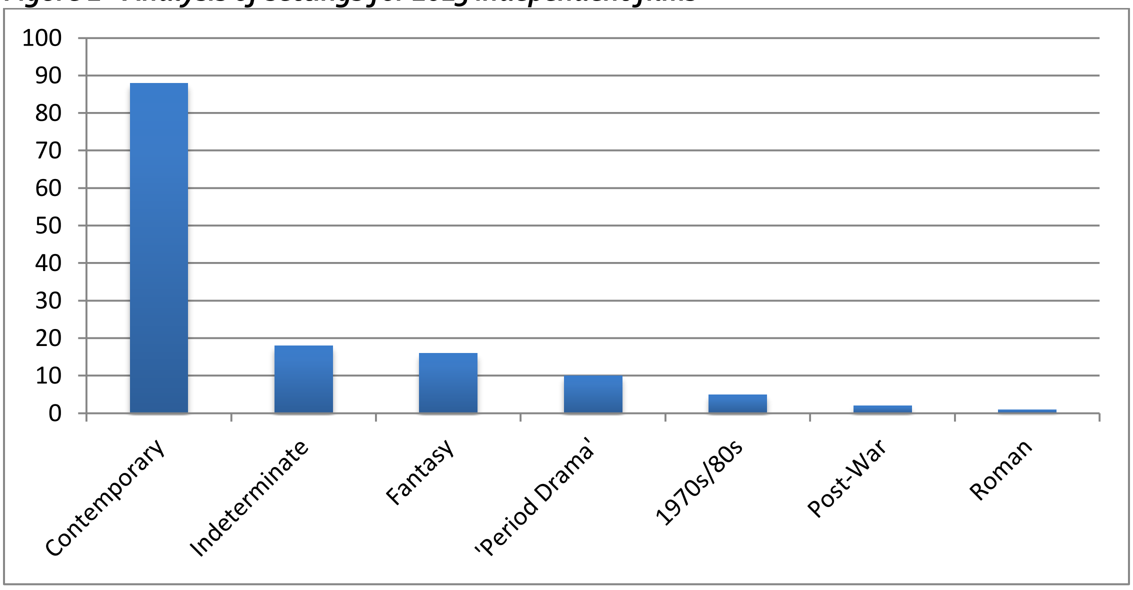
While these box office figures are solid rather than spectacular, they nonetheless demonstrate that a strong audience exists for British film internationally, which appears to be appropriate to the budget level of the productions. Indeed, with the exception of *The Imposter*, it is noticeable that all of the films which succeeded in the US market are very clearly British in origin. While this is not, perhaps, a strong enough evidence base to overturn the conclusions in Stories We Tell Ourselves regarding the position of British films within the US market – that would require a much deeper analysis of data – nonetheless it does show that the space and audience exists for such productions.

Within the British market, the only film outside of this list to make the top 10 by box office was *Filth* – there isn't a clear reason for this, though it might be hypothesised that the content of the film fell too far outside of US cultural norms for it to succeed in the market.

4.3.2.2 Setting Analysis

Analysis of the settings for the independent films certified for 2013 suggests that the vast majority of productions are contemporary – this sits in opposition to the stereotype of British films as being predominantly period dramas.

Figure 1 - Analysis of settings for 2013 independent films



Source: Olsberg•SPI/Nordicity; NB: for the purposes of this analysis, 'Period' was taken to mean anything set between the Tudor and Edwardian eras, inclusive

In many ways, this correlates with the findings of the original Stories We Tell Ourselves analysis, which notes that the majority of UK films in both samples were of contemporary setting. This tends to underline that conclusion, by way of reference to a specific time period, rather than a random sample.

This analysis is also supported by reference to the narrower sample of independent productions for which we have box office data for either the US or UK. Once again, the vast majority of these films, 13 out of 20, are contemporary in setting, with 1970s/80s being the second biggest setting, with three. This is reflected in the box office figures – of the top 5 in the US, two were contemporary in setting (*Quartet* and *Seven Psychopaths*), one period (*Belle*), and two 1970s/80s (*The Quiet Ones* and *Believe*).

4.3.2.3 Conclusions

Our analysis here highlights that there are a diverse range of successful, culturally valuable British independent films being produced on a regular basis, which find an audience both domestically and overseas. This underlines both the cultural and audience value of the UK independent production sector, by demonstrating the response these films generate.

Of the films certified in 2013, *Belle* appears to have been the most successful from an audience perspective, reaching a broad audience through the box office, whilst maintaining a high level of audience ratings. This is possibly reflective of the broader international cultural conversation into which the film was released, which included other films covering a similar subject area – the historical treatment of people from ethnic minorities – including the US film *12 Years a Slave*.

Considering the setting of the UK independent films certified in 2013, it is clear that contemporary films are dominant, ahead of both fantasy and period settings. This is also reflected in the box office results, where the leading independent films both at home and in the US were set in the present day. Though this represents only a single years' analysis, the fact that it correlates with the conclusions of Stories We Tell Ourselves tends to suggest that the focus of current British filmmaking is the present day. That this is well received by the audience – through the box office and ratings – highlights the audience contribution such contemporary drama generates.

3.3.3. Case Study: The Illusionist

The Illusionist was a 2010 Franco-Scottish animated film, largely set in Edinburgh and based on a script by Jacques Tati. Set in 1959, and with little dialogue – which where it exists is largely in Gaelic – the film garnered a significant critical response both in the UK and France, and achieved several prizes. These included a European Film Award and a César Award, as well as nominations for the Academy Awards and Golden Globes.

The Illusionist was notable for what one consultee described as its 'sense of place'. This was noted by Jonathan Meville in The Scotsman, who wrote that: "Edinburgh's skyline has never looked so good, and if the city didn't exist it would be hard to believe somewhere so beautiful was real: if locals aren't inspired ... after this, they never will be."[63]

This particular sense of place speaks to the particular cultural value which the production has for Scotland in general, and the city of Edinburgh in particular. Though animated, reviewers

[63] Meville, J., 'Film Review: The Illusionist', in *the Scotsman* (18th June, 2010)

felt that the film conveyed better than a live action might have the particular spirit of the Scottish capital, and while the story was criticised by some, the setting was highly praised. This is reflected in the reviews posted on IMDb, which highlight the impact the film had on a global audience, and the admiration which this generated both for Scotland and Edinburgh.

In doing so, *The Illusionist* underlines a particular characteristic of film as an art form – even where the visuals on the screen are clearly set apart from reality, deep cultural impacts can nonetheless be generated. In this case, the portrayal of a historical, animated, and fictionalised version of Edinburgh nonetheless led to the creation of positive audience feelings regarding the real city.

3.4. Positive Externalities and Social Impact

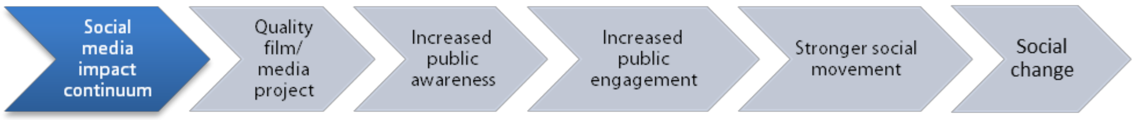
Films not only entertain, and thereby, generate economic benefits in the form of consumer surplus for the audiences that watch them, they can also have wider social impacts. In particular, films can lead to socio-political changes. In this regard, films can have positive spillovers or generate positive externalities beyond the boundary of the audience environment. By observing and measuring these positive externalities one can obtain a more complete picture of the social impact of film. Indeed, the UK's filmmaking community is at the forefront of research into the measurement and modelling of the social impact of film.

The social impact of BRITDOC, a social entrepreneurship organisation in the UK, is at the cutting edge of a growing trend and practice called 'impact producing', which entails merging documentary films with outreach and distribution strategies that engage audiences to drive social change.[64]

Previously, a documentary filmmaker would release and exhibit a film. Potentially, they would tour the film with educational programmes but often thereafter, they would soon move onto the next project. However, this new and growing movement is now focussing filmmakers on the value of distribution and outreach for their films, especially now, as new documentary investors, such as foundations and non-Governmental organisations (NGOs), are providing an increasingly important source of investment and a concomitant need to demonstrate the value of their investment.

BRITDOC is also leading the way in refining the methodologies to measure the social impact, or value, of documentary, with its A Social Impact Evaluation for *The End of the Line*, being the first report of its kind for a film.[65] In this report they considered a number of evaluation models including that developed by the US-based film foundation the Fledgling Fund, for their 2008 working paper entitled Assessing Creative Media's Social Impact, the schema of which is summarised below and which they applied to *The End of the Line*.

Figure 2 - Schema for social impact of media



Source: The Fledgling Fund

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[64] http://britdoc.org/britdoc/our-mission
[65] BRITDOC (undated), *The End of the Line: A Social Impact Evaluation*, accessed at: http://britdoc.org/uploads/media_items/theendoftheline-evaluationdocument.original.pdf

The BRITDOC organisation followed this report by developing the methodology further in Beyond the Box Office wherein they measured the *social return on investment* (SROI) of *An Inconvenient Truth,* undertaking a willingness to pay study for the film, which measured the intrinsic value placed on the film by UK citizens.[66, 67] This second report, first valued the film as a private good by examining its performance in the market in terms of numbers of people who saw the film, as well as its profit and loss. Measuring the film as a public good was less straight forward, and relied on two competing methodologies:

1. **Campaign valuation:** the press value of the awareness raised by the film; and

2. **Willingness to Pay (WTP):** the intrinsic valuation that individuals placed on the film.

Comparatively, measuring the press footprint was more easily done, as it used advertising value equivalency (AVE), which gave an estimated value for press coverage based on surveys that determined the share of the UK population who had seen the film. For *An Inconvenient Truth*, press coverage received a proxy measure of £3.7 million. Using this proxy, *The End of the Line* was attributed an AVE valuation of £1.2 million, given that it reached a third of the British public that *An Inconvenient Truth* had.

However, the press footprint approach does not capture all externalities. To calculate intrinsic value, YouGov was commissioned to conduct a WTP study to capture unrealised value beyond the box office that the film had on audiences and non-audiences. Respondents were asked to imagine that the film required their support in order to be distributed, and were then prompted with a series of financial amounts and asked whether they agreed or disagreed with a starting value to ensure the film was seen. This approach gave the film an intrinsic valuation of £73.4 million.

Given that the social campaigns of films vary in budget, not every film can conduct a WTP study; moreover, each film has unique goals for its social impact strategy. To date, there are no industry-wide, standardized impact measure practices or frameworks in acceptance, indeed currently, it is considered that a "one size fits all approach" to impact measurement is not realistic.[68]

Technological advances are also introducing new and innovative ways to track and measure impact. The US's Harmony Institute is advancing a variety of tools and techniques to analyse social media activity around a film in order to track conversation and measure engagement. The Harmony Institute's *Impact Playbook* groups aggregate metrics around five common themes:

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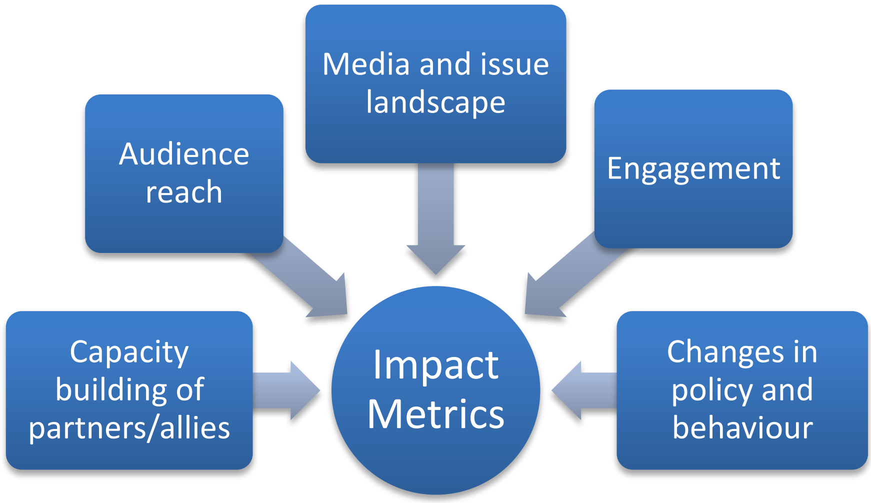
[66] SROI was started by started by Jed Emerson and the Roberts Enterprise Development Fund and developed by nef (New Economics Foundation)

[67] Search, J., *Beyond the Box Office: New Documentary Valuations* (2011) accessed at: http://britdoc.org/uploads/media_items/aninconvenienttruth-beyondtheboxoffice.original.pdf

[68] National Center for Media Engagement, *Measuring Public Media's Impact: Challenges and Opportunities* (2013) accessed at: http://www.lfagroup.com/wp/wp-content/uploads/2013/03/Measuring-Public-Medias-Impact-Final-3-13.pdf

Figure 3 - Types of social impact metrics [69]



Often impact is not solely about volume and reach but also about the degree of engagement and shifts in perception. This pushes producers beyond examining just how many people saw the film or followed it on social media but in also capturing how a film can facilitate changes in values and practices of an individual and society, which can be harder to measure than just social media metrics and involves a balance between qualitative and quantitative data.

Currently, social impact is measured primarily on a film-by-film basis but that is expected to soon change. The Harmony Institute recently released StoryPilot, an interactive web application for exploring how hundreds of films and shows lead to social change.[70] In addition, educators, non-profits and software companies are developing tools to gather essential statistics on films, including Sparkwise, ConText, and the Participant Index.[71, 72, 73] The impact-producing field is growing, along with research into new methodologies and tools.

The work that BRITDOC has done in recent years has culminated in their own Impact Field Guide & Toolkit, which consolidates what they have learnt and provides modules for use by filmmakers to enhance the impact of their work.[74] The case studies of *No Fire Zone* and *The Act of Killing* from BRITDOC illustrate how two recent British documentaries approached evaluating the social impact of their films.

3.4.1. *Case Study: No Fire Zone*

No Fire Zone was an investigative documentary that tells the story of the final 138 days of the 26-year Sri Lankan Civil War, when tens of thousands of civilians were killed after having gathered them into what the Government had promised would be a no fire zone, through eyewitness testimonies, personal stories, and video evidence.

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[69] Harmony Institute, *Impact Playbook: Best Practices for Understanding the Impact of Media* (2013) accessed at: http://harmony-institute.org/docs/HI_BAVC_Impact_Playbook.pdf
[70] http://www.storypilot.org/
[71] http://sparkwi.se/
[72] http://context.lis.illinois.edu/
[73] http://www.takepart.com/tpi
[74] BRITDOC, *The Impact Field Guide & Toolkit* (undated) accessed at: http://impactguide.org/index.php

4.4.1.1 Audience and social media metrics

- Five territories into which the television rights were sold (UK, Denmark, Finland, India and Sweden)
- 10 film festival commendations or prizes
- 82,000 unique visitors to documentary website
- 6,450 links to the documentary website
- 300 separate websites to which the trailer has been uploaded
- 8,008 twitter followers for the director Twitter.com/Callum_Macrae
- 5,650 twitter followers for the documentary Twitter.com/nofirezonemovie
- 1,888 followers of documentary Facebook page

4.4.1.2 Campaign steps and impacts

- Multiple screening 27 countries across 5 continents
- 19 screenings and debates attended by director, Callum Macrae
- Mass awareness: in India, Sri Lanka, Malaysia & Nepal by free streaming in these jurisdictions in response to censorship issues – 30,000 hits in the 2 days after free streaming went live
- Channel 4 developed a free app that allowed the film to be downloaded and provided access to additional content
- Over 150 major news stories and dozens of interviews in the week after the campaign launch in India in February 2013
- Defy the Ban: a response to Malaysian censorship actions
- Advocacy at the UN Human Rights Council (UNHRC): campaign launched in India and all 47 countries of the UNHRC lobbied
- Main opposition party in Tamil Nadu withdrew from the India governing coalition
- India supported the UNHRC resolution in March 2013
- Indian Prime Minister boycotted the Commonwealth Heads of Government Meeting (CHOGM) 2013 in response to pressure from Indian politicians after further revelations by the director in the build up to CHOGM.
- Canada and Mauritius also decide to boycott CHOGM
- Key tweets by David Cameron, UK Prime Minister & Erik Solheim, Chief Negotiator of the Sri Lankan Peace Process 2000-2005, ahead of CHOGM
- CHOGM in Sri Lanka in November 2013: David Cameron, the UK Prime Minister raised questions publicly on four occasions and visited the Tamil homelands, the first foreign leader since 1948
- Success in March 2014 as UNHRC sets up international inquiry into Sri Lankan war crimes by 23 votes for, 12 against and 12 abstentions

3.4.2. Case Study: The Act of Killing

The Act of Killing is a documentary film about the Indonesian killings of 1965–66, where an ostensibly anti-communist purge resulted in more than 500,000 people being killed. The film followed those responsible for the killings as they re-enacted the events of 1965-66, depicting their memories and feelings about what happened.

4.4.2.1 Audience and social media metrics

- 100 festivals in 57 countries
- 1,000 community screenings in 118 cities
- 21 countries in Europe, Asia, US and Latin America where documentary had cinema release, including Indonesia on 10 Dec 2012
- 21 countries in Europe, Asia, US & Latin America where TV rights were presold
- 29 awards and prizes including 5 Audience Awards, 4 Best Film Awards
- 1,321,665 views of online trailer
- 352,418 unique visits to documentary website
- 6,653 on email list
- 8,235 Facebook Likes
- 10,372 members signed up to Jagal's Facebook page (Indonesian version)
- 3,935 Twitter followers @TheActofKilling

4.4.2.2 Campaign steps and impacts

- Commercially distributed films in Indonesia are submitted to censors and can be banned, therefore early stages of the distribution campaign was based on a non-commercial basis.
- Autumn 2012: at the National Human Rights Commission invitation only screenings were held for:
    - editors and publishers of Indonesia's main news outlets
    - leading filmmakers
    - historians and writers
    - human rights advocates
    - survivor organisations
    - educators
- Attendees were encouraged to host closed screenings: DVDs were provided
- Special edition of *Tempo*, the premiere news magazine in Indonesia, was published (Oct 2012): 75 pages of killers' testimonies from across the country
- 50 screenings in 30 cities by leaders of Indonesian civil society on international Human Rights Day (Dec 2012)
- 30-600 attendees at these screenings: most by invitation but some in public; there were no incidents
- 600 new articles published on the atrocities in Indonesia (Feb 2013)
- 1,096 DVDs distributed to 118 cities in 29 of the 33 provinces (May-Aug 2013)
- Indonesian Independence Day (Aug 2013): 45 publicly announced screenings
- Film was geo-blocked for free download across the country on anniversary of the start of the 1965 atrocities (Sep 2013)
- DVD release and TV broadcasts (autumn 2013)
- Result: with a carefully staged distribution of the film within Indonesia, the distributors were able to ensure the film was seen by a large number of key members of civic society and opinion-formers within controlled environments, and generated word-of-mouth and momentum, which ultimately led to public screenings across Indonesia without the film being banned or censored.

3.5. Quantitative Analysis

As part of the quantitative analysis of the cultural and audience value of film, we developed a revealed preference model that estimates the consumer surplus generated by film viewing in the UK. In this sub-section, we also update an econometric model developed by Oxford Economics for estimating the cultural premium associated with UK films and investigate how economists and filmmakers attempt to quantify the positive externalities in terms of social impact, which many documentaries often have.

3.5.1. Consumer Surplus

To estimate the consumer surplus associated with film, we have adopted a revealed preference approach. Under this approach, the value that consumers place on a particular commodity is 'revealed' by their behaviour in related market transactions rather than direct measurement of their demand.

As noted elsewhere in this report, simply observing the ticket prices or other market prices that consumers are subject to when consuming film content provides only limited information about the value that consumers place on film, except that that value, in monetary terms, exceeds the market price.

For film, we believe that UK consumers' demand for broadband Internet provides a useful revealed preference proxy for estimating the consumer surplus generated by film. In recent years, there has been a significant increase in the broadband speeds paid for by UK households – i.e. the technological capacity to download more megabytes (MB) of data in a given time period. While broadband Internet service is used by households for a variety of applications, the burgeoning demand for faster broadband service has, in large part, been driven by consumers' increasing use of the Internet for consumption of video content, with film content being responsible for a large part of this.[75]

In effect, our revealed preference approach starts with data on the increase in the consumer surplus generated by broadband Internet use during a given time period (2006-2010) and then attempts to isolate the portion of that increase in consumer surplus which can be attributed to film consumption over the Internet.

<u>Broadband consumer surplus</u>

According to research conducted by Drs. Greenstein and McDevitt, the consumer surplus generated by broadband Internet service in the UK increased from £7.6 billion in 2006 to £31.3 billion in 2010.[76] In other words, between 2010 and 2006, the consumer surplus generated by broadband in the UK increased by £23.7 billion.

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[75] Cisco, Cisco Visual Networking Index (VNI) Global IP Traffic Forecast Update: 2010-2015 (2011) p. 16-17.

[76] Greenstein, S. and McDevitt, R., "Measuring the Broadband Bonus in Thirty OECD Countries," *OECD Digital Economy Papers*, no. 197 (2012) accessed at http://www.oecd-ilibrary.org/science-and-technology/measuring-the-broadband-bonus-in-thirty-oecd-countries_5k9bcwkg3hwf-en, p. 13.All USD amounts converted to sterling using purchasing power parity exchange rates published by the OECD. We used the time period of 2006 to 2010 because this was the widest time period available in the study. This time period does correspond precisely the first use of broadband for film or video consumption. However, for our analysis we concentrate on the change in consumer surplus and how it was associated with the change in broadband use during the period.

Adoption vs. speed

Of course, the change in the overall level of consumer surplus generated by broadband includes not only the effects from faster download speeds but also increased adoption of broadband. As households with broadband experience faster download speeds, their consumer surplus will increase. However, as more households subscribe to broadband, the aggregate consumer surplus generated by broadband within the UK will also increase.

To remove the effects on total consumer surplus from adoption, we determined that broadband generated, on average, consumer surplus of £737 per subscribing household in the UK in 2006. We applied this amount to the estimated number of subscribing households in 2010 and then deducted this amount from the total increase in consumer surplus. Based on this approach, we estimate that broadband adoption accounted for £6 billion of the £23.7 billion increase in consumer surplus in the UK between 2006 and 2010. This implied that the balance in the increase in consumer surplus (£17.7 billion) could be attributed to faster download speed. When this total consumer surplus amount was distributed across the 18.5 million broadband households in the UK in 2010, it implied that each broadband household experienced an increase in consumer surplus of £958 on account of the increase in broadband speeds between 2006 and 2010.

Contribution of video and peer-to-peer

Consumer demand for faster broadband would have been driven by a number of different Internet applications. So for the next step in our revealed preference approach, we isolated the portion of the increase in consumer surplus due to faster broadband speeds which could be attributed to video and peer-to-peer (P2P) applications.

Using statistics on Internet traffic published by Cisco and separate statistics on the global number of fixed broadband users, we determined that the average annual Internet traffic per user increased from 96.3 GB (gigabytes) in 2006 to 248.3 GB in 2010. We also estimated that the average Internet traffic associated with video and P2P applications increased from 69 GB per user in 2006 to 196 GB per user in 2010.

The overall increase in average Internet traffic was, therefore, 152 GB between 2006 and 2010. Of this overall increase, traffic associated with video and P2P applications accounted for 127.3 GB, or 84%. From this we concluded that the use of video and P2P applications accounted for 84% of the increase in consumer surplus associated with faster broadband speeds, or approximately £803 per household between 2006 and 2010 (84% × £958 ≈ £803).

Film content's share of video and P2P traffic

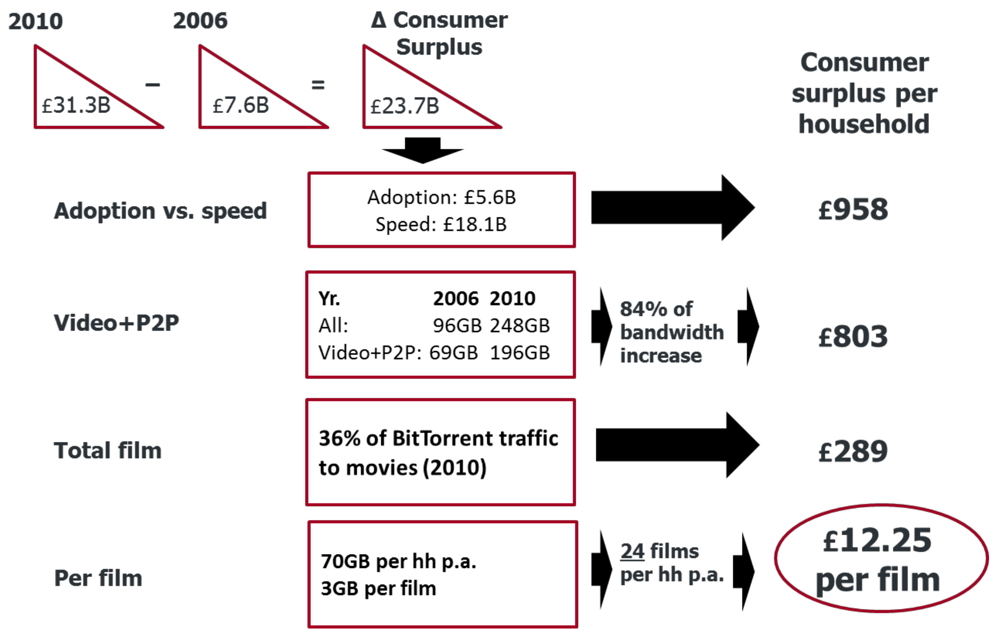
Since the Cisco statistics did not breakout film content from other video and P2P content, we also needed some proxy for isolating the increase in consumer surplus that could be reasonably attributed to film content. According to a study conducted by Envisional, film content accounted for 36% of BitTorrent traffic in 2010.[77] We took this as a reasonable proxy and determined that of the overall increase in consumer surplus associated with video and P2P traffic, £289 could be attributed to film content, per se, as opposed to other forms of video content, including television and user-generated content (36% × £803 = £289).

[77] Envisional, *Technical report: An Estimate of Infringing Use of the Internet* (2011) accessed at http://documents.envisional.com/docs/Envisional-Internet_Usage-Jan2011.pdf.

Consumer surplus per film

Finally, to express the annualised estimate of the consumer surplus associated with film (£289) on a per film basis, we used the Cisco traffic data and the fact that the file-size for a 2-hour feature is 2GB to 4GB. As noted above, an estimated 36% of total video and P2P Internet traffic in 2010 was attributed to film content. This translated into 70.8 GB per broadband Internet user (36% × 196.6GB = 70.8GB) or an average of 24 films per user (70.8GB ÷ 3GB ≈ 24). Dividing the total consumer surplus of £289 by 24 films yields a consumer surplus per film of £12.25.

Figure 4 - Estimation of consumer surplus per film (based on revealed preference model)



Source: Olsberg•SPI/Nordicity analysis based on data from Greenstein and Ryan McDevitt (2012), OECD, Cisco, Envisional, Ofcom and ONS.

In Quantifying and Valuing the Wellbeing Impacts of Culture and Sport, Fujiwara, Kudrna and Dolan also derived estimates of the consumer surplus generated by cinema attendance. In that study, prepared for the DCMS in 2014, the authors used a subjective well-being model and found that cinema attendance generated a consumer surplus of £4.02 per film.[78] After adjusting this estimate by consumer price inflation, we find that it implies a consumer surplus per film of £4.58 in 2013.

Although the consumer surplus estimate of £4.58 derived by Fujiwara et al. is lower than the figure of £12.25 derived under our revealed preference approach, the two estimates are, in fact consistent. When the average price of a cinema ticket in the UK, £6.55, is added to the Fujiwara et al. estimate it brings the estimate of the total social welfare generated by a film to £11.13. When one considers that the incremental consumer cost of viewing a film online is very low and, in many cases, is zero, it is clear that the consumer surplus of £12.25 is very close to the estimate of total social welfare. In that regard, the two estimates - £12.25 and £11.13 – are consistent.

[78] Quantifying and Valuing the Wellbeing Impacts of Culture and Sport, p. 27.

By combining the estimates of consumer surplus from both Fujiwara et al. and our own revealed preference modelling with statistics on film viewing on different platforms, we derived estimates of the total consumer surplus generated by the viewing of UK-made films in the UK. The results summarised in Table 4 indicate that the viewing of UK-made film content in the UK generated £9.9 billion in consumer surplus in 2013. The majority of this consumer surplus originated from the viewing of UK-made films on broadband television. Over 770 million views of UK-made films generated nearly £6.5 billion in consumer surplus.

Table 4 - Estimate of consumer surplus for UK-made films viewed in the UK, 2013

Viewing platform	Total views (m)	Total views to UK films (m)	Consumer surplus per film view (£)	Total consumer surplus (£m)
Cinema	165.5	39.7	4.58†	181.7
Television	3,400.0	771.8	8.41††	6,492.8
DVD/Blu-ray	171.6	41.2	8.41††	346.2
VoD	103.2	23.3	8.41††	196.2
Online	988.4	217.5	12.25†††	2,663.8
Total	**4,828.7**	**1,093.5**		**9,880.8**

Source: Olsberg-SPI/Nordicity analysis based on data from BFI, Ofcom, IAB, Attentional; and Fujiwara, Kudrna and Dolan (2014) Quantifying and Valuing the Wellbeing Impacts of Culture and Sport, report prepared for DCMS.
† Based on data from Fujiwara et al. (2014)
† † Average of Fujiwara et al. 2014 and Olsberg-SPI/Nordicity estimate of £12.25.
† † † Based on Olsberg-SPI/Nordicity estimate.

3.6. Overall Impacts

British film has a range of clear, demonstrable impacts for the audience, which both existing research and our new work have helped to clarify. These include the role which film can take in helping society to understand itself, and projecting British society abroad. Previous research has demonstrated this with reference to ethnic minorities and the gay community, but we can also see this in recent years in discussion of our past treatment of minorities, through films such as *Belle*.

It is, furthermore, clear that the British public highly values film as an art form. The work previously undertaken through Opening Our Eyes quantifies this, while the significant audience response to experiences like Secret Cinema also helps to underline the value of the cinematic experience to the audience. Bringing this back to our framework, it is clear that the size of the audience for British film is large, diverse, and international.

This is underlined by our research into the consumer surplus for film, which demonstrates the large value which the public, indirectly, places on the acquisition of cinematic content. The public also values British film at a premium compared to international films, underlining the increased cultural value which this has.

Internationally, the impacts are harder to discern, but still clearly visible. It is clear from the British Council's research that British film is particularly valued as a way of describing Britain, and our analysis of the audience response tends to underline this by reference to British independent productions. Here, it is clear that a broad range of overtly British stories have earned relatively well in the crowded, difficult, British market. Furthermore, our analysis suggests that the vast majority of these are very much contemporary in outlook, rather than falling into the 'costume drama' segment within which British film is often, unfairly, felt to exist.

In all, the wide range of research makes it clear that the British film sector makes both broad and deep audience and cultural contributions. It provides a vast volume of content to a range of different audiences, and the data show that the British public strongly responds to this. The British film industry is also highly regarded by the public in a range of other countries, though it is clear that this is not always even, and that there are contradictions and misunderstandings to be found. Nonetheless, the data which are available show a range of positive contributions from these exports, even on occasions where the content is not recognised as British.

4. THE HIGH-END TV SECTOR

4.1. Introduction

While the HETV Tax Relief (HETR) is available to any production spending more than £1 million per broadcast hour, to date the focus has been drama production, together with one nature documentary. Though British drama production has a great history, and has had worldwide impacts over the years, the focus of this research will be the newly-defined HETV segment. 'Television drama' is used where data have not allowed for a specific focus on HETV, but for the most part we have tried to determine specific contributions.

4.2. Literature Review

Compared to the film sector, HETV is something of a new field. While television drama (and occasionally documentary) of the kind which HETV is a sub-sector have been around for a long time, it was not until the 1990s that the first HETV dramas were screened. The pioneers in this field – such as *The Sopranos* and *The West Wing* – were, broadly speaking, American in origin, and there is something of a gap between the emergence of these drama series and a response in the UK production community.

British television drama took some years after the initial introduction of such dramas to the US to catch up in terms of storytelling and production values, leaving only a small range of productions which fit the 'HETV' definition. This is despite the UK's strong TV production heritage, and leads to significant questions for the researcher about how to focus on the sector as defined. Whereas we will predominantly focus on HETV – as defined for the HETR – we also look at broader television drama where this is of interest to the question of cultural and audience contributions.

4.2.1. Studying British Television

The disconnect between the aims of this document and the existing base of literature, in many ways, goes even further than this. As Durham University's Lawrence Black noted in a 2005 article that "studies of television were prone to 'privileging questions of policy and organisation' rather than obtaining a sense of television as a medium [or] assessing its cultural content and reception by viewers…"[79]

Despite this, research to date has clearly highlighted the unique position which television occupies in modern life, given its near total reach. Morgan and Signorielli noted in 1990 "that it is television's ubiquity, its persistence, its redundancy and its pervasiveness at the heart of contemporary culture which secures its uniquely, and plausibly uniquely powerful, position as the definer of cultural reality, particularly for those who watch it intensely."[80] They further note that this ubiquity makes it incredibly hard to determine the specific cultural and audience impacts of television, as it blends into the background akin to "personal experience or information, representations and images from other media…"[81]

While the study of television and its impacts therefore remains somewhat in its infancy – at least with regard to the entire medium rather than its specific impacts – it is nonetheless clear that British television has a unique global place. As Bignell noted in 2008, "Britain is relatively

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[79] Black, L. 'Whose Finger on the Button? British Television and the Politics of Cultural Control', in *Historical Journal of Film and Television,* vol. 25, no. 4 (October 2005) p. 549; Black quotes Corner, J., *Critical Ideas in Television Studies* (2009)

[80] Silverstone, R., *Television and Everyday Life* (1994) p.139; quoting Morgan and Signorielli (1990)

[81] *ibid*, p. 139

unusual in global terms because its major broadcasting organisations mainly show programmes made in their own country."[82] He notes that while the US television market is by far the largest, the English language helps British TV exports, though the primary market for British programmes remains domestic.

4.2.2. British Television in the Home

Historically, television studies have focussed on the audience as something of an abstract entity, deriving textual analysis methods from traditional cultural models, and analysing TV programmes using this form. This led to a situation where the audience was seen either as a "mass", broadly undifferentiated from one another, or as being completely atomised. Silverstone states in his 1994 Television and Everyday Life that "the audience has become increasingly problematic, not just for academic researchers, for whom it has tended to become de-reified to the point of invisibility, but also for commercial concerns, for whom it must be re-reified for them to maximise their share of it."[83]

This changed with David Morley's seminal 1980 book, The 'Nationwide' Audience, which studied the audience for the BBC programme *Nationwide*. Though much criticised since, as research methods have evolved, this study clearly showed for the first time that the audience for a programme interprets the content differently depending on their own pre-existing knowledge and prejudices. As Morley notes, "individual readings will be framed by shared cultural formations and practices pre-existent to the individual…"[84]

The fact that the audience expectations for a programme cannot be accurately predicted ahead of time is further underlined by Buckingham, whose 1987 study of *Eastenders* clearly highlighted that what the producers had intended with regard to the audience did not, in fact, come to pass. Whereas the show had aimed its younger characters at the youth audience, in actuality it was the adult characters whom the audience identified most with. Buckingham notes that this audience "refused to identify with the young characters and instead located their interest in the slightly illicit behaviours of the adults." [85]

Later studies moved to identify the audience as less of a single individual than a group, with audience preference mapping onto that of the dominant – often male – family member. Through this, the social context in which television viewing was traditionally undertaken is shown, with Morley's 1986 Family Television noting "the domestic viewing context itself – as the framework within which 'readings' of programs are (ordinarily) made…"[86] As we note elsewhere, this is, increasingly, changing as online streaming and multiple screens break up this TV-centric household model, though to date no studies have clearly described the impact of this.

4.2.3. British Television Drama in the US

Bignell, above, notes that British TV is very successful in generating international markets, including in the US where a range of British drama products have traditionally played very well. Though the earliest successful British programmes in the country were spy stories such

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[82] Bignell, J. An Introduction to Television Studies (2008) p. 65
[83] Television and Everyday Life, p. 132
[84] Turner, G., British Cultural Studies, An Introduction (1991) p. 132; quoting Morley, D. The 'Nationwide' Audience (1980)
[85] ibid, p. 152; quoting Buckingham, D. Public Secrets: EastEnders and Its Audience (1987)
[86] British Cultural Studies p. 144; quoting Morley, D., Family Television: Cultural Power and Domestic Leisure (1986)

as *The Avengers*, from 1969 British quality drama carved a specific niche in the American television market, beginning with the *Forsyte Saga*. Though this was originally rejected by the major networks for being both too British and being filmed in black and white, when it was finally picked up it had a major cultural impact. As Miller, in *Something Completely Different* highlights, "Whereas daytime dramas… seemed only to serve the fantasies of everyday housewives, *The Forsyte Saga* supplemented romance-centred storylines with Galsworthy's 'realistic' forays into the male-defined worlds of business and politics. As a result, the *Saga* acquired a cultural significance, coded as 'literacy', to its critics that they transmitted to their readers in turn."[87]

As a result of this original sale, the Public Broadcasting Service (PBS) – supported by Mobil and driven by the demands of the Nixon administration – began its Masterpiece Theatre series showing European (largely British) drama. The major networks attempted to ape this success, but CBS's broadcasting of the BBC's *Six Wives of Henry VIII* failed to generate sufficient audience share. Miller notes that this was taken to indicate "that a gap still existed between the two systems' constructions of audience."[88]

Nonetheless, PBS continued to pick up British dramas through the Masterpiece Theatre brand, achieving sufficient audience and thought share to make this successful. As Miller notes, one curious impact of this was the additional introductory pieces from commentators, especially Alistair Cooke, which were required to fill in the 5-10 minute schedule gap caused by differences in the UK shows' formats to the US' networks slots. This led to the shows being framed, explaining cultural significances to the US audience, and helping to increase both cultural and audience impacts.

Masterpiece Theatre remains one of PBS's most successful regular slots, and is the destination for many of the British productions described later in this report.

4.3. Review of Existing Data

4.3.1. Domestic Contributions

5.3.1.1 Ofcom Data

Ofcom's 2014 Communications Market Report clearly demonstrates the particular position of British television drama within the UK's media market. The report notes that broadcaster spend, across the five main PSBs and BBC portfolio channels on first-run originated drama and soaps in 2013 was £565 million – though this was lower than 2008, it still represents the largest single element of broadcasting spend, and some 23.4% of the total.[89]

These spending priorities are aligned with other data from the report which show that UK TV Drama is one of the two most popular genres which people access on VoD services, lower only than film.[90] A claimed use survey shows that 53% of people have accessed UK Drama through TV VoD, and 49% online, compared to 39% TV/32% online for US TV Drama, and

[87] Miller, J.S., Something Completely Different: British Television and American Culture (2000) p. 80
[88] *ibid*, p. 96
[89] Ofcom, The Communications Market Report (August 2014) p.169
[90] Whereas VoD represents a sub-sector of television viewing, it offers a very precise perspective on viewing habits, and is therefore used here as a proxy for all viewing

22% TV/20% online for soap operas.[91] The report notes that 'catch[ing] up on a missed programme or film' is the most common use for such VoD services.

While the data do not explicitly allow for the evaluation of HETV's impact domestically, nonetheless they hint at what it is likely to have been. This is underlined with the data on the top 10 programmes by average audience for 2013 – of the three non-live events, *Doctor Who* and *Downton Abbey* both feature from the HETV sector. Only *Mrs Brown's Boys* makes the list as a non-live, non-HETV programme.[92]

As a result of these data, it seems safe to conclude that HETV has already generated a significant place within the cultural oeuvre in the UK. Nonetheless, the data from Ofcom are not universally positive – whereas spend has increased, audience surveys suggest delivery requires some improvements. The 2013 PSB Report's audience impact work places the satisfaction with Public Broadcasters' delivery of "high quality soaps or dramas made in the UK" at only 47%.[93] While qualitative data in the report suggest the audience has seen an improvement in this area in recent years – coinciding with the emergence of UK HETV – more primary research is required to determine the nuances behind these data.

5.3.1.2 Other Research

The contention that HETV (or its direct antecedents) forms a distinct element of the TV Drama market is one which is supported by Bennett's 2009 Culture, Class, Distinction. This text argues that programmes such as *Spooks*, *The Sopranos*, and *The West Wing* form a distinct 'new drama' category, separate from 'popular drama' shows such as *The Bill* and *Midsomer Murders*. Shows within this category tend towards a distinct televisual aesthetic, which plays with the properties of television, and continues story arcs beyond the immediate present of the broadcast.

In doing so, the 'new drama' becomes far more of interest to groups such as professionals, the university educated, and those in the middle of the age range.[94] Bennett concludes that whereas "television is not an area where institutional capital (yet) operates… it is probably also important that the field of television has been changing at a very rapid rate."[95]

The idea that cultural capital – the value of culture to the social relationships generated by an individual – can be created through television viewing is very much a novelty, but yet it is one which can clearly be seen to have coincided with the advent of HETV. This emergence of the 'Box Set' as a cultural element within the middle classes, in particular, is one which can certainly be seen socially as a trend.[96] However, the determination of a degree of change is one which will, regrettably, require an increased distance from the point of emergence to accurately gauge. Nonetheless, some idea of the cultural capital – both domestically and internationally – can be seen in the case study, *The Day of the Doctor*, below.

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[91] Communications Market Report (2014), p. 149
[92] *ibid*, p. 156
[93] Ofcom, PSB Report 2013 – Information Pack B – PSB Audience Impact (August 2013) p. 22
[94] Culture, Class, Distinction (2009), p. 146
[95] *ibid*, p. 151
[96] This is shown through anecdotal evidence, for example the role of the 'Box Set' in adverts from Sky, starring Idris Elba, and as part of a stereotypically middle-class household in 'Harry and Paul'

4.3.2. Case Study: The Day of the Doctor

The Day of the Doctor – the fiftieth anniversary show of the BBC drama *Doctor Who* – is notable for its enormous, worldwide audience impact. Shown in 2013, it represented at the time the largest simulcast of a television programme in history, screening across television channels and cinemas across 94 countries worldwide.

The episode achieved significant viewership worldwide, including 10.18 million viewers in the UK, 2.4 million in the US, 590,000 in Australia (with the 19:30 pm repeat gaining a further 1.36 million), and 1.1 million in Canada (with 600,000 watching the repeat.) On Twitter, SecondSync data revealed the programme generated just shy of 500,000 tweets during its broadcast, peaking at 12,939 tweets per minute at the start.[97]

In cinemas, the programme was shown on over 1,500 screens across the world – including in countries where it was available free to air on TV – with more than half a million tickets sold for 3D screenings. Overall, cinema screenings grossed $10.2 million worldwide, including $4.8 million in the US alone, where the programme was shown on 660 screens across the country.[98] As a result of both this and the television screening, the programme was latterly awarded a Guinness World Record for the largest ever simulcast of a TV drama.[99]

The various data underline both the cultural and audience contributions of *The Day of the Doctor*. As a shared cultural event, the programme is more readily comparable with a global sporting event than a science fiction programme – the experience of large audiences viewing it at awkward times (given the simulcast) underlines the particular value they placed on sharing the experience.

Considering the event domestically, it is clear that significant audience value was developed in the UK by this programme. This is demonstrated by the enormous viewership which the show gained domestically, and through the significant social media interaction of the British public. While the show is therefore notable for its large international impacts – particularly given the inconvenient screening time in many time zones – the domestic impacts were, in many ways, much larger.

4.3.3. International Impacts

5.3.3.1 As Others See Us

In addition to the Film sector, the British Council's 2014 report As Others See Us also describes the impact of British television in the five countries it studies – the US, Germany, Brazil, China, and India. Whereas film has a reasonably strong showing in these countries, television comes joint last in a ranking of the UK's arts and cultural assets, with only 10% considering that TV makes the UK attractive to them.[100]

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[97] *The Day of the Doctor – press reviews*, accessed at: http://www.doctorwhonews.net/2013/11/day-of-doctor-press-review.html

[98] Cunningham, T., *'Doctor Who' Anniversary Theatrical Run Scores $10.2M at Worldwide Box Office*, accessed at: http://www.thewrap.com/dr-anniversary-special-averages-hunger-games-catching-fire-box-office/ and Setchfield, N., *The Day Of The Doctor Triumphs At US Box Office*, accessed at: http://www.gamesradar.com/the-day-of-the-doctor-triumphs-at-us-box-office/

[99] Guenigault, M., *Guinness World Record for the Day of the Doctor*, accessed at: http://www.doctorwho.tv/whats-new/article/guinness-world-record-for-the-day-of-the-doctor

[100] *As Others See Us*, p. 15; the Ipsos MORI survey on which the report is based was conducted in Brazil, China, Germany, India, India, the UK and the USA December 2013-January 2014

Looking below the headline data, there are some specific countries where the sector performs better. In India, the survey shows that 13% feel that British television makes the country particularly attractive, while for both Brazil and the US, 12% feel the same way. Surprisingly given the success of programmes like *Sherlock* and *Downton Abbey* in the Chinese market, only 8% of Chinese respondents felt that the UK's television made the country attractive to them.[101]

This conclusion is, however, potentially challenged by consultation evidence which highlights the esteem with which British television is seen in continental Europe. Consultees particularly noted the value of British crime drama in locations like Germany, with *Endeavour* and *Morse* highlighted.

5.3.3.2 UK HETV in the US Market

In recent years, British television programmes – in particular *Downton Abbey*, *Doctor Who*, and *Sherlock* (see case study, below) – have taken an increasing audience share in the US marketplace. As part of this trend, the US has increasingly taken UK television drama which sits outside of the traditional costume drama segment, with shows such as *Broadchurch* and *Luther* also finding particular audiences.

Downton Abbey has been a particular success, being at the forefront of what US commentators have called a 'golden age' of British television. The premiere episode of series four – the most recent shown – received 10.2 million viewers on PBS in the US, becoming the highest-rated drama premiere in the channel's history.[102] This audience impact has been replicated culturally, with the programme receiving 27 nominations for Primetime Emmy awards over its first two series, the highest any non-US programme has ever achieved.[103] The particular cultural impact of the show has also been seen in the US Congress, where Aaron Schock – an Illinois Representative – decorated his office to match the show's "Red Room".[104]

5.3.3.3 UK HETV in China

Downton Abbey has also had a major impact within the Chinese television market. This was exemplified by requests to David Cameron on Sina Weibo (the Chinese equivalent of Twitter) for Parliament to pass a law mandating that 72 episodes be produced a year.[105] The cultural impact of the lifestyle seen in *Downton Abbey* has led to the emergence of a unique tourist trade from the Chinese super-wealthy, who are reported to have spent up to £100,000 per week on emulating the show during UK holidays. These have included game shooting trips, and the hiring of costumes, butlers, and stately homes.[106]

In addition to *Downton Abbey*, *Sherlock* has been the other big audience success for British HETV in China. Though we explore this in more detail in the case study, below, it is worth noting that the same message on Weibo requesting a law for *Downton Abbey* asked for much the same thing for *Sherlock*!

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[101] *ibid*, unpublished data kindly shared by the British Council and analysed by SPI
[102] Ensor, J, 'How America fell in love with British TV' in *The Telegraph* (19th July, 2014)
[103] McCormack, K., 'Back for more! Hugh Bonneville and Michelle Dockery lead the way as Downton Abbey gets SIXTEEN nominations for this year's Emmys' in *The Daily Mail* (19th July, 2012)
[104] 'At play in Peoria', in *The Economist* (21st May, 2015)
[105] Zhu W., 'David Cameron joins Weibo', in *China Dispatch* (5th December, 2013)
[106] Dowling, K., 'Downton life draws China's big guns', in *The Sunday Times* (10th August, 2014)

5.3.3.4 Screen Tourism

The appeal of *Downton Abbey* is clearly demonstrated through SPI's recent work, Quantifying Film and Television Tourism in England. This surveyed visitors to the village of Bampton in Oxfordshire – one of the filming locations for the programme – and found that for 87.3% of international tourists the series was the primary motivator for their visit.[107] Of the total number of tourists surveyed, including domestic visitors, 67.2% were there at least in part because of the series, representing the highest proportion of overall screen visitors of all locations surveyed. Similar to the results for *Harry Potter*, the largest number of overseas tourists came from the US and Australia, with Germany and Canada coming joint third.[108]

The data from the study underline the particular attraction certain well-loved television series can have even many decades after release. *Brideshead Revisited* – first broadcast in 1981 – is a good example of this, with 67.8% of those motivated by film or television programmes to visit Castle Howard citing it, a far higher proportion than more modern productions that had filmed at the location.[109] Productions like 1995's *Pride and Prejudice* continuing to exert a significant screen tourist pull at the key locations they were shot at.[110]

Overall, the study demonstrates both the depth and breadth of audience impacts which television productions can have internationally, motivating individuals to visit the sites shown on screen. The case of *Downton Abbey* in Bampton demonstrates this breadth, with the vast majority of international tourists visiting as a result of the show. From the perspective of this study, though, *Brideshead Revisited* is perhaps the more interesting example, underlining the depth of impact which British television drama can have on the international public, even many decades after its release.

4.3.4. Case Study: Sherlock

Though having had a relatively short run of programmes to date, with only nine episodes shown over four years, *Sherlock* has nonetheless been a cultural phenomenon. The show has had major audience impacts across the world, including in the US, China, Japan, and South Korea. This has led to a range of cultural impacts, including:

- Fan fiction in China, much of which speculates on whether Holmes and Watson are in a relationship;
- Comic books in Japan; and,
- K-pop tributes in Korea.[111]

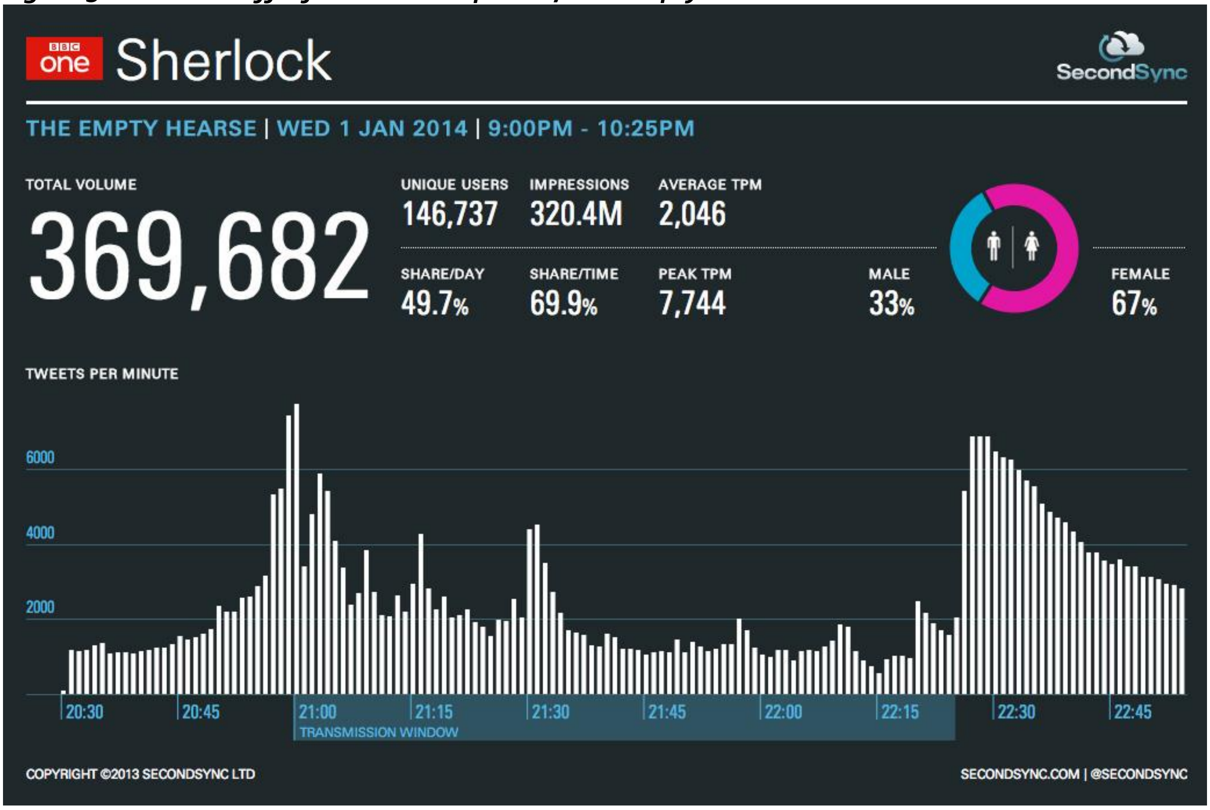
The success in the Chinese market has been particularly marked, with 'Curly Fu' and 'Peanut' (the Chinese nicknames for Benedict Cumberbatch and Martin Freeman) having huge followings. Aside from the emergence of swathes of fan fiction and fan sites, consultees have advised that there is a Chinese blogger who has visited each shooting site for the show, generating a large social network following of their own in the process. The success of the show in China led the BBC and Hartswood Films to provide their own, officially dubbed

[107] Quantifying Film and TV Tourism (2015), p. 59
[108] *ibid*, p. 60
[109] *ibid*, p. 63; modern productions include the 2008 film of the same name
[110] *ibid*, p. 72
[111] Jones, R., 'Sherlock facts: 21 things you didn't know' in *The Daily Telegraph* (2nd January, 2014)

version of the programme on Youku, a Chinese VoD service – this was seen as the only way to ensure that the programme would not be illegally shared.[112]

In the US, the programme achieved 4 million viewers for the opening episode of the most recent series, though it is worthy of note that this screened on PBS 18 days after its UK premiere.[113] Given this gap, it is likely that actual viewership – including from illegal file sharing – was much larger.

Figure 5 - Twitter traffic for Sherlock episode, The Empty Hearse



Source: SecondSync

Within the UK, the cultural and audience impacts of the show are demonstrated by SecondSync's analysis of the Twitter traffic surrounding the first episode. This showed that 369,682 tweets were sent about the programme during the course of the show and an hour either side, peaking at 7,744 per minute – at the time, this was the largest social media engagement for any UK TV show.[114] As the analysts noted, this is a volume of tweets normally more associated with football matches, underlining the particular audience impacts of the show.

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[112] French, P., 'Sherlock Holmes and the curious case of several million Chinese fans' in *LA Review of Books – China Blog*, accessed at http://blog.lareviewofbooks.org/chinablog/sherlock-holmes-curious-case-several-million-chinese-fans/

[113] de Moraes, L., 'Benedict Cumberbatch Sentimental About 'Sherlock' But Mum About More Seasons After Season 3 Premiere Scores In Ratings', in *Dateline* (20th January, 2014), accessed at http://deadline.com/2014/01/tca-sherlock-move-pays-ratings-dividends-to-pbs-4-million-tune-in-668164/

[114] *Sherlock Generates the Biggest Tweet Total for a Single Episode of a Drama Series*, accessed at http://secondsync.tumblr.com/post/72092144868/sherlock-generates-the-biggest-tweet-total-for-a

Despite the large volume of twitter traffic, it is instructive to note that the number of tweets pales in comparison to the reported number of viewers in the UK, given as 12.72 million.[115] We take this to indicate that, in spite of the press coverage which tends to be given to social media and the more engaged audience which it represents, the majority of the audience for even major productions remain in the passive, traditional mould. Nonetheless, this should not detract from the significant level of engagement which the Twitter audience demonstrates, and the degree of value which their response shows that they place on the production.

Taken as a whole, this demonstrates the significant cultural value which *Sherlock* has generated domestically and overseas. Despite its relatively low number of episodes, the show has had an enormous cultural impact, generating significant interest in the UK across the world, and creating a large range of spin-off impacts.

4.4. Audience Response

4.4.1. Methodology

Analysis of television programmes using the Audience Response methodology was undertaken on a similar basis to that used for Film. The sample taken was of all productions which were in receipt of certification at the time of the study, with the exception of programmes which had not yet aired.

As would be expected, viewing figures were used in lieu of Box Office to understand the audience size. Due to data availability, these focussed on the first programme in any run – ideally, each episode would have been separately considered, but sources could not be found to allow for this. Similarly, though we wished to consider +7 audience data – including catch-up and timeshifted viewing – this could not be found for all productions, so overnight numbers were used in all cases for the sake of consistency.

Determining the size of broadcasts in other markets proved to be a major challenge. Many of the programmes supported by the HETR are broadcast in the US on PBS; save for exceptional numbers, including the first episode of the most recent season of *Downton Abbey*, PBS does not publish viewing figures. As a result of this, we have looked to use social media data, generated from review sites, to understand the cultural impact of programming in the US.

The approach taken to consider wider impacts in the HETV sector was similar to that used for film, though does not include Rotten Tomatoes, as this site doesn't cover television. Analysis of the 'Britishness' of content was, similarly to film, conducted by way of internal discussion by the consultants. This was conducted across the entirety of the sample, given its more manageable size.

4.4.2. Results

5.4.2.1 Overview and Leading Programmes

The sample used for this section of the analysis included 46 separate productions which had been certified through the cultural test for HETV. At the time of writing, the vast majority of these had been screened, though this was not universally the case. For the purposes of our analysis, though, the productions which had not been screened were included, as many of them – such as *Fungus the Bogeyman* – had existing cultural ties of interest.

[115] BARB Top 30 data, accessed at: http://www.barb.co.uk/whats-new/weekly-top-30?

By a combination of the metrics used, *Game of Thrones* is comfortably the UK HETV programme with the highest audience and critical ratings for any programme certified in 2013/14. The series also has among the largest viewerships for any programme, though this does not necessarily translate into audience figures, as both in the US and UK the programme is on pay TV, and a significant volume of viewing is also conducted through illegal streaming.

The largest single UK programme on US television by audience figures was *Downton Abbey*, which achieved 10.2 million viewers for the first episode of its most recent series. This correlates well with the cultural impacts noted earlier, though we note that the critical ratings the show has achieved in the US are somewhat below the audience reviews.

Of the certified programmes studied, only one other gained more than 10 million viewers in the US, the UK set episodes of the US-made and located Sherlock Holmes series, *Elementary*; these UK-set episodes also received relatively high audience and critical ratings, averaging 8.0 in both cases.

Table 5 - Top 10 HETV programmes by Audience Rating

Rank	*Title*	*Rating*
1	*Game of Thrones (Season 4)*	9.35
2	*A Poet in New York*	8.80
3	*24 (most recent season): Live Another Day*	8.70
4	*The Lost Honour of Christopher Jefferies.*	8.50
5	*David Attenborough's Natural History Museum Alive*	8.30
6	*The Honourable Woman*	8.25
7	*Agatha Christie's Poirot V*	8.20
8	*Da Vinci's Demons (Season 2)*	8.20
9	*Downton Abbey (Season 4)*	8.05
10	*The Escape Artist*	8.05

Source: Olsberg•SPI/Nordicity

In many ways, the pattern seen here mirrors the audience response to film relatively closely, including the addition of a natural history programme in the 10 highest rated releases. The audience for HETV, it appears, appreciates a range of US led and smaller British productions, set in a range of locations, and across a variety of genres. It is noticeable, though, that there are a greater number of contemporary programmes in this list than might – stereotypically – be expected.

5.4.2.2 Audience Value

Curiously, despite its relatively low audience numbers, *Dylan Thomas: A Poet in New York* was the second highest-rated show by public reviews across the sample. This is possibly reflective of the broader cultural celebrations around the centenary of the poet's birth, underlining how television, like film, can tie into the wider cultural trends of a country or time. Similarly, it may be read as showing a depth – as opposed to a breadth – of audience engagement, though on this occasion it did not prove possible to tell.

In a similar vein to film, the impact of natural history documentaries on the audience can also be clearly seen, in this case through *David Attenborough's Natural History Museum Alive* show. Though this only gained 600,000 viewers – likely a consequence of being on pay TV – it is the

5th highest show by audience rating, underlining the ongoing interest of the British public in natural history.

Longer-term cultural trends are also very clearly visible through the data for HETV, as a range of programmes like *Agatha Christie's Poirot* and *Endeavour* gather both significant audiences and good critical and viewer ratings. It is notable that both of these shows are either spin-offs of long running shows or long running shows in their own right, but yet they continue to generate strong audience impacts, underlining their particular role in the cultural conversation in Britain. Indeed, *Poirot's* audience rating of 8.2 from viewers averages out higher than the ostensibly more popular *Downton Abbey*.

Table 6 - Top 10 HETV programmes by UK Audience

Rank	*Title*	*UK Audience*
1	*Downton Abbey (Season 4)*	8,400,000
2	*Call The Midwife*	8,200,000
3	*The Escape Artist*	6,190,000
4	*Jamaica Inn*	6,100,000
5	*Death Comes to Pemberley*	5,900,000
6	*The 7.39*	5,700,000
7	*Endeavour (2013)*	5,500,000
8	*Mr Selfridge*	5,300,000
9	*Remember Me (2014)*	5,300,000
10	*Agatha Christie's Poirot V*	5,200,000

Source: Olsberg•SPI/Nordicity; NB: UK Audience for first show of series

5.4.2.3 'Britishness'

Compared to the Film sector, the shows which receive higher viewership and audience rankings for HETV are a more mixed range of big budget US productions – such as *Game of Thrones* and *24* – and more clearly British TV, including *The Honourable Woman* and *The Escape Artist*. As with film, we have conducted an analysis of 'Britishness' across the entirety of the sample size, though as no viewing figures are available for a large proportion of these programmes in the US, we are not able to look at this against US market share.

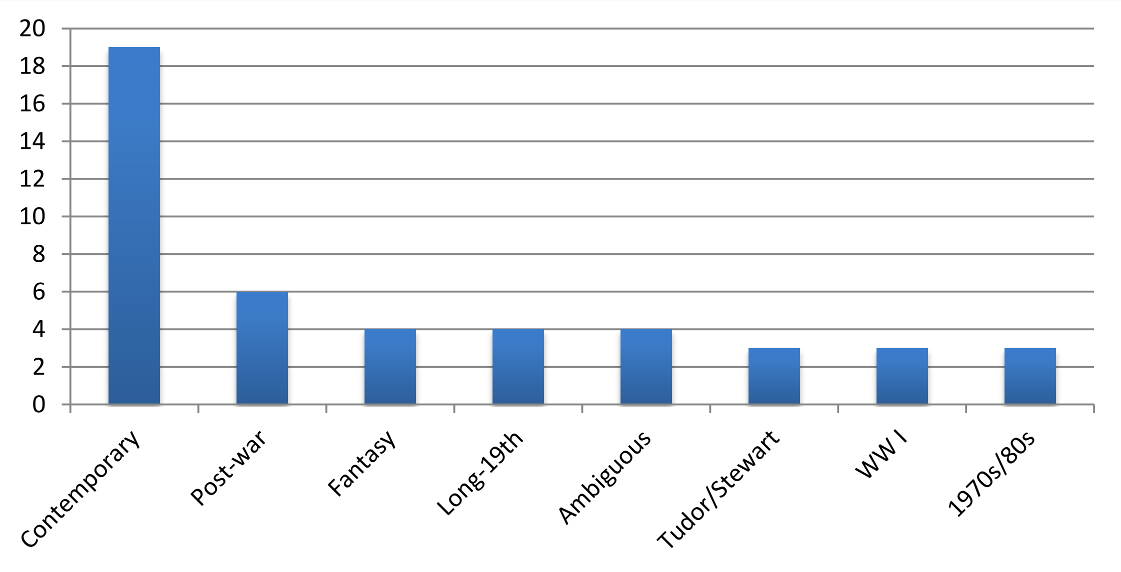
Of the 46 shows studied, our impression is that the vast majority would be recognised as clearly British in nature by an average foreign viewer – 34 are British, against eight not-British, and four ambiguous. However, as with film, when we consider the top 10 by audience rating, things are less clear – of these, six are clearly British, and four clearly not. Two of these, though, are British-set episodes and series of US programmes – *Veep* and *24*.

Looking at the top 10 programmes by viewership in the UK also suggests a stronger British connection from TV than film – all of these programmes were felt to be clearly British. While many of the more American shows are on Pay TV in the UK, we feel that this conclusion is still valid, given the broad British nature of the majority of television production in the UK.

5.4.2.4 Genre

Similar to film, when we consider the genre or setting of the certified HETV programmes, the vast majority of these are contemporary – 19, against six for the next category, post-war. It is interesting to note that the period from 1945-69 makes up a far higher proportion of the programmes certified through the HETR than it does for their film equivalent, but there is no clear pattern in this as it covers long-running serials such as *Endeavour*, popular programming, including *Call the Midwife*, and mini-series like *The Great Train Robbery*.

Figure 6 - Setting analysis of HETV programmes



Source: Olsberg•SPI/Nordicity

Considering the same sample by audience rating, contemporary programmes continue to dominate, with five of the top 10, followed by fantasy, early 20th Century, and Tudor/Stewart programmes. This said, when ordered by top 10 for UK viewing figures, costume drama comes to the fore. All four long-19th Century programmes are in the top 10, together with three post-war, two contemporary, and one World War I and Inter-War.

This tends to suggest a split between high levels of viewership and high levels of audience rating which works in a similar way to the depth and breadth split explored through film, above. It is also, potentially, evidence of the 'active viewership' described by Bennett, above, though more research would be needed to determine the underlying reason.

5.4.2.5 Conclusions

This analysis underlines the particular audience value of British HETV. Leading shows, including *Downton Abbey* and *Call the Midwife* can generate enormous audiences – both in the UK and the US – from clearly British stories. In addition, less clearly British stories, which have leveraged the skills and facilities which exist in the UK, can also have large audience impacts. Together, these demonstrate the value which such experiences represent to the viewer, providing for both strong audience and cultural impacts.

Whereas there is a stereotype of British TV being focussed on the costume drama segment, it is clear from our analysis that, in fact, the majority of the work produced in the first year of the HETR sits in the modern age or the twentieth century. Similarly, the vast majority of the work is very clearly British, and would be expected to be considered as such across the world, maximising its cultural export value.

It is also worth underlining the particular audience contribution which can be seen from long running serials, such as the *Agatha Christie* series and *Endeavour*, which have been able to move into the HETV budget segment as a result of the HETR. These clearly continue to have enormous value for the audience, who watch the programmes in vast numbers, and regard them highly.

4.5. Quantitative Analysis

For the quantitative analysis of the cultural and audience value of HETV, we used data from stated preference research conducted in 2004 by BBC and Human Capital into the consumer and citizen value of the BBC.[116]

4.5.1. Consumer Surplus

In 2004, BBC and Human Capital used a consumer survey and a variety of stated preference research methods, including the national voting method, Gabor-Granger Method and non-normalised chip allocation method to obtain estimates of the monetary value that consumers (i.e. audiences) place on the BBC.[117]

Based on this stated preference valuation approach, BBC and Human Capital concluded that consumers placed a total value of £18.35 per month on the BBC (Figure 7).[118] At the time, the BBC licence fee was £120 p.a., or £10 per month. These results from the study conducted by BBC and Human Capital imply that the BBC generated a consumer surplus of £8.35 per household per month in 2013 or £100.20 per household per annum.

Since HETV programming is commissioned or licensed and then televised by not only the BBC, but other UK broadcasters, we first sought to convert the estimate of the BBC's total consumer value into an estimate of the total consumer value placed on all television in the UK. We assumed that audience share would correspond closely to consumer value. In other words a single broadcaster's share of total consumer value would be in proportion to its audience share.

In 2004, the BBC held a 29.5% audience share.[119] So if consumers placed a value of £18.35 per household per month on the BBC, then they likely placed a value of £62.20 per household per month (£18.35 ÷ 29.5% = £62.20) on the entire television broadcast sector (i.e. "Total TV"). When the per-household value of £62.20 per month was multiplied by the number of multichannel households in the UK in 2004 (24.9 million), we arrived at an estimate of overall consumer value of £18.6 billion (£62.20 × 12 × 24.9 million = £18.6 billion).

To convert the data from 2004 into estimates applicable to 2013, we applied adjustments for changes in the consumer price index (CPI), the increase in the number of multichannel households (24.9 million to 25.8 million) and growth in television viewing (4.9%).[120] After taking into this temporal adjustments, we estimated that consumers placed a value of £25.9 billion on television viewing in 2013.

Data published by ONS indicate that total revenue in UK television broadcast sector (i.e. SIC 60.2 *Television programming and broadcaster services*) totalled £9.5 billion in 2013. When this amount is deducted from our estimate of the total consumer value we conclude that the consumer surplus generated by all television viewing in the UK in 2013 was £16.4 billion. In

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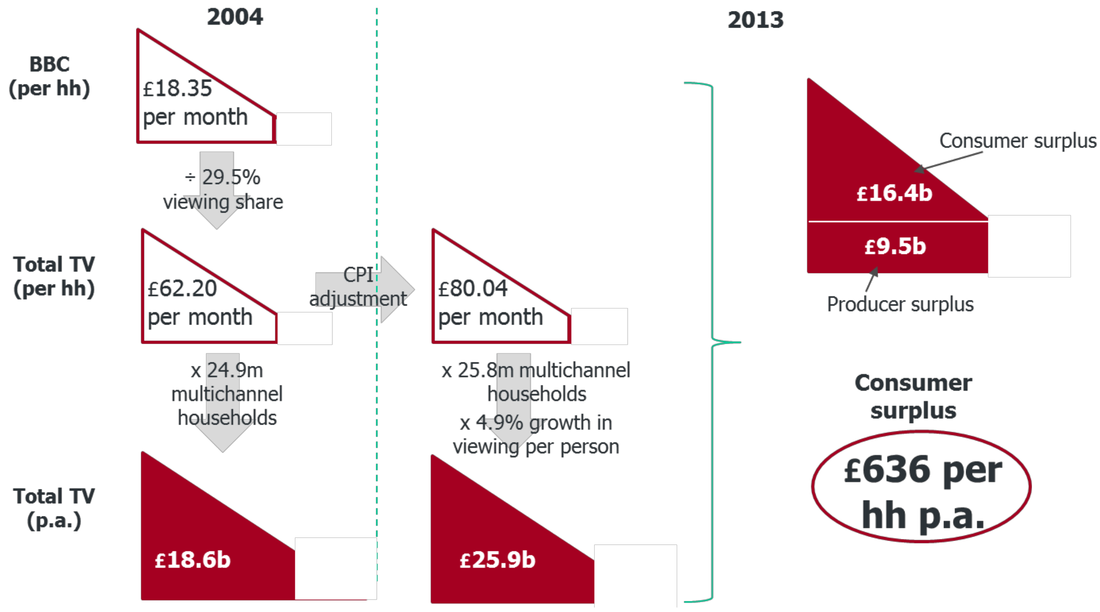
[116] BBC and Human Capital, Measuring the Value of the BBC: A report by the BBC and Human Capital (2004)
[117] *ibid*, p. 17.
[118] *Ibid*, p. 18.
[119] Communications Market Report 2014, Figure 2.69, p. 192
[120] *ibid*, Figure 2.56, p181. According to data published by Ofcom, between 2004 and 2013, television viewing in the UK increased from 222 minutes per week to 232 minutes per day – an increase of 4.5%.

other words, television viewing generated a consumer surplus of £636 per household per annum.

Again, this estimate can be interpreted in the following manner. Households placed a total value of £1,004 on their television viewing in 2013 (£25.9b ÷ 25.8m households = £1,004). In other words, they would be willing to pay up to £1,004 to watch broadcast television in 2013. Households paid, on average, £368 per annum for access to broadcast television (£9.5b ÷ 25.8 households = £368), including BBC licence fee payments. This left each household with an average consumer surplus of £636 per annum in 2013 (£1,004 – £368 = £636).

Figure 7 Estimation of consumer surplus generated by all viewing of broadcast television in the UK, 2013



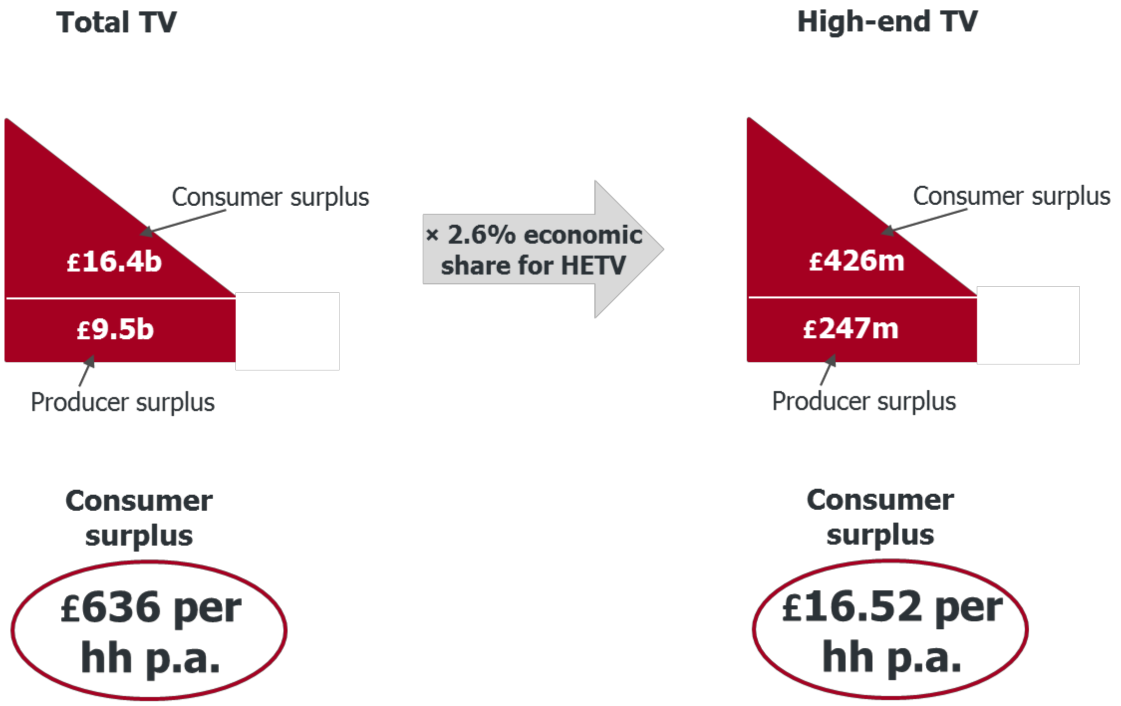
Source: Olsberg•SPI/Nordicity analysis based on data from BBC/Human Capital, Ofcom and ONS.

Whilst this approach gave us an estimate of the consumer surplus generated by the viewing of all broadcast television programming in the UK in 2013, our objective was to estimate the consumer surplus generated by HETV. To isolate the portion of this total consumer surplus (£16.4 billion) associated with HETV, we applied the economic share for HETV, which was developed in Economic Contribution of the UK's Film, High-End TV, Video Game and Animation Programming Sectors.[121]

In that report, we determined that HETV programming accounted for 2.6% of the revenue earned in the television broadcast sector, and thereby, the economic value generated by the sector. We multiplied our estimates of the overall consumer surplus generated by television viewing by the economic share of 2.6% and concluded that HETV generated a consumer surplus of £426 million in 2013 or £16.52 per household per annum (£1.38 per household per month) (Figure 8).

[121] Olsberg-SPI and Nordicity, Economic Contribution of the UK's Film, High-End TV, Video Game and Animation Programing Sectors (2015), pp. 44-45.

Figure 8 Estimation of the consumer surplus generated by viewing of HETV in the UK, 2013



Source: Olsberg•SPI/Nordicity analysis based on data from BBC/Human Capital, Ofcom and ONS.

4.6. Overall Impacts

While the UK HETV sector is newer than film, at least in the manner in which the HETR defines it, it is nonetheless clear that the programmes which it generates have had major worldwide impacts. This is demonstrated clearly through programmes like *The Day of the Doctor* which, by generating record worldwide audiences, unambiguously demonstrate the appetite globally for British cultural products. Such activity also underlines the unique potential for shared cultural experience which television drama can have which, in some ways, can be greater than that for film.

The cultural spinoffs which we have outlined for a number of programmes – notably *Sherlock* and *Downton Abbey* – also speak to the depth of audience appreciation which they generate. Whether through the volume of fan fiction in China centred on *Sherlock*, or the design impacts of *Downton Abbey* in the US, it is evident that cultural products, clearly recognised as British, are generating long-term, deep cultural conversations. In this, we can see the value the individual viewers and the communities in which they live and work place on the experience, demonstrating both an audience and a cultural contribution.

Domestically, too, a strong audience connection with HETV is also apparent, though it appears that the particular shows of interest can be of a slightly different character. Long-term series, such as *Endeavour*, perform particularly well at home, and underline how HETV has moved to encompass traditional British drama output as well as shows like *Game of Thrones* which are more international in concept.

Indeed, it seems clear from our analysis that HETV is a sector which generates particularly British outputs, with the majority of programmes studied in the first year being visibly domestic in character. This said, it is also apparent that it is not just costume drama which is made in the UK – a strong plurality of programmes were contemporary in setting.

Overall, the conclusions which we draw for HETV are similar to those for film – British content is demonstrably having deep cultural and audience impacts worldwide, and generating significant value for the country in the process. While the level of existing research for television is somewhat lower – and the time for impact less given its novelty – nonetheless, it is clear that British HETV has generated experiences of significant value to audiences worldwide. There exists a strong audience in many countries for British television, who engage deeply, and clearly understand the products as British; together this allows for rich, meaningful cultural engagement.

5. THE VIDEO GAMES SECTOR

5.1. Introduction

As one of the originator countries for the modern video game, the UK has a significant tradition in this sector, but despite this, only limited research exists with regard to the cultural and audience impacts of the industry. To address this gap, we use a mixture of research which exists and fresh insight to be able to determine how British video games have made cultural and audience contributions in recent years.

Though we attempt to limit its use, we will throughout this element of the study refer to the slightly artificial distinction between 'core' and 'casual' games. 'Core' games refer to a more traditional type of computer game, which often require specialised equipment and a greater time investment, whereas 'casual' games focus more on short bursts of time, particularly through smartphones. *Monument Valley* is an example of the latter trend, described below in as a case study. 'Core' games can also, in an academic sense, be those which generate social capital within the 'gamer' community, though as we note this is also a difficult distinction to maintain with the growth of the sector.[122]

5.2. Literature Review

Video games are a sector with limited academic research relating to audience and cultural impacts, with much research to date focussing on social impacts. This deficiency has led us to focus on a range of benefits which are demonstrable, using case studies to tie these into British games. While this approach has limits, it was felt to be the best way to demonstrate the broad contributions of the sector in the absence of large volumes of UK-focussed research.

5.2.1. Defining Video Games Culture

6.2.1.1 The Traditional 'Core'

Adrienne Shaw, one of the most prolific academic commentators on video games, notes in her 2010 paper, What is Video Game Culture?, there is a perception that 'games culture' exists separately from other mainstream culture, but it's not clear what exactly it is. As she notes, "What does it mean to have a culture defined by the consumption of a particular medium? Moreover, what are the implications of defining this culture in a particular way?"[123]

The definition of video games culture is one which – both in the popular imagination and academically – has tended to be contained within the stereotype of the 'gamer'. In this, gaming culture is intertwined with a masculine, under-35 audience which sits, in many ways, apart from mainstream society. The pervasiveness of this stereotype is underlined in a 2011 paper by Shaw, Do you identify as a gamer? which underlines that even regular players who do fit this mould tend to self-define out of it. Inherently, the 'gamer' is taken to imply a core element, and games sit outside of the mainstream (hence our preference for player, as a more all-encompassing term.)

[122] We will, in general, not use the term 'gamer' as a result of its pejorative interpretations, save for occasions where the academic literature is quoted or cited; 'player' is preferred, and 'audience' is used where we are referring to the formulation of the audience noted in the introduction to this report

[123] Shaw, A., 'What Is Video Game Culture? Cultural Studies and Games Studies', in *Games and Culture*, vol. 5, no. 4 p. 404

6.2.1.2 Engagement of the Broader Community

Yet, in the smartphone era, this image can no longer be considered an accurate one. A variety of studies have underlined the diverse ways in which the gaming audience has evolved, though without the 'gamer' quite entering the mainstream.

De Schutter, for example, demonstrates the engagement of an older population in Flanders with video gaming. While the results of his survey underline that many of the players engage with interactive versions of traditional games – such as games of solitaire – and that younger or more male players tend to engage in longer sessions, nonetheless the role of games for the group are confirmed.[124] The motivations de Schutter identifies for the playing of games are also much the same – the most popular motive was the *challenge*: "i.e., playing to push oneself to beat the game or get to the next level."[125] Such a motive is common across players, irrelevant of whether the game is 'core' or 'casual'.

Shaw's studies of the broader games-playing community, particularly female players, identify much the same dichotomy – people will play games, for much the same reason, but not identify as games players. This proves to be the case even where the games played are 'core' rather than 'casual', enjoyed by one female participant who didn't self-identify as a 'gamer'. On the other side, female interviewees who identified as 'gamers' could easily have a strong preference for casual games, underlining the fluidity of the definition, and the inherent links with a cultural norm which it is seen to contain.

It is noted that, in this, games appear to be following a path set previously by other media. Novels, albums, film, and television have all had detractors initially – being criticised as a waste of time and energy – before being absorbed into the cultural mainstream. Though it is perhaps too early to state definitively that games are now unambiguously mainstream, certainly they appear to be moving inexorably in that direction.

6.2.1.3 Observations on Games Culture

These observations are taken to identify a number of conclusions which are pertinent to this study. Video gaming is increasingly a mainstream activity, with a relatively broad range of participants who have a range of preferences with regard to the kinds of games they chose to play. Despite this, the common identification of the 'gamer' as being younger, male, and with a preference for 'core' games remains pervasive. Together, this is often also taken to imply a range of other identities, many of which are felt to have negative connotations; this is in spite of the revolution in gaming which has taken place in recent years, particularly driven by the smartphone.

What we can see, in many ways, are the impacts of digitisation on an inherently digital genre – there is significant scope for the discovery of, and long-term identification with, minority interests. Compared to the elite-to-many origins of the other sectors involved in this study, gaming culture is, as a result, inherently more fragile as an issue of interest, as it something people have to opt into. However, once again this might also be seen to reflect the emerging nature of the sector. Its study is also somewhat stymied by the limited way in which it is historically defined. Though we will attempt to move into a broader space throughout this

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[124] de Schutter, B., 'Never Too Old to Play: The Appeal of Digital Games to an Older Audience' in *Games and Culture*, vol. 6, no. 2, p. 157
[125] *ibid*, p. 157

report, we find that much of the existing literature defining 'games culture' is similarly trying to break out of this definitional trap.

5.2.2. Case Study: Monument Valley

Monument Valley – a 2014 British-developed video game originally for iOS – has received rave reviews since its launch, in particular for its art and sound design. Based on a series of optical illusions (noted by critics as similar to MC Escher drawings), the game received a 2014 Apple Design Award, being named as the best iPad game of 2014, and having sold more than 2.4 million copies by the end of January 2015.[126]

Of itself, this would have suggested a strong audience contribution, but the game also played a minor plot role during the recent third series of Netflix's *House of Cards*. Within the context of the show, this is presented as a significant departure for the main character, Frank Underwood, given his preference for First Person Shooter games, but it also demonstrates the increasing cultural crossover of video games as a genre.

Published interviews with the creators of *Monument Valley* have noted that the game was utilised in the show at the specific request of *House of Cards'* producers, underlining the cultural impact which the game has had. The appearance on the show also helped with introducing the game to a new audience, in particular people who'd never played games, which the developers stated as one of their aims.[127]

As an example, *Monument Valley* therefore exemplifies the increasingly cross-over nature of games, and the way in which they are entering the mainstream cultural conversation. The use of the game as a plot point in a major television series, in particular, serves to exemplify this. This is, of course, not the only way in which games and HETV or literature are growing together – in the US, the major television and graphic novel series *The Walking Dead*, and *The Wolf Among Us* have high-quality video-game tie-ins, while in the UK, *Doctor Who* has a recent tie-in game designed to teach children programming.[128]

5.2.3. How the Audience Engages with Games

As de Schutter's work implies, the various audiences for video games engage with the product in different ways. Whereas the more traditional audience utilises games much more heavily as a primary means of entertainment, others utilise them more as a distraction. It is for example implied through de Schutter's work, though not explicitly stated, that many of the games played by those studied for the research are those which come pre-installed on Microsoft Windows, rather than games which they have specifically looked to acquire. What is without doubt is the size of the audience – the latest GameTrack data show that 41% of the UK population, or 20 million UK residents, play games.[129]

The divergence between casual games – which as we note above tend to be defined by short bursts of play, suitable for distraction or use on a mobile phone on journeys – and core games is demonstrated through the level of engagement which individuals have with games. Data

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[126] *Monument Valley in Numbers*, accessed at: http://monumentvalleygame.squarespace.com/blog/2015/1/15/monument-valley-in-numbers
[127] Makuch, E., *How Indie Game Monument Valley Got on House of Cards Season 3*, accessed at: http://www.gamespot.com/articles/how-indie-game-monument-valley-got-on-house-of-car/1100-6425728/
[128] Conditt, J., *Doctor Who game starring Capaldi teaches kids to code* (20th October, 2014), accessed at: http://www.engadget.com/2014/10/20/doctor-who-game-starring-capaldi-teaches-kids-to-code/
[129] GameTrack Digest: Quarter 4, 2015

for the Steam platform, made available by the Ars Technica website, underlines this, with 'free to play' titles being the most owned, but the British-made *Football Manager* series being by far the most played per owner. Ars Technica's data show the mean play time per owner of *Football Manager 2015* – the most recent release – is 152.6 hours; this is more than twice the level of the next game.[130] We will look at audience engagement with *Football Manager* in more detail in the case study, below.

The audience and opinion leaders (often on YouTube) can also be instrumental in drawing indie games into a position of greater visibility, which has had a dramatic impact on their sales. As an example of this, Mike Bithell – creator of the critically acclaimed *Thomas Was Alone* – notes the role of YouTube in generating publicity for the game. In an interview with gaming website Penny Arcade, he noted that, "Total Biscuit did a WTF video about the game. Thomas sold eight times more units than on launch day. In a matter of hours. I was outselling *Assassin's Creed 3* on Steam."[131] This increased exposure set *Thomas Was Alone* up for greater critical success, culminating in the game winning a BAFTA Performance Award for Danny Wallace's narration, the game being nominated in two further categories.

Increasingly, there is also the emergence of a passive audience for gaming – more akin to an audience in the traditional definition – given the growth of eSports. The global audience for eSports is enormous – the *League of Legends* world finals in Seoul, for example, attracted a crowd of 60,000 to a football stadium to watch professional, corporately sponsored teams, while the overall market value was estimated at $612 million for 2015.[132, 133] In the UK market, Gfinity and Vue have recently launched a 600-seater eSports venue in its Broadway cinema in London, indicating the increased interest in eSports which is emerging.[134] GAME has also recently purchased the eSports company Multiplay.

These examples show a range of different levels of engagement with video games from the audience perspective. Whereas some use them on a very simple level as a distraction, without significant mental engagement, other communities are much more heavily involved in the broader cultural discussion around the sector. This is particularly shown in the more indie or niche segments of the sector, exemplified by *Thomas Was Alone* and *Football Manager*, which despite their occasionally limited audience reach can demonstrate very deep levels of cultural and audience engagement, demonstrated below.

5.2.4. Case Study: Football Manager

The *Football Manager* series (until 2004 titled *Championship Manager,* or *Champ Man*) is historically one of the most pervasive in British video gaming. Since its release in 1992, the game has seen the development of a significant, dedicated audience, who put a large degree of time into understanding and playing the game. This has also resulted in a unique output of cultural product, including fan fiction, whereby players undertake to write fictionalised

[130] *Steam Gauge: Measuring the most popular titles of 2014*, accessed at: http://arstechnica.com/gaming/2015/03/steam-gauge-measuring-the-most-popular-steam-games-of-2014/2/
[131] Penny Arcade, *Nintendo grabs money, control from fans promoting its games on Youtube*, accessed at: http://www.narutoforums.com/showthread.php?t=919689 (NB: original site no longer available) It is worth noting that the youtuber in question is also British, underlining another avenue through which the UK drives the cultural impact of games.
[132] Cellan-Jones, R., *Game-on – e-sports takes off in the UK* (17th October, 2014), accessed at: http://www.bbc.co.uk/news/technology-29659275
[133] *The worldwide eSports market reaches 134 million viewers*, accessed at: https://www.superdataresearch.com/blog/esports-brief/
[134] http://corporate.myvue.com/news/article/title/gfinity-and-vue-entertainment-international-to-open-uks-first-ever-esports-arena

accounts of their play, adding large amounts of detail around the basic framework of the game, and publishing the results online.

The impact of this is studied in a 2006 paper by Gerry Crawford, The Cult of Champ Man, which considers the particular role which the series takes within the lives of those who play it. While the paper is by now relatively old, as the series has progressed quite slowly – and can remain relatively obtuse to an individual encountering it for the first time – its conclusions continue to have significant value.

Crawford identifies the key part of *Champ Man's* success as being its 'performative' aspect – the game allows for the experimentation of users with alternative identities, providing a framework for imagination and fantasy. Within this framework, we can see the development of more traditional forms of storytelling and culture – as Crawford notes, the publisher's website "features a discussion board forum dedicated to *CM/FM* 'stories', where players can post accounts of their gaming successes, failures, or experiences."[135]

It is also worthy of note that, in addition to the particular impacts of *Football Manager* within the field of gaming culture, there has been a reflective impact into broader football culture itself as a result of the game's success. By bringing to the attention of its fans a more detailed appreciation of the tactical side of the sport of football, the series has helped engender a more nuanced kind of sports journalism around it. The Blizzard, a quarterly football magazine was held up by consultees as an example of this – indeed, in its earlier editions, it contained a section on 'Champ Man Stories' – while Football Manager's underlying database of players has also been adapted as a scouting tool for real-life football clubs.[136]

Crawford concludes that the specific pleasures of the *Football Manager* series derive from two key elements – its 'intertextuality' (i.e., the fact that it lends from, and engages with, real world professional sport) and its performativity. In doing so, it is highlighted that one of the key parts of *Football Manager* – as with any other game, and many other cultural forms – is the stimulation of imagination and experience. As he notes, "games (like other texts) are given meaning by their users, located within their everyday lives and frequently drawn on and used as a resource in wider social settings."[137]

Taken in this context, it is easy to see video games – while inherently separate from 'traditional' cultural forms, as nonetheless falling into a ready continuum. While digital games are by their nature a departure from film, television, and books, as the *Football Manager* series demonstrates, they allow for a similar exercise of imagination and entertainment, whilst also – much like other creative cultural forms – providing a social touchpoint in the world outside of their boundaries.

Of course, the interactive nature of games allows a level of engagement beyond traditional forms of entertainment, by providing a user-manipulated world in which the story – itself often user-manipulated – takes place. This is a key part of the success of games such as *Football Manager* from a performative perspective.

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[135] Crawford, G., 'The Cult of Champ Man: the culture and pleasures of Championship Manager/Football Manager gamers', in *Information, Communication, & Society*, vol. 9, no. 4, p. 503
[136] Stuart, K., *Why clubs are using Football Manager as a real-life scouting tool*, in 'The Guardian' (12th August, 2014), accessed at: http://www.theguardian.com/technology/2014/aug/12/why-clubs-football-manager-scouting-tool
[137] The Cult of Champ Man, p. 510

5.2.5. Games and Education

From an instrumental perspective of the sector's cultural contributions, research suggests that there is an increasing role for video games within the classroom, both as part of the renewed impetuous for computer science education and as a 'hook' to engage pupils in lessons. One consultee noted that there is significant crossover between the Raspberry Pi platform – a UK-made product which is popular in classrooms – and video games use in the classroom. While Pi includes programming tools such as 'Scratch', its build of the popular game *Minecraft* is also seen as educationally valuable, helping engage pupils with the mechanics of programming, and engaging them around issues like art and history.

The teaching of the processes around programming was noted as a particularly interesting output, as the game allows scripting, so that users – including children – can change the parameters of the world to suit their aims. As a result, children can achieve what they want quicker – a process which, it was noted, is relatively similar to the use of formulae in Excel, though considered much more interesting by the children playing. The Digital Schoolhouse initiative – operating in London, and supported by Ukie – exemplifies this, using specialist teachers to engage schoolchildren at different levels with programming concepts and norms. The initiative integrates game-building and play-based learning in their workshops and curriculum materials. They use games to help develop computational thinking skills such as problem solving and logical reasoning.

Minecraft has also been used as the basis for other educational projects, such as the Tate art gallery's Tate Worlds project. In this, a number of works of art have been re-imagined into *Minecraft*, utilising the game as a framework for exploration, and encouraging engagement. Tate state the aims of the project as "[allowing] players of *Minecraft* to explore a range of paintings and sculpture, undertaking various activities and challenges that relate to the themes of the artworks, or exploring how they were made."[138] This reflects the increasing use of games technology as the basis for broader cultural and educational engagement.

Specific groups, such as the 'London Educational Games meetup' are increasingly emerging to explore the utilisation of games in the classroom, as well as to share experience and expertise. Aside from *Minecraft*, a range of games like *Mario Kart* were noted by consultees – in this instance, as a way to teach children about speed and distance calculations in physics. Notably, such games are not educational in nature, reflecting instead an educational use of an entertainment product with which kids will often be familiar outside the classroom.

The movement towards the use of games in the classroom is, however, not without its critics; as one commentator noted recently, "*Minecraft* has about as much inherent educational value as an overhead projector."[139] It is, furthermore, clear that additional research has to be undertaken to understand the specific utility and best practice surrounding the use of video games in a classroom. Nonetheless, the feedback from consultees on the issue – including those working in education – was that video games do have a specific, instrumental value in engaging a young audience in topics; though needing additional research, this is suggestive of a high-level of audience contribution.

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[138] *Tate Worlds: Art Reimagined for Minecraft*, accessed at: http://www.tate.org.uk/about/projects/tate-worlds-art-reimagined-minecraft

[139] Schank, H., 'The Myth of the Minecraft Curriculum', in *The Atlantic* (20th February, 2015), accessed at: http://www.theatlantic.com/education/archive/2015/02/the-case-against-minecraft/385678/

5.2.6. British Culture in Video Games

While the UK is one of the original markets for video games – starting with games such as *Manic Miner*, *Jet Set Willy*, and the *Dizzy* series in the 1980s – there is limited specific research regarding the cultural impacts of such products on the broader market. Given the role of the British games sector in developing the market, it is intuitively held that British games have impacted culturally, and this was confirmed by consultees. There are also a number of games which draw from other British cultural products, and that can therefore be seen to build upon British culture and creativity, though without necessarily directly crediting this – *Elite*, a case study below, exemplifies this.

Little Big Planet – a puzzle/platformer game developed for PlayStation 3 and 4 by the British studio Media Molecule – is particularly notable for its British content, a factor which has become noticeably prominent in the most recent game in the series. Here, a bowler-hat wearing villain voiced by Hugh Laurie was highlighted by reviewers as a particular plus, acting as he did against the player's character, who was guided by the voice acting of Stephen Fry.

This combination is notable in that it is reflective of the stereotypical role which British actors tend to take in Hollywood – the villain; it also reflects a perceived British model of clothing through the use of the bowler hat, and builds on an established combination of stars. It is perhaps instructive though, when considering the cultural and audience contribution of the release, that most of the commentary on this which we have discovered has come from British news media and game sites. Nonetheless, while British commentators readily recognised the social cues which the game subtly used, it appears that those outside the country either didn't notice them, or focussed their attention in commentary on other aspects of the game.

5.2.7. Case Study: Elite

Originally published in 1984, the BBC Micro title *Elite* – a space adventure, trading, and combat simulator – is one of the most influential in gaming history, both as a game itself and in the way in which it contributed to the development of the sector. The game sold well in the UK and abroad, generating a number of ports to other systems, including the IBM PC, NES and Commodore 64.

The long-term audience impact of *Elite* and its sequels (*Elite II* and *Frontier: First Encounters*) was underlined in 2012 when a fourth game in the series – *Elite: Dangerous* – was pitched on the Kickstarter crowdfunding website. Aiming to raise £1.25 million, the game's campaign ended up drawing in more than 25,000 backers from around the world, funding the creation of a game which had been 'on the drawing board' for decades. Launched in December 2014, the game received very positive reviews, while the combination of the crowdfunding campaign and heritage of the original title has led to an engaged audience.

Aside from this long-term audience impact of the game itself, *Elite* has proven highly influential in the development of a range of other video games, and is one of the titles which spawned an entire genre of real-time space trading and fighting simulations. One of the original developers of *Grand Theft Auto* has also highlighted the impact of *Elite* in the development of that game, in spurning a traditional mission structure in favour of the open-world approach now popular worldwide.[140]

[140] Donovan, T., *The Replay Interviews: Gary Penn*, accessed at: http://www.gamasutra.com/view/feature/134644/the_replay_interviews_gary_penn.php?page=2

As an example, the *Elite* series underlines both the long-term cultural impact of British creativity in the games sector and the long-term audience impact of the original game itself. The game simultaneously stimulated significant new creative products whilst maintaining enough mindshare amongst the audience to get them to pay for a follow up.

5.2.8. Conclusions

The various analyses and case studies we have identified show that the video games sector worldwide makes a significant and growing cultural contribution. While this has historically been focussed on the 'gamer', defined as a specific age group and gender, this model has broken down over the past few years, particularly with the widespread introduction of the smartphone in western society.

Games have increasingly come into the mainstream, and can – as in the case of *Monument Valley* – be regarded as significant cultural achievements, gathering a large audience in the process. Such audiences value games, across age groups, primarily for the challenge which they pose, but it is clear that there are also a range of additional audience contributions which games make. The case of *Football Manager* – with its particular performative aspect, through which it stimulates the imagination of the audience in the creation of new stories – is a good example of this.

Increasingly, games are also being used in the classroom and in other cultural activities, as a way of engaging a generation which has been brought up inherently understanding the paradigms the sector contains. Though the impact of these models is presently not well studied, there is significant anecdotal evidence of audience impacts.

Specifically British cultural impacts are also possible through games, though the evidence here is relatively difficult to tease out. We address this question further in the 'Audience Response' section, below.

5.3. Audience Response

5.3.1. Methodology

Unlike for film and HETV, sampling through the cultural test was not possible for video games, as this had not been put into place until April 2014. As a result of this, though games have now passed through the test, they did not match the time basis which we had for the other parts of the study, nor would any released games have had sufficient time to impact upon the market.

As a result of this, a sample was generated by the consultants for use in this element of the study. This was comprised from two separate elements:

- The analysis of the top 100 chart for 2013 conducted for the Economic Contribution Study – this highlighted 30 games which, in the opinion of the consultants, would have qualified at least in part for the Video Game Tax Relief (VGTR) had it been in place (though only 27 of these were analysed, after removing duplicates);[141] and,
- A separate sample of 15 games outside of the top 100 which would also have qualified for VGTR – this was generated by way of an analysis of the video games

[141] Duplicates included, for example, an original version of the game and a separately-classified 'Game of the Year' edition, which included additional content but wasn't separately reviewed

released during the calendar year, 2014, and a review of various lists of best games released in that same year, and published on sites such as IGN and Metacritic.

In contrast to the film and HETV sections, the compilation of these lists raised a number of questions with regard to the methodology. How to manage ports – the translation of content from one console or system to another – was a key one of these, and given particular prominence by the release in 2013 of a new generation of consoles. In a similar vein, the question of how to aggregate a sample of products released inconsistently across a range of consoles was also apparent, as a number of games were only released on a sub-set of the entire range.

In order to achieve consistency, the decision was taken to separately average professional and audience ratings on reviews websites across the various releases considered – this created two metrics for each game, in addition to the numbers of videos on YouTube. For the purposes of the analysis, ports and re-releases (such as 'Game of the Year' editions) were included, though the analysis was limited to those versions of the game released in the year in question.

For the purposes of our analysis, data were collated for games across:

- PC;
- Apple iOS (iPhone, iPod Touch, and iPad);
- Sony PlayStation 3;
- Microsoft Xbox 360;
- Sony PlayStation 4; and,
- Microsoft Xbox One.

Data were not collected for the Nintendo Wii or Wii U as many of the games were not released on these platforms. Android releases of mobile games were also not included, as Metacritic does not cover these, and no equivalent aggregator data could be found.

Attempts were made to collect sales data for the products in question but, regrettably, this did not prove to be reliably available for many of the smaller projects. As such, sales data are considered on a case-by-case basis. Analysis of the 'Britishness' of the projects was undertaken internally by the consultants, considering the entire sample size.

5.3.2. Results

6.3.2.1 Leading Games

Table 7 - Top 10 games by Audience Rating

Rank	*Title*	*Rating*
1	*Batman: Arkham City – GOTY*	8.85
2	*Grand Theft Auto V*	8.46
3	*Forza Horizon 2*	8.40
4	*LEGO The Lord of the Rings*	8.33
5	*LEGO Harry Potter: Years 5-7*	8.15
6	*Sonic/All Stars Racing Transformed*	8.13
7	*Grand Theft Auto Episodes: Liberty City*	8.10
8	*Stealth Bastard Deluxe (also Stealth Inc.)*	8.10
9	*Sleeping Dogs*	8.03

10	*Max Payne 3*	7.98

Source: Olsberg•SPI/Nordicity

The highest rated games based on the audience analysis were all drawn from the top 100 list, with only one indie game – the British-made *Stealth Bastard Deluxe* (published in the US as *Stealth Inc.*) – making the top 10 by audience rating.

Table 8 - Top 10 games by Critical Rating

Rank	*Title*	*Rating*
1	*Grand Theft Auto V*	9.70
2	*Grand Theft Auto IV*	9.53
3	*Batman: Arkham City – GOTY*	9.37
4	*The Room 2*	8.80
5	*Joe Danger*	8.80
6	*Max Payne 3*	8.67
7	*Super Hexagon*	8.60
8	*DMC (Devil May Cry)*	8.53
9	*Forza Horizon*	8.50
10	*Sorcery!*	8.50

Source: Olsberg•SPI/Nordicity

Weighted by critical rating, the range of indie games making the top 10 is more balanced – critical weightings place four games in the top 10, including two in the top five, though *Grand Theft Auto V* and *Batman: Arkham City* form two of the top three in both cases.

It is noticeable that, while a number of games see correlation between their critical and audience ratings, others such as *Max Payne 3* and *Football Manager* have much higher apparent appreciation from the critics. This is, in many ways, similar to film, where it is clear that critical taste does not align cleanly with that of the mainstream audience. In the case of *Football Manager*, while the game is highly regarded in both its community and by critics for its detail and level of immersion, comments suggest that newcomers to the series can find it obtuse and unapproachable, which likely impacts its audience ratings.

Though we have not added the data in for the other segments – as they did not provide useful insights – considering the number of YouTube videos for the sample also led to some interesting insights into how the audience interacts with games.

Table 9 - Top 10 games by number of YouTube videos[142]

Rank	*Title*	*Number of Videos*
1	*The Room 2*	5,550,000
2	*Just Dance 4*	4,990,000
3	*Grid 2*	3,180,000
4	*Grand Theft Auto IV*	1,610,000
5	*Democracy 3*	1,470,000
6	*Grand Theft Auto V*	1,340,000
7	*Just Dance Kids 2014*	1,190,000
8	*Minecraft: Xbox 360 Edition*	818,000
9	*DMC (Devil May Cry)*	808,000

[142] YouTube data extracted during March 2015

10	*Batman: Arkham City – GOTY*	628,000

Source: Olsberg•SPI/Nordicity

That an indie game for mobile, *The Room 2* is top on this list might seem peculiar, but it underlines a particular use for YouTube in these games – sharing solutions or insights when people find the game hard to beat. Meanwhile, the lists also suggest that family games do well on YouTube, with people sharing their play on the *Just Dance* series.

Taken together with the data on top audience and critical ratings, it is clear that there are a number of different audiences and models of interaction at work with British video games. Whereas the highest rated games by audience and partially by critical rating tend towards the more traditional market – although the split between indie and major products differs – the YouTube ratings allow us to see a different audience interacting with British products. Here, the games are slightly more biased to the casual and family side, with a number of popular – though not necessarily acclaimed – games also making an appearance.

6.3.2.3 'Britishness' and Genre Analysis

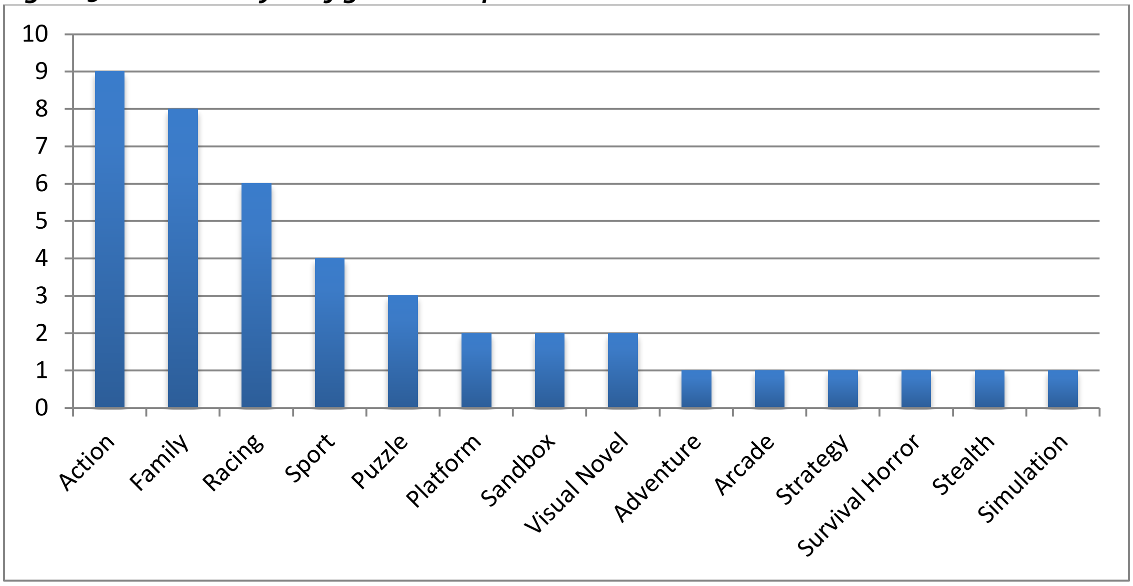
Compared to films and television, a smaller percentage of the video games studied were considered to be obviously British – either in tone, content, or setting – with the consultants noting 27 not British against ten British, and five ambiguous. Of the not-British games, the majority were either set in a fantasy setting or in an intentionally unclear location, likely responding to the demands of the market and publishers.[143]

Despite this, it is clear from research that the introduction of the VGTR is starting to spur the creation of a number of more obviously British games, leveraging both this and crowdfunding platforms such as Kickstarter. We anticipate that should this analysis be repeated once the impact of the VGTR has become clear, a larger percentage of clearly British video games might be found, though it should be noted this is not mandatory in the cultural test.

Looking at the genres for the various games in the sample, it is clear that there is a much more even spread for games in comparison with film or television. Though action, family, and racing games are the most popular, there are a number of games produced in a wide variety of categories.

[143] This would not cause any problems for the VGTR, which is structured to allow the game to be set either in another EEA country, or a fantasy/imaginary setting

Figure 9 - Genre analysis of games sample



Source: Olsberg•SPI/Nordicity; NB: where a game fitted into multiple genres, the one considered most appropriate or dominant was chosen; unclear genres discounted

At present, this tends to suggest that, while action and racing games tend to have a large degree of audience popularity, the games sector in the UK produces a significant variety of games. It will be interesting to observe the direction of travel for the sector as the impact of the VGTR becomes apparent, as this will underline whether there are presently audience demands which – for reasons of finance – are not currently being fulfilled. Nesta analysis of data from Kickstarter tends to support this conclusion, highlighting that the most successful genres on the platform are those which have less interest to major publishers, but which nonetheless remain popular with players.[144]

6.3.2.4 Conclusions

This analysis demonstrates the strong value the audience places on games made in Britain, and also highlights that there are increasingly multiple audiences for games, supporting the data noted in the literature review. Whereas the most popular games by audience rating are skewed towards the more traditional, 'core' paradigm, there is less evidence of this in the critical rankings. Meanwhile, the analysis of YouTube videos shines a light on a completely different audience for games, demonstrating the value of games to a more casual audience in completing the games, and in sharing achievements.

One potential area of challenge for the sector is the analysis of the 'Britishness' of games, where it is apparent that the product is the least clearly 'British' of all those covered by this report. Part of this is, of course, a reflection of the nature of games themselves, and it is also apparent that British cultural values are increasingly entering the games production sector in the UK. Nonetheless, as with the use of British technical skills in Film production, it is likely incumbent on the industry to explain that games like *Grand Theft Auto* – by far the most successful of those studied – are, in fact, wholly developed by a British studio. While we have no doubt the players understand this, the broader public would, we believe, be surprised to find this out.

[144] Nesta, *What did we learn from looking at UK video games Kickstarter data?*, accessed at: http://www.nesta.org.uk/blog/what-did-we-learn-looking-uk-video-games-kickstarter-data

5.4. Quantitative Analysis

For the quantitative analysis of the cultural and audience value of video games, we applied revealed preference techniques. A time-value analysis was used to estimate the value (in monetary terms) that video games consumers place on video games. We also sought to understand if UK video games consumers place a higher value on UK-made video games than other video games. This would have aligned the games analysis with the other sectors, but did not prove possible with the available data.

5.4.1. Time Spent Analysis

Most screen content is exhibited in fixed time increments: e.g. a two-hour feature or a one-hour television drama. As a result, any analysis of the total time that consumers spend watching screen content provides little indication of the value that consumers place on that content. Whilst it is true that a consumer who watches a film multiple times probably places a higher value on it than they would on a film they only watched once, this does not necessarily hold true across all consumers. A consumer who watches a film once may value it just as much as the consumer who watches multiple times.

In the case of video games, however, there is a positive relationship between the time spent playing and the value placed on a video game or video games, in general. In other words, the experiential benefit derived from playing video games increases with the time spent playing. Video games consumers are more likely to spend more time playing video games if they place a higher value on it.

With that in mind, we have used data on the breakdown of video games consumers in the UK, the time they spend playing video games and proxies for the value of leisure time to estimate the overall social welfare associated with video games and the consumer surplus component of this overall social welfare.

Since video games use and the opportunity cost of leisure time varies by age, our time-value analysis was also conducted on the basis of age cohorts. The results of the analysis and the estimate of total social welfare can be found in Table 10, and were derived using the following data sources and methods:

- **Share of video games consumers by age group:** A distribution of the number of video games consumers in the UK by age cohort (6-64) was obtained from GameTrack/Ukie.

- **Number of video games consumers in UK:** The age distribution of video games consumers was multiplied by the estimated number of total video games consumers in the UK in 2013 between the ages of 6 and 64 (21 million) to derive estimates of the number of video games consumers in each age cohort. The total number of video games consumers in the UK was also supplied by GameTrack/Ukie.

- **Average hours per week of video-game playing:** Data for the average hours per week of video game playing was derived from data published by Ofcom.[145]

[145] Ofcom, Children and Parents: Media Use and Attitudes Report 2014, (2014) Figure 29, p. 59; Communications Market 2014, Figure 1.25, p. 45.

- **Total hours per week:** The total number of video games consumers in the UK was multiplied by the average hours per week of video game playing to arrive at an estimate of the total aggregate hours of video game playing in the UK in 2013 by age cohort.

- **Time cost:** The time cost was based on the average value of non-working time (£6.04) used in the Department of Transport's Transport User Benefit Appraisal (TUBA) Model. Since the TUBA Model rate for the value of non-working time was for 2010, the consumer price index was used to arrive at a rate of £6.65 for 2013. Statistics from the Office for National Statistics (ONS) for median hourly wages by age cohort were used to convert this single rate for the entire workforce into different rates for different cohorts. For the 11-14 age cohort, we used a rate of 50% of the rate for 16-17 year olds. For video game consumers under 10 years old, a rate of £0 was applied. This zero rating reflected the fact that the opportunity cost of leisure for children is probably close to nil. The calculation of the time costs can be found in the Appendix.

- **Annualised value of social welfare:** The hourly time cost was multiplied by the total hours per week and 52 weeks to arrive at estimates of the annual value of social welfare generated by video games in the UK in 2013.

In total, we found that, based on the value of UK consumers' non-working time, video games generated social welfare of an estimated £18.5 billion in 2013. More than half of this social welfare was generated in the 15-24 and 25-34 age cohorts. In the case of the 15-24 age cohort, this high value (£5.7 billion) was largely due to the high share of video games consumers in this age group (24%), equivalent to 5.0 million consumers. In the case of the 25-34 age cohort, the high value was largely driven by both higher-than-average participation (19%) and time cost (£6.37 per hour).

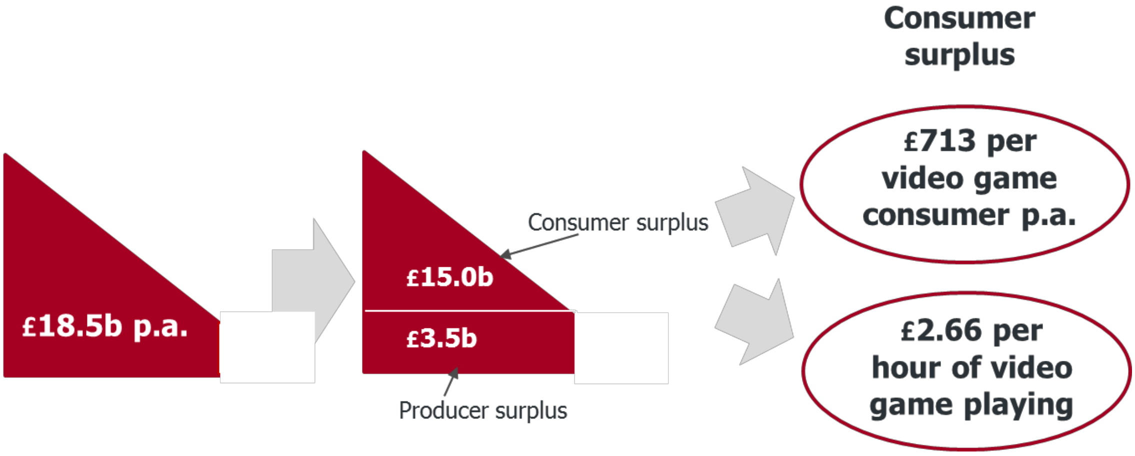
Table 10 - Estimate of value of total social welfare in the UK video games market, 2013

Age group	Share of video games consumers by age group	Number of video games consumers in UK	Average hours per week of video-game playing	Total hours per week	Time cost (£/hr)	Annualised value of social welfare (£b)
6-10	13%	2,730,000	8.0	21,703,500	0.00	0.0
11-14	11%	2,310,000	11.1	25,687,200	1.08	1.4
15-24	24%	5,040,000	5.8	29,000,160	3.75	5.7
25-34	19%	3,990,000	4.3	17,041,955	6.37	5.6
35-44	16%	3,360,000	2.4	7,902,720	7.40	3.0
45-64	18%	3,780,000	1.9	7,051,590	7.28	2.7
Total	**100%**	**21,000,000**	**8.0**	**108,387,125**	**6.65**	**18.5**

Source: Olsberg•SPI/Nordicity analysis based on data from Ukie, GameTrack (ISFE/Ipsos Connect, Ofcom, GFk, ONS and Department for Transport.

To convert this estimate of social welfare to consumer surplus, we subtracted the total value of spending on video games (£3.5 billion) in the UK in 2013. This yielded a consumer surplus of £15 billion, or £713 per video games consumer p.a. in 2013. In other words, each hour of video game playing in the UK in 2013 generated £2.66 of consumer surplus.

Figure 10 Estimation of consumer surplus generated by video games in the UK, 2013



Source: Olsberg•SPI/Nordicity analysis based on data from Ukie, GameTrack (ISFE/Ipsos Connect, Ofcom, GFk, ONS and Department for Transport.

5.5. Overall Impacts

The video games sector encompasses a vast range of different genres and styles of game, ranging from the 'core' extreme to the most 'casual' smartphone game. Within this, inevitably, exist a range of different cultural and audience contributions, many of which have not yet been explored in any detail. This situation is made more difficult by the lack of an unambiguous academic framework for analysis, though this situation is slowly being rectified.

Nonetheless, it is clear that as an industry, the games sector has undergone a period of profound change in recent years. Though still often unfairly maligned as pandering to a traditional audience of games players, it is evident that there are now a vast range of games players across the age and demographic spectra. Even where games remain somewhat difficult to access for the casual player, possessing a steep learning curve, they offer significant performative value – stimulating imagination and play amongst their audiences – and generating small but intense communities.

Games technology is also beginning to seep into the broader cultural, artistic, and educational oeuvre, generating impacts through the classroom and art gallery. The example of *Minecraft* (though not a British game, with the exception of the Xbox 360 version) is at the forefront of this, given its popularity and adaptability.

This variety of audience impacts is clearly visible through our Audience Response analysis, which demonstrates the broad variety of different games currently available, and the equally varied range of audiences who play them. Though we anticipate this has only scratched the surface on the analysis of the audience for British games, nonetheless it is clear that there are a wide range of different players, all of whom are being served in one way or another by the British industry. While the evident 'Britishness' of these games might, in some cases, be questionable, there is anecdotal evidence of change in this regard. It is also, like for the film sector, incumbent upon the games industry to explain how products are British, though the announcement of a *Grand Theft Auto* drama-documentary from the BBC might help in this regard.[146]

[146] Crecente, B., *New BBC drama tells story of GTA, 'one of the greatest British coding success stories'*, accessed at: http://www.polygon.com/2015/3/12/8200157/new-bbc-drama-tells-story-of-gta-one-of-the-greatest-british-coding

The value which the British audience places on games is also demonstrated by the analysis of consumer surplus, which shows a social welfare value of £18.5 billion, and a consumer surplus of £713 per person, or £2.66 per hour played. This underlines the significant benefits players receive from gaming, at the same time showing the tremendous value games represent, given the time period over which this engagement is spared.

Overall though the data are in some ways limited, it is clear that the public both in Britain and around the world places a significant value on British video games as demonstrated by the impact of *Grand Theft Auto V*, the best-selling entertainment product launch of all time with $1bn in 3 days worldwide. As of May 2015 it has sold over 5m boxed copies in the UK.[147] The value of experiences to the individual – at £18.5 billion per year – are clearly substantial, while through games like *Grand Theft Auto* there is also unambiguous, significant engagement with British cultural product around the world.

[147] Calvin, A., *Grand Theft Auto V has sold 5m boxed copies in the UK* (18th May, 2015), accessed at: http://www.mcvuk.com/news/read/grand-theft-auto-v-has-sold-5m-boxed-copies-in-the-uk/0149619

6. THE ANIMATION PROGRAMME SECTOR

6.1. Introduction

Whereas UK animation can include a range of different products, for the purpose of this analysis we will focus on television animation, as supported through the Animation Tax Relief (ATR). This reflects the use of 'animation' and 'animation programming' in the Economic Contribution Study though not, we note, the entire range of animation produced in the UK, much of which is supported through the FTR, and some through the VGTR.

Though available for a range of animation productions, to date, the ATR has predominantly supported the production of animation programming aimed at children's audiences, and this informs our approach for the following analysis. There are substantial amounts of literature relating to the impact of television for children, and we will draw on this heavily, below, as it allows for significant insights into the cultural and audience impacts of the UK animation programme sector.

Furthermore, data from surveys such as Ofcom's and the BBC's regarding the audience will use 'children's TV' as a proxy for the UK animation sector. Though this is by no means a perfect analogue, nonetheless, it provides a useful tool for the analysis of the audience demands for, and response to, the UK animation sector.

Whereas for the other three sectors covered by this study an Audience Response methodology was used to understand cultural and audience impacts, for the animation sector this did not prove possible. During our research process, it became apparent that the data which would be required to undertake this were not available, as audience reviews for many of the shows did not exist. This is likely a reflection of the target viewership for the shows in question, these often being a pre-school demographic.

Nonetheless, despite this issue, our research did raise an interesting conclusion regarding the audience impact of the UK animation sector – in reality, a single audience does not exist. By this, we mean to highlight the fact that children's television inherently has two separate viewerships: the child and the parent. We use case studies below to explore this in more detail.

6.2. Literature Review

The UK animation sector has long had a strong focus on the pre-school market, and here there is much evidence of broad, positive impacts for children, both educationally and in helping to develop cultural understanding. As a result of this, though literature describing the specific audience and cultural contributions of British animation are difficult to find, there are plenty of data surrounding the value of children's television which can be used instead.

These demonstrate the particular opportunities and challenges offered by the provision of television content to children, while consultations have been used to discuss the issues relating to the provision of distinctly British content in an American-dominated marketplace.

6.2.1. The Value of Television to Children

Dafna Lemish's 2007 book, Children and Television: A Global Perspective underlines the particular place which television occupies in the upbringing of a child in the 21st century. She notes that they "enjoy it tremendously, and learn far more about the world from it than from any other socializing agent."[148] Lemish also highlights that it is both pervasive in the lives of

[148] Lemish, D., Children and Television: A Global Perspective (2007) p. 1

children and also, uniquely, one of the few experiences shared in a homogenous way by children worldwide – they share the same content in a way seldom experienced in other media.

It is noted that the impact of television on children and their development is not unidirectional – they react both to what they see on screen, and to how it makes them feel. Such impacts are crucial both for their cultural development – picking up the underlying cues and shared meanings which form part of the everyday experience for a culture – as well as their educational development. Within this, Lemish notes that "children are not passive, proverbial 'tabula rasa' upon which television messages leave their marks... [they] are active consumers of television. They react to, think, feel, create meanings."[149] This is exemplified through the *Sarah and Duck* case study, below.

7.2.1.1 Television and Language Acquisition

A particular area of focus for children's television in the UK is in education, and here there is a body of evidence for the value of television programming in learning, particularly language acquisition. Lemish notes that a longitudinal survey of *Sesame Street* showed this in the US, with children who started viewing at age 3 – and, crucially, engaged with adults in the world around them – picking up a greater range of vocabulary than those who started later.[150] Two key conclusions are drawn from this research: firstly, that age-appropriate viewing is necessary for the maximisation of educational outcomes, and secondly that television requires active engagement from parents to be most effective.

The UK's *Teletubbies* – though not an animation programme – is also given as an "outstanding example of educational television".[151] It is noted that the value comes from a simple, repeated formula – a range of childlike movements and behaviours, play with familiar object, and a limited, frequently-repeated, and age-appropriate vocabulary.

7.2.1.2 Media Literacy

Kaoruko Kondo notes in a 2007 review – Can Television be good for Children? – that kids also develop televisual literacy from an early age, developing representational thinking skills from ages 2 to 7, while only appreciating abstract codes and conventions at a later date. It is noted that "young children start to understand television from an early age. As they mature they learn to draw distinctions between their own world, what is shown on television and whether it is true to life."[152] Through this process, children learn to understand television and other media in an increasingly sophisticated manner – in this way, they learn to understand the social cues which form part of broader societal norms, both within and without the televisual space.

7.2.1.3 School Readiness

Kondo also reflects on studies around *Sesame Street*, which show that young adults who had watched the programme as children achieved higher grades in English, Maths, and Science;

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[149] *ibid*, p. 3
[150] Lemish highlights that *Sesame Street* is a useful touchpoint for studies as it is both effectively the original modern children's programme, and the longest-running – as such it allows for longitudinal impact studies in a way which other, comparable shows in the US or elsewhere do no
[151] Children and Television (2007), p. 177
[152] Kondo, K., Can Television be good for Children? (2007) p. 3

this was particularly true among boys. Furthermore, these individuals read more often, had higher academic self-esteem, and valued academia more. "This suggests that those who watch educational programming enter school with learning skills… [which set] them up for academic success."[153]

Of course, given Lemish's conclusions that engaged parenting is necessary for the maximisation of success, it might be legitimately argued that values which engender engaged learning are equally likely to come from parents. Nonetheless, together with *Sesame Street*, other programmes were also cited as having positive impacts. Meanwhile, while Kondo is not able to identify specific impacts of British television programmes, she notes that "parents were 'generally very positive about the role of media in their young children's social, emotional, linguistic and cognitive development.'"[154]

6.2.2. Case Study: Sarah and Duck

A story-driven animation aimed at 4-6 year olds, *Sarah and Duck* has been a major success for British animation since it was first broadcast in 2013. The story revolves around the adventures of Sarah – a seven-year old girl – and her best friend, a mallard duck. Unusually for a children's animation programme, Sarah lives in a world without parents, though it is noted that the narrator takes on the role of guiding the characters on occasion.

The show is built around the inquisitiveness of the lead character and her willingness to explore, utilising the narrator as a safety net to hint at solutions. This breaks many of the rules of traditional children's animation – with its requirement to ensure that children are reassured – but has nonetheless been enormously successful, especially with parents. Survey work on Facebook (conducted and analysed by Karrot, the production company behind the show) underlines this, demonstrating a range of age groups engaging with the show, including those who fall a long way outside the target age group, up to the age of 13.

An analysis of the programme written by a Danish business professor underlines the particular reasons for success which the show has had, including the value of working in an unsupervised manner, co-creation, and crisis rituals.[155] Together, it is noted that these add up to valuable lessons for both children and adults, especially when packaged in a quirky, very British setting.

The results of this have been a range of license sales across the world – including a large proportion of Europe, Australia, Canada, Japan, Latin America, and Korea. *Sarah and Duck* has also been picked up by CCTV in China for broadcast on one of its main channels, and is being used in Taiwan to aid with children learning English.

Taken as a whole, this sets the stage for a large degree of audience impacts, in particular through the unique learning which the show allows for. It also underlines the point (made below) about the value in the market of products which break perceived rules, not only with regard to the structure of stories, but also in allowing children to explore and utilise their imaginations.

[153] *ibid,* p. 8
[154] *ibid*, p. 10
[155] *Innovation with Sarah and Duck*, accessed at: http://www.awesomedepartment.com/blog/innovation-with-sarah-and-duck/

6.2.3. Conclusions

Though the majority of the existing research is, regrettably, focussed on US-based programming, nonetheless it presents a clear perspective on the contribution children's television makes to the audience. In combination with engaged parenting, television can make a clear, valuable contribution to the language abilities of small children and their readiness to enter former education.

As Lemish highlights as well, TV is a unique socialising agent for young children, being similar worldwide. The impact of this, given the increasing export value of such clearly-British productions as *Sarah and Duck* and *Lily's Driftwood Bay* are yet to be seen. However, given the particular value of culture in developing trust between nations, and underpinning trade and diplomacy – demonstrated earlier – such early impacts clearly offer enormous potential.

6.3. UK Animation in contrast to US Animation

The value of such conclusions regarding the role of animation in the social development of children is underlined when we consider the particular differences between UK and US animation. While we have discovered limited literature to highlight these impacts, consultees repeatedly stated that UK animation has a particular cultural value which is reflective of broader British cultural trends. The growth of UK animation following the implementation of the ATR is expected to bring this to the fore, allowing children a greater level of engagement with British animated content after a period of increasing US domination.

6.3.1. Agency and 'Baddies'

Compared to US children's storytelling, the development of stories in the British (or European) tradition originates from a very different place. Such differences are underlined by a number of factors such as agency – the ability of a character to take control of their destiny and world around them - and morality.

It is notable that characters within a US-driven children's setting are required, for cultural reasons, to show far more of an ability to control things than those in Europe. Whereas the tradition in Europe is for stories to show things happening to an individual, in American properties agency for the lead character is vital – this ties into the US 'tradition' of a person drawing themselves up by their bootstraps.

In the recent past, this clash of traditions had led to the submergence of the European storytelling tradition, with UK animations taking on a more American tone as it was felt to offer greater success on the international market. Properties such as *Bob the Builder* were noted by consultees as having adopted an American sensibility and tone for these reasons. However, while this adoption of US traditions may be seen to allow for greater transferability, it was also criticised for making productions more anodyne, and limiting the educational value. This was particularly the case when we consider the cultural contribution such programmes can make – by divorcing productions from a native storytelling tradition, it is possible that such stories become more difficult for children to connect with as they age.

This was seen by consultees as being particularly the case when we consider the impact of the anti-hero in British animation. Whereas within US-driven productions there is a need for 'baddies' to be misguided and, generally, to apologies for their actions, such obfuscation is not a part of the native storytelling tradition. Villains in European fairy stories and British pantomimes are, inherently, evil – despite the recent Disney movie, Maleficent does not have positive motives in the Brothers Grimm's *Sleeping Beauty*.

This is not to say that moral messages do not exist in British children's programming; rather, they are more subtly conveyed, better reflecting the nature of our society. With this in mind, it can be seen that there is a significant cultural value for the development of truly British animation productions. Given the particular role of children's television in teaching the audience about cultural norms, the ability to recognise European story patterns – as opposed solely to American ones – is highly valuable in the long-term preservation of British and European cultural norms.

6.3.2. Language, Music, and Citizenship

Much the same can be said for the development of linguistic norms, where there is a marked difference between British and American approaches. Even within children's television – such as *Captain Pugwash* – there is a great premium placed upon the use of language and linguistic tricks and puns. Often, this is watered down from the original books due to funding requirements, but it is nonetheless valuable in tying children's viewing into the broader British tradition of literary humour.

In a similar vein, British television animation can be used, depending on the aims of the producer and the funder, to put across a range of other cultural traditions. These include styles of music, where the background to British programmes can reflect a range of traditions, helping children to become acquainted with these. Consultees from Channel 5 highlighted this as a particular interest of theirs in commissioning programmes.

Similarly, the BBC tends to provide a range of intended outcomes against their programmes, including:

- Philosophy for *What's the Big Idea* (a French co-production);
- Citizenship and Identity for *Rastamouse*; and,
- Language development for *RaRa the Noisy Lion*.

These specified outcomes tend to be in keeping with the BBC's public service requirements and objectives, and tend to see a degree of positive feedback from stakeholders to these channels.

6.3.3. Parental Response

As we noted in the Economic Contribution Study, it is instructive that whereas UK-originated children's programming accounts for just 20% of total air time at present, it also accounts for 45% of actual viewing.[156] The particular parental response to Children's TV in the UK – demonstrated through Ofcom's 2014 PSB Tracking Survey – is also strong; the data show that 81% of parents are happy with the delivery of CBeebies, 76% with CBBC, and 55% with Channel 5.[157]

Channels were seen to provide 'a wide range of high quality and British made programmes for children', which 85% felt was a highly important objective. While animation only forms a part of this at present, in many ways this was felt to reflect the previously difficult economic conditions for production, an issue which is expected to be lessened with the introduction of the ATR.

[156] Ofcom, PSB Report 2013: Annex Information Pack F: Children's Report, pp. 31 and 37
[157] Ofcom, *PSB Annual Report December 2014 – PSB Tracking Survey – Annex 3.i: PSB audience opinions* p. 62; though C5 is relatively low, this has seen strong growth in recent years from 33% satisfaction in 2010

6.3.4. Export Value

One potential challenge which might be raised as a result of the emergence of more animation with clearly-British sensibilities is the impact of this on international sales. We noted before both that producers have historically made animations with US sensibilities for the purpose of the export market, and that one of the values of animation is that it 'travels well', and is easily dubbed. This must, inevitably, lead to a question of whether a more clearly-British animation can travel abroad, and whether those impacts will be shared.

Though it is early in the process, to date the impact of a more British form of animation appears – in actuality – to have been highly positive. Both *Lily's Driftwood Bay* and *Sarah and Duck* (developed as case studies) have proven highly successful abroad, with *Lily's Driftwood Bay* having, unusually, not been overdubbed from its original Ulster accents for re-transmission in the US or Australia. Exporters have also noted a significantly greater interest around British animation at markets such as Kidscreen in recent years, which is seen as suggestive of the fact that a greater British feeling in animation has gone down well in the international marketplace.

Many consultees have noted that with the introduction of the tax relief, there is an expectation that this UK sensibility will increasingly be reflected on children's TV globally – so far the signs of this occurring are very positive.

6.3.5. Case Study: Lily's Driftwood Bay

As with other cultural sectors, animation delivers audience and cultural value for the UK's nations and regions. S4C in Wales has long been a supporter of animation programming, while Northern Irish producers have been growing in strength in recent years, with the sector responding well to the emergence of the tax relief.

Lily's Driftwood Bay is a product of this, and one which has had a range of interesting cultural and audience impacts. Set on the Irish coast, the series has sold well, being picked up in Scandinavia and Germany for dubbing, and also selling in the US and Australia. For both of those territories, the unusual decision was taken not to overdub, retaining the programme's original mix of regional British accents, including a number of Northern Irish ones.

Within the broader UK, this quality is also highly valuable. *Lily's Driftwood Bay* is very rare as a children's programme with a series of Ulster accents, and is practically unique in showing on the mainland with these accents maintained. When we consider that a generation ago, children would have grown up hearing Ulster accents on the news (if at all), this underlines the tremendous cultural progress which has been made in recent years.

Aside from being an inherent part of the value of the programme – to the extent that in Norway a similar range of accents from across the country was used to maintain the tone – this is likely to have a significant long-term cultural impact in the UK. Various consultees noted that alongside shows like *The Fall*, *Lily's Driftwood Bay* presented Northern Ireland in a different light to the remainder of the world for the first time. Though it is, understandably, too early to tell, it is hoped that a generation of children will grow up with a different view on what Northern Ireland represents.

Furthermore, the success of the Northern Irish animation sector, alongside that seen for HETV with *Game of Thrones* also sets the stage for the province's future economic success.

6.3.6. Conclusions

It is clear that British children's television is vital in the maintenance of our cultural norms through a new generation. Consultees noted the deep differences which exist between British and American children's television, including in the fundamentals of story construction, which it is vital that new generations are able to understand. While more formal academic research still needs to be done, it was clear to consultees at least that this is an invaluable audience and cultural contribution of unambiguously domestic children's content.

Finally, it is worth highlighting that, in contrast to the accepted norms of the sector, it is apparent that such unambiguous content is succeeding in the marketplace. While it presents a small sample size, the evidence from recent markets suggests that the re-emergence of British content is having a significant impact on its success internationally. The case studies we have developed are also suggestive of this.

6.4. Quantitative Analysis

As with HETV, we used data from stated preference research conducted by BBC and Human Capital in 2003, in combination with more recent research of the economic share of animation programming conducted by Olsberg-SPI and Nordicity, to estimate the consumer surplus generated animation programming eligible for ATR.

6.4.1. Consumer Surplus

In section 5.3.1, we derived estimates of the total social welfare and consumer surplus generated by the viewing of all broadcast television programming in the UK. We found that all television viewing generated total social welfare of £25.9 billion in 2013 and included £9.5 billion in producer surplus and £16.4 billion in consumer surplus. In other words, on average, each household would be willing to pay up to £1,004 to watch broadcast television in 2013. Households paid, on average, £368 per annum for access to broadcast television (£9.5b ÷ 25.8 television households = £368), including BBC licence fee payments. This left each household with an average consumer surplus of £636 per annum in 2013 (£1,004 – £368 = £636).

To isolate the portion of this total consumer surplus (£16.4 billion) associated with animation programming, we applied the economic share for animation programming, which was developed in Economic Contribution of the UK's Film, High-End TV, Video Game and Animation Programing Sectors.[158] In that report, we determined that animation programming accounted for 0.31% of the revenue earned in the television broadcast sector in 2013, and thereby, the economic value generated by the sector.

We multiplied our estimates of the overall consumer surplus generated by television viewing by the economic share of 0.31% and concluded that animation generated a consumer surplus of £51 million in 2013. In order to convert this estimate of overall consumer surplus to a per-household figure, we divided it by an estimate of the number of households in the UK with a child in the 4-15 age cohort (i.e. the children's audience cohort).[159] With an estimated 6.2 million households with a child in the 4-15 age cohort in 2013, the consumer surplus

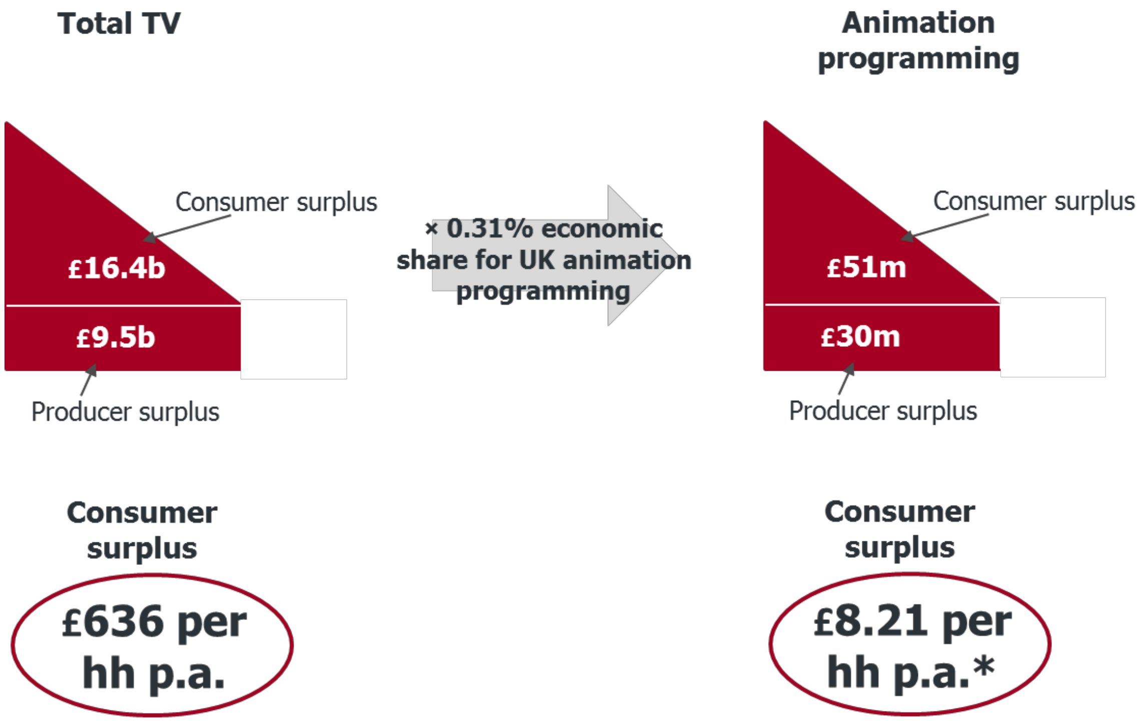
[158] Economic Contribution Study, p. 65

[159] Whilst it is the case that animation programming eligible for ATR is made for both children's and general audiences, since the economic contribution study focused on animation programming made for children's audience (i.e. ages 4-15), a similar approach has been adopted for the analysis of consumer surplus in order to have consistency. Research conducted by Pact in 2011 found that the vast majority of the animation programming produced in the UK was, in fact, made for children's audiences rather than general audiences.

generated by the viewing of animation programming was equal to £8.21 per household per annum (£0.68 per household per month) (Figure 11).

Whilst the per household consumer surplus generated by animation programming (£8.21) was approximately half the consumer surplus generated by HETV (£16.52), it is important to keep in mind that average television viewing by children in 2013 (134 minutes per day) was 42% less than the average across all ages (232 minutes per day).[160] In addition, there was a steep drop in the number of original hours of UK animation commissioned by public service broadcasters (PSBs) in the UK during the first decade of the 2000s, which could have indirectly affected the animation programming's audience share and thereby the value place on it by households. Between 2002 and 2011, the annual amount of original UK animation programming commissioned by PSBs fell from 176 hours to 19 hours.[161] In so far as the reduced levels of original UK animation programming put downward pressure on the share of animation viewing among children's audiences then it could have negatively affected animation programming's economic share and thereby its total consumer surplus and the annual consumer surplus per household.

Figure 11 - Estimation of the consumer surplus generated by viewing of animation programming in the UK, 2013



Source: Olsberg•SPI/Nordicity analysis based on data from BBC/Human Capital, Ofcom and ONS.[162]

[160] Communications Market Report, Figure 2.56, p. 181.
[161] Ofcom, *Public Service Broadcasting Report 2013: Annex*, "Information Pack F: Children's Report" (2013), Figure 21, p. 29.
[162] To estimate the annual consumer surplus per household, the total consumer surplus of £52 million was divided by an estimate of the number of TV households in the UK with a child between the ages of 4 and 15 (6.2 million households). According to ONS, 7.7 million (of the 26.4 million total households) in the UK in 2013 included a dependent child. Whilst data on the share of households with a dependent child between the ages of 4 and 15 was not available, ONS population statistics indicated that children aged 4 to 15 accounted for 63% of all dependent children 18 years and under in 2013. Recognising that the share of dependent-children households with at least one child aged 4 to 15 would be higher than the share of the dependent-children population in this age cohort, a higher share (80%) was used to estimate the number of TV households with at least one child in the 4-to-15 age

The lower consumer surplus for animation programming, vis-à-vis HETV, may also be representative of the steady erosion of children's TV budgets over the last decade, given the real-terms erosion of overall broadcaster budgets. This is, itself, a broader response to various political and economic pressures which the broadcasters have faced. In these circumstances, animation programming appears to have borne a disproportionately higher share of the reduction in production spending, given the particular expense of its creation, the long production process required and the long shelf life that some animation properties display.

UK audiences' have demonstrated a clear preference for British children's programming. As noted in Section 7.3.3, UK-made children's programming accounted for 45% of viewing by children's audiences in 2011, even though it represented only 20% of programming aired in that year. [163] When this demonstrated preference is compared to the precipitous decline in the commissioning of original children's animation by PSBs in the 2000s, it would appear that a market failure does exist. Whereas consumers want these products, upstream decisions have led to them not being made, and the marketplace on its own appears unable to correct this supply shortfall. The introduction of the ATR has, however, started to impact on the commissioning of animation programming, which should lead to the narrowing of this gap in forthcoming years.

6.5. Overall Impacts

It is clear from the existing literature around the sector that children's television serves a vital purpose and that, when twinned with engaged parenting, can create significant educational and social benefits for the viewer. Given the recent growth of unambiguously British animation as a result of the ATR, this offers a significant benefit to the British public as a whole.

The differences between British and American animation are marked, both in tone and storytelling, and it is anticipated that this will have major impacts on the ability of a young audience to understand domestic cultural norms. Wholly British animations such as *Sarah and Duck* offer the opportunity to inculcate children at home with such cultural norms, and it is clear from the Ofcom data that they are strongly valued by the audience. Even abroad, there has been a highly positive response to the emergence of this new British animation, though the exact cultural impacts of this remain to be seen.

However the consumer surplus value for animation programmes alone is relatively low, at £8.21 per household with children per annum, despite the significant premium placed by parents on UK-made product. This is reflective of a number of commissioning and spending trends over the last decade which have limited outlay on commissioning children's animation, though it is to be hoped that the ATR will address this given the enormous value the product generates. As it stands, the cost to the country of animation remains astonishingly low – given the cultural and audience values which are demonstrably placed on it, it represents great value for the country.

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group. The calculation of the estimated number of households with at least one child between 4 and 15 is summarised as follows: 7.7 million households × 80% = 6.2 million TV households.

[163] Ofcom, PSB Report 2013: Annex Information Pack F: Children's Report (2013), pp. 31 and 37

7. CONCLUSIONS

7.1. Audience Contributions

This study has demonstrated that there are a wide range of different audiences for British screen products, from niche audiences for British Indie films to the broad viewership for *Downton Abbey* and world record sales of *Grand Theft Auto V*. These audiences exist both domestically and internationally, underlining the role which British culture plays in global conversations. In many cases, it is apparent that no single audience exists, with British cultural products being adept at finding niches, as exemplified by projects like *The Imposter*.

It is also readily apparent that there are a great many occasions where British HETV, film, and video games act as world leaders. Projects such as *Gravity*, *Game of Thrones*, and *Grand Theft Auto V* all demonstrate this, achieving major audience share worldwide, and in doing so presenting significant British artistic and technical achievements to the world. However, while such projects undoubtedly deliver strong audience value in some ways, there will always be a question of whether they are recognised as British, and maximising this value must be a challenge to the UK's screen sectors.

Outside of these major audience successes, there are a range of products which, though smaller in scale, continue to service valuable audiences at home and, in many cases, abroad. These include long-running television series such as *Poirot* and *Endeavour*, which have moved into the HETV segment as the HETR has become available, and generate major audiences and impacts domestically. In a similar vein, it is clear that there are a broad range of smaller film productions made during the year in question which speak to specific audiences, and in doing so provide valuable social welfare and audience contributions.

Though not necessarily so clearly domestic, much the same can be said for a swathe of video games which, focussing on the family and 'casual' market generate strong audience impacts though without significant critical fanfare. This is, furthermore, an increasing trend in the broader video games sector, as the emergence of crowdfunding demonstrates. Through this, games like *Elite* – possessed of small, but dedicated fanbases, though without the scale deemed necessary by major publishers – can find the funding for development. In so doing, a clear, important audience contribution is revealed.

Animation programming, at present, exists separate to this, as the sector has until recently been in a downward spiral with increasingly limited space on public television. Nonetheless, it is increasingly clear that there are a range of new British animations generating significant, evangelical audiences domestically and internationally, which should provide a strong basis for the long-term future success of the sector, culturally and economically. Similarly, it is clear that the audience, both domestically and internationally, finds great value in these.

7.2. Cultural Contributions

The data we have developed and used for this report confirm that the cultural contributions arising from British screen products are large, diverse, and present significant (if difficult to quantify) value for the British public. This is most clear for the Film and HETV sectors, where the consequences of such cultural contributions can be seen through lenses such as social media and screen tourism. Through these, it is evident that screen products have generated a large degree of interest in Britain as a country, and furthermore form a key part of how a wide range of individuals learn about and value the UK.

Considering a number of projects in more detail, we believe that it is evident that British cultural projects form part of wider global cultural conversations – for example on the former treatment of ethnic minorities – while maintaining a distinct British character. This is shown through a project like *Belle*, which had a clear audience impact whilst forming part of a broader, incredibly valuable cultural conversation.

There are, furthermore, a diverse range of cultural impacts which can be seen through some of Britain's most critically acclaimed programmes. *Sherlock's* generation of spinoff cultural products in East Asia is an example of this, as is the impact of *Downton Abbey* on American interior décor. In both cases, the outcomes represent clear perspectives on how the individuals value the cultural experiences represented by a British cultural product.

Other productions, including *The Imposter*, *Dylan Thomas: A Poet in New York*, and *Football Manager* have smaller, but more intense impacts on a narrower range of people. Such projects are often (though not always) critically acclaimed, and achieve what we term 'depth' of impact, with this narrower range of audience members interacting intensely with the cultural product. As with the examples of *Downton Abbey* and *Sherlock*, this represents a reflection of the value of the product to the individual.

It is also the case that British products continue to lead the world in areas such as nature documentary – this is the case both for film and HETV, and from a cultural perspective, generates significant value; these include productions like *David Attenborough's Natural History Museum.* Social value productions, such as *The Act of Killing* can also do this, helping to shape thought processes, and generate solutions to global problems. While not necessarily easily catalogued within the framework we have set out, such productions undeniably have intense cultural impacts, changing the ways in which society sees and values both its present and its past.

In the animation sector, such broad-scale global impacts are harder to discern, given the limited scale of the industry until recently. Nonetheless, it is clear that British animations are starting to generate cultural contributions worldwide, and are doing so by being true to British traditions, rather than adopting American norms. Given the notable differences between the storytelling and cultural traditions of the two countries, this offers significant cultural value to the UK, and is reflected in a strong audience preference for British domestic product. It must also be seen to set the stage for a better future understanding of British cultural norms within the audience which views it, both domestically and overseas.

8. APPENDIX 1 – LIST OF CONSULTEES

Robbie Allen, Creative Scotland

Vivienne Avery, BFI

Hasan Bakhshi, Nesta

Elenora Belfiore, Warwick Commission

Pauline Burt, Ffilm Cymru

Mellie Buse, Producer

Greg Childs, Children's Media Conference

Geoffrey Crossick, Arts and Humanities Research Council and University of London

Carol Comley, BFI

Emily Davidson, Pact

Jackie Edwards, BBC Children's

Daniel Fujiwara, London School of Economics

Jane Glastonbury, DCMS

Martha Henson, London Educational Games Meetup

Oli Hyatt, Animation UK

Bob Last, Ink Digital

Mona Lotten, British Council

Anna Mansi, BFI

Jamila Metran, CITV

John McVay, Pact

Caroline Norbury, Creative England

Dave O'Brien, City University

Samantha Perahia, British Film Commission

Tom Phillips, University of East Anglia

Richard Powell, UKTI New York

Pablo Rossell, British Council

Jane Rumble, Ofcom

Richard Russell, ACE

Sara Selwood, Cultural Trends

Andrew Smith, Pinewood Group

Jessica Symons, Channel 5

Jon Travis, HM Treasury

Eben Upton, Raspberry Pi

Mike Watts, Producer

Colin Williams, Sixteen South

Richard Williams, Northern Ireland Screen

Chris Whyte, Karrot Animation

Dan Wood, Ukie

Adrian Wootton, British Film Commission

9. APPENDIX 2 – BIBLIOGRAPHY

AEA Consulting , *Thundering Hooves* (2006)

ACE, *The Value of Arts and Culture to People and Society* (2014)

'At play in Peoria', in *The Economist* (21st May, 2015)

BARB Top 30 data, accessed at: http://www.barb.co.uk/whats-new/weekly-top-30?

BBC, *BBC Annual Report and Accounts 2013/14* (2014)

BBC and Human Capital, *Measuring the Value of the BBC: A report by the BBC and Human Capital* (2004)

BBC Worldwide, *Inspiring Audiences Worldwide – BBC Worldwide Annual Review 2013-14* (2014)

Belfiore, E. and Bennett, O., *Beyond the 'Toolkit Approach'*, in 'Journal for Cultural Research', vol. 14, no. 2 (April 2010) pp. 121-142

Bennett, T. et al, *Culture, Class, Distinction* (2009)

Bignell, J. *An Introduction to Television Studies* (2008)

Black, L. 'Whose Finger on the Button? British Television and the Politics of Cultural Control', in *Historical Journal of Film and Television*, vol. 25, no. 4 (October 2005) pp. 547-576

Bradshaw, P. "Secret Cinema: Back to the Future review – fancy dress eccentricity", in *The Guardian* (31st July, 2014)

Bramley, EV, "Social media storm in wake of Secret Cinema's Back to the Future shambles", in The Guardian (25th July, 2014)

British Council, *Trust Pays* (2012)

BRITDOC, *The Act of Killing: Impact assessment*, accessed at: http://impactguide.org/library/TheActofKilling.pdf

BRITDOC, *The End of the Line: A Social Impact Evaluation* (undated), accessed at: http://britdoc.org/uploads/media_items/theendoftheline-evaluationdocument.original.pdf

BRTIDOC, *The Impact Field Guide & Toolkit* (undated), accessed at: http://impactguide.org/index.php

BSAC, *Business Briefing – Games Consumption Trends* (October 2014)

Carnwath, J.D. and Brown, A.S., *Understanding the Value and Impacts of Cultural Experiences* (2014)

Carr, D. (eds.) *Computer Games: Text, Narrative and Play* (2006)

Cellan-Jones, R., *Game-on – e-sports takes off in the UK* (17th October, 2014), accessed at: http://www.bbc.co.uk/news/technology-29659275

Channel 4 Britdoc Foundation, *The End of the Line: A Social Impact Evaluation by Channel 4 Britdoc Foundation* (undated) accessed at http://britdoc.org/uploads/media_items/theendoftheline-evaluationdocument.original.pdf

Cisco Systems Inc., *Cisco Visual Networking Index – Forecast and Methodology, 2007–2012* (2008)

Cisco Systems Inc., *Cisco Visual Networking Index (VNI) Global IP Traffic Forecast Update: 2010-2015* (2011).

Communication Chambers, *Securing the Future of UK Animation* (October 2011)

Conditt, J., *Doctor Who game starring Capaldi teaches kids to code* (20th October, 2014), accessed at: http://www.engadget.com/2014/10/20/doctor-who-game-starring-capaldi-teaches-kids-to-code/

Crawford, G., *The cult of Champ Man: the culture and pleasures of Championship Manager/Football Manager games*, in 'Information, Communication & Society', vol. 9, no. 4 (August 2006) pp. 496-514

Crawford, G., *Video Gamers* (2012)

Crecente, B., *New BBC drama tells story of GTA, 'one of the greatest British coding success stories'*, accessed at: http://www.polygon.com/2015/3/12/8200157/new-bbc-drama-tells-story-of-gta-one-of-the-greatest-british-coding

Crossick, G., and Kaszynska, P., *Under Construction: Towards a framework for cultural value*, in 'Cultural Trends', vol. 23, no. 2 (2014) pp. 120-131

Culligan, C., Dubber, J., and Lotten, M., *As Others See Us: Culture, attraction and soft power* (2014)

Cunningham, T., *'Doctor Who' Anniversary Theatrical Run Scores $10.2M at Worldwide Box Office*, accessed at: http://www.thewrap.com/dr-anniversary-special-averages-hunger-games-catching-fire-box-office/

Department for Culture, Media & Sport, *Triennial Review of the British Film Institute* (September 2014)

de Moraes, L., 'Benedict Cumberbatch Sentimental About 'Sherlock' But Mum About More Seasons After Season 3 Premiere Scores In Ratings', in *Dateline* (20th January, 2014), accessed at http://deadline.com/2014/01/tca-sherlock-move-pays-ratings-dividends-to-pbs-4-million-tune-in-668164/

de Schutter, B., *Never Too Old to Play: The Appeal of Digital Games to an Older Audience*, in 'Games and Culture', vol. 6, no. 2 (2011) pp. 155-170

Donovan, T., *The Replay Interviews: Gary Penn*, accessed at: http://www.gamasutra.com/view/feature/134644/the_replay_interviews_gary_penn.php?page=2

Dowling, K., 'Downton life draws China's big guns', in *The Sunday Times* (10th August, 2014)

Ellis-Petersen, H, "Great Scott! Secret Cinema's Back to the Future opening night cancelled" in *The Guardian* (14th July, 2014)

Envisional, *Technical report: An Estimate of Infringing Use of the Internet* (2011), accessed at http://documents.envisional.com/docs/Envisional-Internet_Usage-Jan2011.pdf

Ensor, J, 'How America fell in love with British TV' in *The Telegraph* (19th July, 2014)

French, P., 'Sherlock Holmes and the curious case of several million Chinese fans' in *LA Review of Books – China Blog*, accessed at http://blog.lareviewofbooks.org/chinablog/sherlock-holmes-curious-case-several-million-chinese-fans/

Fujiwara, D., Kudrna, L., and Dolan, P., *Quantifying and Valuing the Wellbeing Impacts of Culture and Sport* (2014)

Fujiwara, D., Kudrna, L., and Dolan, P., *Quantifying the Social Impacts of Culture and Sport* (2014)

Games Investor Consulting, *Sources of Finance: The Sinews of Business* (2014)

Greenstein, S., and McDevitt, R., *Measuring the Broadband Bonus in Thirty OECD Countries*, in 'OECD Digital Economy Papers', no. 197 (2012), accessed at http://www.oecd-ilibrary.org/science-and-technology/measuring-the-broadband-bonus-in-thirty-oecd-countries_5k9bcwkg3hwf-en

Gordon, J.C., and Beilby-Orrin, H., *International Measurement of the Economic and Social Importance of Culture* (2006)

Gosling, V.K., and Crawford, G., *Game Scenes: Theorizing Digital Game Audiences*, in 'Games and Culture', vol. 6, no. 2 (2011) pp. 135-154

Guenigault, M., *Guinness World Record for the Day of the Doctor*, accessed at: http://www.doctorwho.tv/whats-new/article/guinness-world-record-for-the-day-of-the-doctor

Harmony Institute, "Impact Playbook: Best Practices for Understanding the Impact of Media" (2013), accessed at: http://harmony-institute.org/docs/HI_BAVC_Impact_Playbook.pdf

HM Treasury, *The Green Book: Appraisal and Evaluation in Central Government* (2011)

Holden, J., and Tryhorn, C., *Influence and Attraction: Culture and the race for soft power in the 21st Century* (2013)

House of Lords, *Select Committee on Soft Power and the UK's Influence, Report of Session 2013-14: Persuasion and Power in the Modern World* (March 2014)

Hutter, M., and Throsby, D. (eds.) *Beyond price: value in culture, economics, and the arts* (2008)

Innovation with Sarah and Duck, accessed at: http://www.awesomedepartment.com/blog/innovation-with-sarah-and-duck/

Jones, R., 'Sherlock facts: 21 things you didn't know' in *The Daily Telegraph* (2nd January, 2014)

Knell, J., and Taylor, M., *Arts Funding, Austerity and the Big Society: Remaking the case for the arts* (February 2011)

Kondo, K., *Can Television be good for Children?* (Undated)

Lemish, D., *Children and Television: a global perspective* (2007)

Livingstone, I., and Hope, A., *Next Gen. Transforming the UK into the world's leading talent hub for the video games and visual effects industries* (February 2011)

Loughton, T., *The State our children are in* (undated)

Makuch, E., *How Indie Game Monument Valley Got on House of Cards Season 3*, accessed at: http://www.gamespot.com/articles/how-indie-game-monument-valley-got-on-house-of-car/1100-6425728/

McCormack, K., 'Back for more! Hugh Bonneville and Michelle Dockery lead the way as Downton Abbey gets SIXTEEN nominations for this year's Emmys' in *The Daily Mail* (19th July, 2012)

Meville, J., 'Film Review: The Illusionist', in *the Scotsman* (18th June, 2010)

Miller, J.S., *Something Completely Different: British Television and American Culture* (2000)

Monument Valley in Numbers, accessed at: http://monumentvalleygame.squarespace.com/blog/2015/1/15/monument-valley-in-numbers

Moore, R., *Movie Review: "Submarine"*, accessed at http://rogersmovienation.com/2013/01/15/movie-review-submarine/

Morley, D., *Television, Audiences and Cultural Studies* (1992)

Narval Media, etc..., *Stories We Tell Ourselves* (2009)

Nat Cen, *Purpose Remit Survey UK Report (Prepared for BBC Trust*) (July 2014)

National Center for Media Engagement, *Measuring Public Media's Impact: Challenges and Opportunities* (2013), accessed at: http://www.lfagroup.com/wp/wp-content/uploads/2013/03/Measuring-Public-Medias-Impact-Final-3-13.pdf

Nesta, *What did we learn from looking at UK video games Kickstarter data?*, accessed at: http://www.nesta.org.uk/blog/what-did-we-learn-looking-uk-video-games-kickstarter-data

New Economics Foundation, *Wellbeing in four policy areas: Report by the All-Party Parliamentary Group on Wellbeing Economics* (September 2014)

Northern Alliance and Ipsos MediaCT, *Opening Our Eyes* (July 2011)

O'Brien, D., *Measuring the value of culture: a report to the Department for Culture Media and Sport* (2010)

Ofcom, *Public Service Broadcasting Report 2013: Annex*, "Information Pack F: Children's Report" (2012)

Ofcom, *Children and Parents: Media Use and Attitudes Report 2014* (August 2014)

Ofcom, *The Communications Market 2014* (2014)

Oliver and Ohlbaum, *Independent Production Sector Financial Survey and Census* (2014)

Olsberg•SPI, *Quantifying Film and Television Tourism in England* (March 2015)

Olsberg•SPI and Nordicity, *Economic Contribution of the UK's Film, High-End TV, Video Game and Animation Programing Sectors* (2015)

Oxford Economics, *The Economic Impact of the UK Film Industry* (2012)

Penny Arcade, *Nintendo grabs money, control from fans promoting its games on Youtube*, accessed at: http://www.narutoforums.com/showthread.php?t=919689 (NB: original site no longer available)

Schank, H., 'The Myth of the Minecraft Curriculum', in *The Atlantic* (20th February, 2015), accessed at: http://www.theatlantic.com/education/archive/2015/02/the-case-against-minecraft/385678/

Schott, G.R., and Horrell, K.R., *Girl Gamers and their Relationship with Gaming Culture* in 'Convergence', vol. 6, no. 1 (2000) pp. 36-51

Setchfield, N., *The Day Of The Doctor Triumphs At US Box Office*, accessed at: http://www.gamesradar.com/the-day-of-the-doctor-triumphs-at-us-box-office/

Search, J., *Beyond the Box Office: New Documentary Valuations* (2011), accessed at http://britdoc.org/uploads/media_items/aninconvenienttruth-beyondtheboxoffice.original

Shaw, A., *Do you identify as a gamer? Gender, race, sexuality and gamer identity*, in 'New Media and Society', vol. 14, no. 1 (2011) pp. 28-44

Shaw, A., *Rethinking Game Studies: A case study approach to video game play and identification*, in 'Critical Studies in Media Communication' (2012) pp. 1-15

Shaw, A., *What is Video Game Culture? Cultural Studies and Game Studies*, in 'Games and Culture', vol. 5, no. 4 (2010) pp. 403-424

Sherlock Generates the Biggest Tweet Total for a Single Episode of a Drama Series, accessed at http://secondsync.tumblr.com/post/72092144868/sherlock-generates-the-biggest-tweet-total-for-a

Silverstone, R., *Television and Everyday Life* (1994)

Smith, P. "Secret Cinema presents Back to the Future, review: 'triumphant'", in *The Telegraph* (1st August, 2014)

Sotamaa, O., *When the Game Is Not Enough: Motivations and Practices Among Computer Game Modding Culture*, in 'Games and Culture', vol. 5, no. 3 (2010) pp. 239-255

Steam Gauge: Measuring the most popular titles of 2014, accessed at: http://arstechnica.com/gaming/2015/03/steam-gauge-measuring-the-most-popular-steam-games-of-2014/2/

Stein, A., *Indie Sports Games: Performance and Performativity*, in 'Loading…' vol. 7 (undated) pp. 61-77

Stein, A., Mitgutsch, K., and Consalvo, M., *Who are sports gamers? A large study of sports video games players*, in 'Convergence', vol. 19, no. 3 (2013) pp. 345-363

Stuart, K., *Why clubs are using Football Manager as a real-life scouting tool*, in 'The Guardian' (12th August, 2014), accessed at: http://www.theguardian.com/technology/2014/aug/12/why-clubs-football-manager-scouting-tool

Tate Worlds: Art Reimagined for Minecraft, accessed at: http://www.tate.org.uk/about/projects/tate-worlds-art-reimagined-minecraft

TRP, *UK Television Exports Survey 2012* (2013)

TRP Research, *UK Television Exports FY 2013/2014* (2014)

Turner, G., *British Cultural Studies, An Introduction* (1991)

TV Licensing, *Telescope 2014* (2014)

UK Trade and Investment, *UK Creative Industries – International Strategy* (June 2014)

Wolf Brown, *Understanding the Value and Impacts of Cultural Experiences* (2014)

Zhu W., 'David Cameron joins Weibo', in *China Dispatch* (5th December, 2013)

10. APPENDIX 3 – DATA TABLES

Video Games Sector – Calculation of time costs

Table A - 1 Calculation of value of leisure time by age cohort

Age cohort	Median hourly wage, 2013 (£)	Scale (all employees = 1.00)	Scaled value of leisure time (£)
All employees	13.03	1.00	6.65
16-17	4.24	0.33	2.16
18-21	7.20	0.55	3.68
22-29	10.58	0.81	5.40
30-39	14.37	1.10	7.34
40-49	14.63	1.12	7.47
50-59	13.90	1.07	7.10
60+	12.12	0.93	6.19

Source: Olsberg-SPI/Nordicity calculations based on data from ONS Annual Survey of Hours and Earnings.

Table A - 2 - Calculation of value of leisure time for video game user age cohorts

Age cohort	Share of video game users	Value of one hour of leisure time (£)	Comments
6-10	13%	0	Zero rated
11-14	11%	1.08	50% of value of leisure time for age cohort, 16-17.
15-24	24%	3.75	Average of value of leisure time for age cohorts, 16-17, 18-21 and 22-29.
25-34	19%	6.37	Average of value of leisure time for age cohorts, 22-29 and 30-39.
35-44	16%	7.40	Average of value of leisure time for age cohorts, 30-39 and 40-49.
45-64	18%	7.28	Average of value of leisure time for age cohorts, 40-49 and 50-59.

Source: Olsberg-SPI/Nordicity calculations based on data from ONS Annual Survey of Hours and Earnings and **GameTrack (ISFE/Ipsos Connect)**.Note: Totals may not sum due to rounding.