THE UK AND IRISH GAME INDUSTRIES

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This chapter will look at the origins, present state and key policy issues facing the games industry in the United Kingdom (UK), including Scotland, Wales, England, Northern Ireland and the Republic of Ireland (R. of Ireland); home to memorable titles like *Grand Theft Auto*, *Tomb Raider*, *SingStar* and *Little Big Planet* and middleware technology by companies like Havok. The growth of new mobile platforms, the diffusion of the Internet and the increase in state financial support for game development in Canada and South East Asia have introduced both challenges and opportunities over the last decade.

Introduction

From the 1980s the UK emerged as the main console and PC development centre in Europe, whereas the R. of Ireland is better known as a site for support and servicing. In both things are changing. There is a sense currently that things are just "taking off" in the R. of Ireland in terms of employment in the games industry whereas in the UK the discourse is more pessimistic with various reports signalling a decline in terms of employment and company numbers from a perceived "heyday" in the 1980s and 1990s. Neither, I will argue, is correct.

This chapter attempts to situate the changes being experienced within these countries in the context of the global political economy of the games industry (Johns 2006, 177). It also tries to navigate the particular influence of the creative industries policy discourse, which developed in the UK in the late 1990s, and which ostensibly focuses on creativity and intellectual property (IP) creation but in practice is often reduced to a discourse of IP ownership, skills and nation branding. This chapter will explore briefly the history of the games industry in the UK and Ireland before examining the available statistics on the contemporary industry and finally discussing a number of issues which national industry trade associations are focusing on. This chapter is based on interviews and analysis of relevant research, reports and press releases.

Formation and Origins of a Games Industry

In order to understand the games industry in the UK and Ireland we must understand some key institutional, cultural and economic linkages and distinctions between the nations. The UK and the R. of Ireland have profound historical, cultural, economic and political links and were all part of the same state for centuries until 1921. The R. of Ireland gained independence in that year and became a republic in 1948. Northern Ireland remained within the UK. A thirty-year period of political violence in Northern Ireland until 1998 and economic stagnation until the 1990s in the R. of Ireland meant that many budding game developers emigrated to work in the UK or U.S. where there was a blossoming games industry in the 1970s and 1980s.

Numerous Celtic cultural and linguistic links exist between Scotland, Wales and Ireland even if English is the dominant language spoken in all the nations. England also dominates in terms of population size. The population of the UK is almost sixty-two million, with England accounting for 51.5 million of this (Office for National Statistics 2009). Scotland is the next largest nation with 5.16 million, then the R. of Ireland with 4.6 million (CSO 2008), and Wales and Northern Ireland account for 4.76 million together. According to Eurostat figures, the UK is

the third largest country in the EU 27, after Germany and France, whereas the R. of Ireland is the eighth smallest, just smaller than Denmark, Sweden and Finland. All the nations in this chapter are part of the European Union and must operate economically, politically and socially in that context. However, the R. of Ireland alone is a member of the euro currency union.

The origins of the UK's game development industry are in the growth of a UK-based home computer industry in the 1980s. The UK-developed Sinclair Spectrum 48k was released in 1982 and provided an affordable and flexible programming alternative to the American Commodore 64 (C64) and had its own magazine (CRASH). One could be a both a producer and a consumer on these platforms (Wade 2007, 685). Although commercial companies were the key drivers in the development of the computer hardware and games software industries in the U.S. (e.g. Atari, Commodore), public policy and public bodies like the BBC¹ and universities played a significant part, albeit inadvertently, in the development of a games industry in the UK and Ireland. Haddon argues that the development of the BBC's Computer Literacy Project in the early 1980s, which included a television series on "the Mighty Micro" and the release of the BBC's own branded micro, in association with Acorn, were important to the popularity of microcomputing in the mid-1980s. The BBC/Acorn released nine computers in total with a higher technical specification than their rivals and more software. In the main these platforms were developed and marketed with an educational and work focus which linked into a wider discourse surrounding the information technology (IT) revolution and a need to learn computer skills in order to participate in the changing economy and society. According to Haddon and Skinner (1991, 435) available figures suggest that Britain had a higher per capita installed base of micros

¹ British Broadcasting Corporation—the public sector broadcaster in the UK.

than many other Western European countries at this time. The dominant user of the micro in the home were young males.

Meanwhile, across the water Atari had already globalized its production network and established a factory to manufacture its arcade cabinets in a small town in the centre of the R. of Ireland. Tipperary was the chosen site and the American company shipped up to two thousand cabinets a month to Europe from a port in the south of Ireland. Tens of thousands of Atari hits including Centipede, Missile Command and Asteroids passed through the Irish town for European markets. In the mid-1980s arcade cabinets with games such as Marble Madness, Gauntlet and Temple of Doom were produced. As with many successful game companies the parent company was the target of numerous takeovers. Atari became Atari/Warner Communications in 1978, and from 1985 until 1990 the factory was run as a joint venture with the Japanese company Namco. Ownership reverted back to Warner from 1990 to 1995 until Chicago-based Midway Games purchased the plant in 1995. The plant was purchased the following year by Namco Europe and would close after twenty years in 1998 (McCormick 2008). The acquisition of companies and the relocation of game production to cheaper cost locations are themes that recur throughout the history of the games industry in both Ireland and the UK.

Whereas Atari was just manufacturing games developed outside of Ireland, in the southern town of Waterford a small company called Emerald Software produce a string of original 8- to 16-bit games, including *Moonwalker* and *The Running Man* in the late 1980s. Emerald had been founded that year by two Englishmen: Dave Martin, an ex-maths teacher, and Mike Dixon, whose background was in the music industry. The company received commissions from U.S. Gold to work on Michael Jackson's *Moonwalker* and from Grandslam to work on the

Schwarzenegger spin-off *The Running Man*. The Jackson side-scrolling Amiga hit was later released on the Sega. There was also *Vigilante*, a fighting game, and an Amiga-based shooter, *Phantom Fighter*. The company closed in 1991. One former employee noted, "Towards our demise, we were asked to churn out X titles in four weeks to save ourselves ... I personally built a game from start to finish in three weeks: a five-level beat-'em-up with the compulsory baddy at the end of each level" (Barter 2004).

Dave Perry is one of the best-known game designers from the island of Ireland during this period. In an interview for gamedevelopers.ie we again see the influence of public investment in computing as he recalls that "my school in Belfast, Methodist College Belfast, received a big government grant for computers, and I was pretty much glued to the computers from there on out. I started writing games that were published in books and magazines. That's how you bought games back then—you had to buy books and type in the code yourself. I think the first game I had published was a driving game—a black square that avoided other black squares. They printed it, and I was excited, and then after a few more games, they sent me a check for 450 pounds! To me, that was a fortune! I published a few of my own books, then moved to London after getting my first real job offer" (McCormick 2003). Subsequently moving from London to the U.S. he formed Shiny Entertainment in 1993, the company behind *The Terminator*, *Teenage Mutant Ninja Turtles*, Disney's *Aladdin* and Warner's *Matrix* projects. He went on to work with Acclaim and is now CEO and co-founder of a new venture, Gaikai.com.

In the late 1980s the UK was a major exporter of game software to other European countries. Individuals or small teams worked as hobbyists and connected to the international scene through games magazines and locally via hobbyist clubs. Others formed small companies out of their bedrooms. David Braben and Ian Bell's computer game *Elite* put the British industry

on the map when it was released in 1984 and sold 150,000 copies. Meanwhile DMA design was founded in 1989 in Dundee Scotland by David Jones who went on to develop *Lemmings* (1991) for the Commodore Amiga. At that time Ireland was still exporting arcade cabinets, but the recession there had taken its toll on software entrepreneurs. An exception in the 1980s in the R. of Ireland was Steve Collins, who began programming in BASIC for the Commodore 64 (C64) and later designed *Herobotix* (published by Hewson) and ported *Badlands* to the C64 (Teque/Domark). He went on to co-found Havok in 1998, the well-known physics middleware firm.

The British games industry went through a major restructuring during the 1990s.

Cornford, Naylor and Driver (2000, 98) note that many British development and publishing companies transferred into "foreign ownership" and development and publishing companies started to move out of publishing. They compared the situation to that which was already present in film; Britain was becoming a talent pool and location of production facilities at prices which compared favourably to the U.S. Through mergers and acquisitions many development studios were bought by foreign-owned companies, and by 2000 only Eidos and Codemasters remained in British ownership. A decade later these two companies had also been the subject of partial and

² See http://library.digiguide.tv/lib/uk-tv-highlight/Brits+Who+Made+The+Modern+World-4496/Documentary/ (accessed 09/03/2012).

³ An entertaining list can be found at http://www.creativetourist.com/features/the-aesthetics-of-gaming (accessed 09/03/2012). Also see the series of five articles written by David Crookes in the *Independent* in February 2011 on the Best of British Gaming at http://blogs.independent.co.uk/author/david-crookes/ (accessed 09/03/2012).

⁴ See interview at http://www.c64.com/interviews/collins.html (accessed 09/03/2012).

total acquisition. In Ireland the 1990s saw the development of localization, marketing and support services by multinational corporations for Europe (Microsoft, Vivendi, Sony).

In Scotland the early to mid-1990s was when DMA Design became known as the home of *Grand Theft Auto*. From the mid-1990s the University of Abertay, Dundee, working in tandem with local government officials, local companies and graduates like David Jones to form a significant cluster of institutions, launched undergraduate and postgraduate programs in games technology and design, developed a specific games research centre and launched the university/government/industry gaming competition "Dare to be Digital" (Kerr 2003). However, DMA Design became a target for acquisition first by Gremlin interactive in 1997, then InfoGrammes and finally Rockstar Games and New York–based Take Two in 1999. David Jones meanwhile left the company to spin out a new company, Real Time Worlds, in 2002, also located in Dundee, which after some successful projects went into liquidation in 2010. This cycle of acquisition, spin-outs, growth and decline is nothing new in the games industry, but perhaps the impact by 2010 was greater given that Real Time Worlds employed over three hundred people in Dundee and the game project that it had just launched had received up to \$100 million in investment.

Internationally the 2000s saw the rise of Sony's PlayStation and Microsoft's Xbox consoles alongside Nintendo's Wii. These three operated alongside increasingly U.S.- and Japanese-based independent publishers, often with roots in traditional media industries. Increasing technological possibilities and larger projects with larger development teams, costs and risks saw the further consolidation of publishing through mergers and acquisitions. Meanwhile massively multiplayer online games (MMOGs), mobile and social/browser platforms emerged as new routes to market. In Britain the history of DMA Design and Real Time Worlds

was replicated over and over with the rise and decline, or acquisition, of major British development studios and publishers (Eidos, Rare, Codemasters, DMA/Rockstar, Lionhead). The top ten selling console and personal computer games in the UK were increasingly tie-ins to other media and real-world properties, and successful titles were developed into franchises, usually by publishers headquartered outside the UK. The Entertainment Leisure Software Publishers Association (ELSPA) was established as a trade body for publishers in 1989, and two years later a separate body, TIGA, was established to represent the interests of developers. The fact that there was a division between their interests can be linked back to the restructuring of the industry and the increased role of U.S. and Japanese publishers.

Meanwhile, Ireland never developed a strong home-grown development industry. A history of foreign direct investment meant that foreign-owned arcade factories and major animation studios established branches in the 1980s, and in the 1990s the Norwegian-owned company Funcom developed PlayStation One games in Dublin. By 2001 this studio had closed as the company switched resources to its new MMOG, *Anarchy Online*. Micro-companies developing mobile and web projects existed, but predominantly the Irish industry revolved around support services including localization, marketing and customer support for Europe (e.g. Microsoft, Vivendi, Sony). A key exception was the development of original IP in technology and in particular the development of two middleware companies (Havok and Demonware), both university spin-out companies and both acquired within less than a decade by multinational corporations (Kerr 2002).

In these countries the last decade saw universities and colleges establish undergraduate and postgraduate courses in game technology and design, as well as major new industry trade conferences emerge to facilitate greater networking. Significantly, the shift to more adult content

in games also prompted the development of co- and self-regulation systems and new content rating systems. In the UK games with "gross violence" and "sexual activity" must be classified under the British Board of Film Classification's (BBFC) film rating system and it is a criminal offence to sell them to minors. In Ireland the sale of games to minors is not a criminal offence but in both countries all games must be classified by game publishers according to the Pan European Game Information System (PEGI). Thus by the end of the first decade of the new millennium all nations had developed a range of new institutions and policies to mediate the relationship between the global games industry and the locale.

The Present: The Challenge of Globalization

Of the top ten games sold in the UK by unit sales in 2001 three of the console games were developed in the UK—Who Wants to Be a Millionaire (Eidos), Grand Theft Auto 3 (Take Two Interactive) and Harry Potter and the Philosopher's Stone (Electronic Arts). Four of the top-selling PC games were developed in the UK—Who Wants to Be a Millionaire (Eidos), Championship Manager 2 (Eidos), Rollercoaster Tycoon (Hasbro Interactive) and Black and White (Electronic Arts). Intriguingly this list points to significant changes in the industry at the time, namely, the growth of tie-ins with other media and the growth of franchises (Spectrum 2002, 17). The Spectrum report for the Department of Trade and Industry in the UK found that the British development industry's share of the U.S. and UK markets was a distant third to the U.S. and Japan, and they were second to the U.S. in the European market. Estimates of employment suggested that the industry employed twenty thousand across all sub-sectors, including retail and support services like legal. These numbers were less than half of those

⁵ See http://www.bbfc.co.uk/classification/the-bbfc-uk-law (accessed 09/03/2012).

employed in the U.S. but still the second largest globally. An estimated six thousand worked in development directly (Spectrum 2002, 20).

The report's title, From Exuberant Youth to Sustainable Maturity, signalled that the industry was facing significant challenges moving beyond its cottage industry roots. A strengths, weaknesses, opportunities and threats (SWOT) analysis of the industry noted that although the industry was well known for its talent, has a strong local market, had strong industry associations (TIGA and ELSPA) and was well placed between the U.S. and European markets, it had a poor profile in the investment community and government offices in the UK, had limited access to finance and its games had limited appeal outside its home market. There were also signs of increased competition for workers and a fear that the industry might lose talent to other countries. The report downplays the significance of foreign acquisition of UK publishers and developers.

The most recent report from Skillset, a government/industry agency in the UK, found that there were 155 computer games development companies by 2009, thirty game publishing companies and thirty-five support companies (Skillset 2010, 1).⁶ A total of seven thousand were

⁶ Cornford, Naylor and Driver (2000, 100) identified 195 in their work of which 126 were development only, twenty publishing only and a further twenty-five engaged in both development and publishing. An Oxford Economics report (2008) estimated that the industry employed ten thousand developers directly. Skillset is an industry body founded by David Puttnam and jointly funded by industry and government. Its focus is improving the productivity and competitiveness of the creative media industries in the UK. Because there is no standard industry classification for the games industry in the UK Skillset collates its data using a survey of companies and in consultation with trade associations and an industry panel. Figures used here are from their 2009 survey.

employed by these companies and the report notes that this is the lowest number employed since it began surveying in 2002 (2010, 2). This figure is, however, an increase on the numbers in the Spectrum 2002 report; does not account for freelancers; and does not include those working in mobile games, flash/web games or serious games. The latter are included in a separate industry sector called interactive media. Indications from other countries would suggest that mobile and web games are some of the fastest growing sub-segments of the games industry. The Skillset report on the interactive media sector states that it employs 39,750 people in the UK with about 1 per cent working specifically in mobile content. Of the total almost twenty-four thousand are employed in an occupation category called "interactive or games production" (Skillset 2009, 3). The methodological distinctions used by Skillset in its surveys are largely ignored when the data is used by trade associations and other parties. Current policy discourses in the UK are more likely to highlight a decrease in overall employment in the games industry sector by focusing solely on the computer games category, something we will return to in the next section on issues.

According to Skillset only 19 per cent of computer games employment is in London, but a further 18 per cent were located just north-east of London. Beyond the greater London region the north-west, where Liverpool and Manchester are located, is the most significant region with 30 per cent employment. Outside of England, Scotland is the next most significant nation with 7 per cent of the total share of employment in the sector (Skillset 2010, 3). When one moves to interactive media employment in London, the south-east and east of England account for 50 per

⁷ The methodological distinctions between computer games and interactive media subsectors were confirmed by email to the author on May 11, 2011. See "Creative Media and the Use and Limitations of Official Data Sources—An Overview" at http://www.skillset.org/uploads/pdf/asset_15460.pdf?1 (accessed 09/03/2012).

cent of total employment, the north-west at 5 per cent and Scotland at 7 per cent (Skillset 2009, 3–4). Overall, when it comes to employment in traditional computer games companies (console/PC) we can see that London is slightly less important and the north-west more important than in employment in interactive and mobile media. Scotland and Northern Ireland are equally represented in each, whereas Wales has slightly more employment in the interactive and mobile sectors (4 per cent compared to 1 per cent of the computer games sector). Overall England, and particularly the greater London area, dominates, although not as much as in other media industries. A similar pattern of geographic concentration in major cities, particularly for localization, marketing and publishing companies, emerges in Ireland, with online community support and development more widely distributed.

In the R. of Ireland the impact of globalization and online technology, combined with a low rate of corporation tax, has had a significant impact on the structure and employment levels in the games industry. The last decade has seen multinational game companies relocating noncore development functions to Ireland and some acquisition activity. A 2009 survey conducted by the author found that the Irish games industry employed 1,469 people although the numbers employed in actual development work were much smaller at 132 (in programming, art, design) plus another 130 in management and marketing. The balance were employed in localization, community support and translation (Kerr and Cawley 2009). The report also found that many of the "other jobs" were in areas that had not existed in previous work conducted by the author in 2001, namely, online community support. Over the intervening eight years employment in the games industry in Ireland had grown 400 per cent, but most of this growth in employment was

⁸ This survey did not include retail or externally contracted support services.

⁹ These employees provide help and technical support to players of online games.

not in development, but rather in newly emerging support functions like online community support. Two high-profile middleware companies, Havok and Demonware, were both subject to acquisition by multinational companies Intel and Activision, respectively, during this period. Local policymakers and politicians have hailed the growth of this new high-technology, high-skilled industry in Ireland, but there is little discussion of IP generation and the fact that the value/IP which most of these workers are supporting is developed and owned elsewhere.

In terms of understanding who works in this industry in these countries the data are largely in line with international studies. The workforce is highly educated and 80 per cent of UK computer game developers have at least a degree-level qualifications or above according to data from Skillset (2010, 6). Representation of women in the UK computer game industry is very low—6 per cent in 2009, which is low compared to other industries, and had declined since 2002 (2010, 4). The industry is also relatively youthful with 69 per cent aged below thirty-five years, although the trend is up (2010, 5). When one examines the figures for the interactive media industry one finds greater numbers of women (32 per cent) and the numbers aged less than thirty-five years are lower (43 per cent). In the Irish context the 2009 survey found that 91 per cent of its workforce was aged below thirty-five years and that fewer than 20 per cent were women. Women were more highly represented in the online community support and quality assurance occupations and if one removed these occupations the percentage share employed in the industry was 7 per cent, in line with the British workforce. The answers to a question about education were incomplete in the Irish survey, but of those who answered this question they indicated that 32 per cent of their workforce had degree-level or above education and a further 10 per cent had certificates or diplomas.

What is clear from these surveys is that core development roles require higher qualifications and tend to be more male dominated. Associated functional roles tend to require lower qualifications, employ greater numbers, but still relatively low numbers of women, and tend to be younger. Images from the 2011 Game British Academy of Film and Television awards (BAFTA) nicely visualize the workforce for us. There is a distinct lack of women in the images and most of the winners are white, males in the twenty-five- to forty-year-old category. The awarding of the academy fellowship to Peter Molyneux summarizes the history of the industry. Acclaimed for his game design, he founded his first company, Bullfrog, in 1987. Following acquisition of Bullfrog by Electronic Arts in 1995 Molyneux left to form Lionhead in 1997. Lionhead was subsequently acquired by Microsoft Game Studios in 2006 and Molyneux became creative director of their European studios, including other British-acquired studios like Rare.

The structure of the games industry in the UK and Ireland has been shaped by the increasing globalization of the games industry during the past two decades. During this time successful game development studios in the UK have been targeted for acquisition by major international publishers and investors. This has had a significant impact upon the development and creation of new projects as well as in some cases their location. Whereas initially many of these "suitors" came from the U.S. and Japan, more recently companies from India and South Korea have emerged. In Ireland the impact of the growth of online games (MMOGs, browser, social networking) in the last decade has been significant and corporations from both the U.S. and Japan have been using Ireland as a location for supporting their European markets. The result is that many companies and employees in both countries are now highly vulnerable to changes in the global market/industry, including competition from lower-cost labour locations, even if both countries specialize to some degree in different stages of the value chain. But new

platforms also bring opportunities. In both countries numerous start-up companies have targeted new platforms with lower barriers to entry including the iPhone, the iPad, Android phones and the online services of the main consoles.

Current Issues: International Competition, Skills and Labour Shortages

By the end of the decade a proliferation of platforms, the growth of the Internet and increased state financial support for game development in South Korea, China and Canada in particular were leading to a range of new challenges and opportunities for the UK and Irish games industry. In this section we critically examine some of the policy discourses relating to the games industry in the UK and Ireland: namely, the perceived need for state support to encourage/protect the games industry, the issue of labour shortages and the related issue of the relevance and quality of educational courses. These issues are articulated in publications issued by the developer and publisher trade associations in Britain: TIGA and UKIE, ¹⁰ respectively, but also are closely mirrored by reports issued by "independent" agencies and consultancies. Similar discourses emerge in Ireland but generally circulate in the media and press releases rather than in commissioned reports. Beyond general research and development tax credits neither country has any specific national policies or support mechanisms for their games industry.

If one was to peruse the numerous reports commissioned by the game trade associations TIGA and ELSPA in the last decade one could only but conclude that the UK games industry is in decline with shrinking revenues and employment. The lobbying of public representatives by trade associations and the industry started in earnest in 2008 with the launch of "GameUp", a

¹⁰ TIGA represents both independent and publisher-owned development companies. ELSPA was rebranded UKIE in 2010.

campaign focused around creating positive public relations for the games industry and addressing the issues of costs and skills for the industry in the UK. ¹¹ Developed by TIGA, ELSPA, Game Investor Consulting and companies like Sony Computer Entertainment Europe, it commissioned reports, targeted public representatives and placed stories in the press (Gibson 2008). An All Party Parliamentary Group on the Computer and Video Games Industry was established in Westminster in 2008 which included ministers, lords and industry representatives. ¹² According to its House of Commons listing the group was established to "to provide a forum to discuss business issues affecting video games' software developers; to develop policies to enhance the sector; and to champion an industry that responsibly creates content for an audience ranging from children to adults." Another report notes that the industry "has failed to make its case as forcefully or successfully to the Exchequer as these other sectors (film etc.). Despite improved engagement between various Ministries and the industry, the level of assistance remains minimal" (Games Investor Consulting 2007, 18).

The case for state support is based mainly on commissioned consultancy research reports. One such report, commissioned by TIGA in 2008, notes that "long term decline in the UK based industry is a real possibility" if the trend for global publishers in the UK to downsize continues (Oxford Economics 2008, 3). The report goes on to note that the UK is no longer third, after Japan and the U.S., in revenue generation terms, and, most recently, the UK is said to have "slipped" to fifth behind Canada and South Korea (Oxford Economics 2008, 4). Another pointed

¹¹ This coincided with the European Commission agreeing to allow the French tax credit system for some video game production.

¹² See http://www.publications.parliament.uk/pa/cm/cmallparty/register/computer-and-video-games-industry.htm (accessed 09/03/2012).

to the "structural weaknesses" and "significant challenges" faced by the UK industry (Games Investor Consulting 2008). This message is reiterated in TIGA's manifesto to government published before the last election in the UK (TIGA 2010).

The message is further elaborated in a consultancy report issued in the last year and written by industry veterans for NESTA. ¹³ This report argues that "the sad truth is that we are already starting to lose our cutting edge: in just two years, it seems the UK's video games industry has dipped from third to sixth place in the global development rankings" (Livingstone and Hope 2011, 5). The report goes on to state that the industry is "under threat" from "from countries with generous public subsidies, such as Canada and France, countries with booming online markets (including Germany and South Korea) and cheaper cost studios in Eastern Europe and the Far East" (2011, 22). Interviews with industry representatives further reiterate the message. It is argued that other countries have "subsidized" industries and that there is not a "level playing pitch" internationally (Games Investor Consulting 2008). Development costs are said to be higher in the UK (especially with a fluctuating U.S. dollar), skill shortages are said to be driving up wage costs and some university courses are described as "low quality".

Although the consultancy reports are careful to present their data with the requisite methodological caveats, press releases, manifestos and policy documents based on them are less careful. Part of the current policy discourse calling for an industry tax credit includes the selective and creative use of statistics. As noted earlier, Skillset divides employment in the British industry into the computer games sector and the interactive media sector. If one only takes figures for the computer games sector, or notes that certain companies are shedding jobs,

¹³ See http://www.nesta.org.uk/publications/assets/features/next_gen (accessed 09/03/2012).

one could make the argument that employment in the UK is falling (TIGA 2011). However, if one adds in a conservative estimate for "mobile content" from the interactive media sector, or tries to take into account the growth of "online", "social" and "mobile" games this is a difficult argument to sustain. One also needs to take into account the year from which the data is presented. We need to ask, where are we in the console life cycle, because many companies shed employees at the mid to end point of the life cycle.

Further, although comparatively the UK may have slipped in overall rankings, this does not mean that total employment in the UK is necessarily falling—it merely points to the growth of games employment in other countries. The Oxford Economics consultancy report commissioned by TIGA states that the UK had slipped to fifth place (in revenue terms) behind Canada, South Korea, Japan and the U.S., when one includes online games, and that the number of UK independent development companies in 2008 was 166, down from 295 in 2000, although the numbers employed in development had increased to 9,900 (2008, 4). ¹⁴ Thus compared to previous reports already mentioned in this chapter, total employment had actually increased, and the decline in independent companies may have been due to mergers and acquisitions by multinational companies and growth in company size. In relation to annual revenue the selection of a base year is important. Certain games, like the latest iteration of *Grand Theft Auto*, can have a significant impact on total sales or revenues in a particular year in the UK. Finally, revenues from mobile and online games may, or may not, be included in reports, but by including them countries like South Korea are automatically promoted up the rankings.

¹⁴ The key term here is *online games*. South Korea has a large online games industry but some calculations of the UK industry do not include these companies.

More significant, I would argue, than total employment numbers is the shift from independent to publisher-owned studios, and the shift from indigenous to foreign-owned publishers, a trend Cornford, Naylor and Driver identified in 2000. This trend indicates a shift in terms of who determines what gets produced in the UK and where the value is retained, above and beyond the payments to workers and supporting services. Many of the UK's top independent studios are deriving over two-thirds of their gross revenue from work to hire (Games Investor Consulting 2008, 13); whereas NESTA estimates that just over half of those employed in the UK industry are now employed by publisher/developers and most of these are foreign owned (Bakhshi and Mateos-Garcia 2010, 6). Although the overall numbers employed by the industry do not seem to have reduced much, and indeed if we include mobile and interactive games they may have increased, what we are seeing is a fear, initially articulated in the Spectrum 2000 report and again in the 2008 Oxford Economics report, that global publisher/developers will move to cheaper locations, or locations which have greater state supports, rather than stay in the UK. Given the numbers of foreign-owned publishers/developers in the UK this is a significant and very real fear. The restructuring Cornford discussed proceeded apace in the last decade, and it is clear that countries like Canada, China and some Eastern European countries are indeed cheaper cost locations compared to the UK. Thus the global political economy of labour and national competition for mobile investment are having a significant impact on the discourse employed by local trade associations in the UK.

These reports have been used as evidence to lobby the UK government to introduce financial supports for the games industry. Throughout the report reference is made to "subsidized territories", the threat of global publishers in the UK downsizing and moving jobs elsewhere and more explicitly it is stated that if nothing is done "10,000 jobs could be lost in the UK" (Oxford

Economics 2008, 3). Despite the "GameUp" campaign and extensive lobbying of the media and policymakers no specific tax breaks have been introduced in the UK for the games industry. At various stages it looked like the government was favourably disposed towards the idea only for it to emerge that no action was to be taken. Instead the new UK government announced in 2011 that it would increase research and development tax credits for SMEs to 200 per cent, a move warmly welcomed by TIGA.

When ELSPA was rebranded UKIE in mid-2010 its mission was broadened to include "promoting, nurturing and protecting the interactive entertainment industry in the UK." Its members are the who's who of global game publishing and development including Microsoft, Nintendo, Ubisoft, Activision Blizzard, EA, Disney, Warner Bros, Konami, Square Enix, Sega and NCsoft. Most of these companies are headquartered either in the U.S. or in Japan. Meanwhile TIGA broadened its remit from independent game developers to publisher-owned developers. Their membership is less obvious on their website but their activities are more focused on independent and publisher/developers. Both, it would appear, are primarily occupied with lobbying the government on behalf of the software publishers, launching manifestos and marshalling data to show that the industry in the UK needs "support". Interestingly, although on its website TIGA says it focuses on "political representation, generating media coverage and developing services", UKIE on its website states that it represents the industry to policymakers and has a dedicated "property crime unit". Briefly in 2011 it was thought that the two bodies might merge, but the publisher/developer split remains in the trade associations. ¹⁵ A suspicion that members of UKIE might have actually lobbied against the introduction of a game tax credit

¹⁵ See http://www.gamesindustry.biz/articles/2011-03-03-ukie-moves-on-in-tiga-merger-debate (accessed 09/03/2012).

in 2010 because of the suggestion that games might be conceptualized as "cultural products" seems to have influenced this. ¹⁶ Labelling games as cultural products would have legal and economic consequences for the sale of games in Europe.

This discourse seeking state support is surprising given that the discourse of the creative industries is premised on entrepreneurship and IP generation and was initially seen as a way to move away from the public subsidies and supports which had been associated with traditional cultural policy. For UKIE the discourse has narrowed to one of national lobbying to obtain state financial support and activities aimed at countering game piracy and crime prevention. This is clearly important because most of the IP is owned by multinational publishers. For TIGA the discourse is still focused on supporting development companies but is also now focused on lobbying the UK government for assistance and, as we will discuss later, a neo-liberal approach to education.

The pessimism of these UK reports contrasts with reports written by bodies outside the UK who note that "the UK is the absolute leader (in Europe) with 23 out of the 27 European top ranking (development) studios" (De Prato et al. 2010, 149). Indeed, the UK games industry is still a significant industry player in European terms and the trade focus on the need for production tax credits is driven less by the decline of the UK industry and more, it would appear, by a desire to reduce taxes paid to the "host" state relative to taxes paid in other countries. In

¹⁶ Vincent Scheurer has suggested in a speech at the Develop industry conference in the UK in July 2011 that UKIE and/or a transnational games publisher may have actively lobbied against the introduction of a games tax relief system in the UK on the grounds that it might lead to a more "restrictive trade and legal environment" for games. See his website for a timeline of events at http://www.sarassin.net/GamesTaxRelief/tax.html (accessed 09/03/2012).

particular it is driven by competition for multinational game development projects with Canada who offer attractive state and federal tax credits and have cheaper labour costs. For example, Quebec offers a 37.5 per cent tax rebate on top of generous federal grant schemes, the state of Georgia in the U.S. offers a 20 per cent tax refund and France offers a 20 per cent tax credit on certain types of games production. As the industry consolidates publisher-owned development studios are relocating to locations with better cost advantages and these same publishers and publisher/developers are lobbying hard through national trade associations for greater support in national markets.

What appears to be missing from this discourse is any discussion of the fact that the UK government, often with assistance from the European Commission, already supports its games industry—see, for example, the activities of regional innovation bodies including Games Northwest, Game Horizon in the North East (http://www.gamehorizon.net/) and Game Republic in Yorkshire (http://gamerepublic.net/). Public funding is available to fund trade missions to other countries, to attend trade conferences, and for training initiatives. The Scottish government meanwhile has invested heavily in various incubator and digital media parks including the Embreonix incubator, the Dundee Digital Media Park, the Seabraes centre and the Pacific quay in Glasgow. Other public/private initiatives have included the UK-wide prototype grant-funding service, the Dare to be Digital student/graduate competition and the IC-CAVE research centre and subsequent GamesLab at the University of Abertay, Scotland. Various marketing and branding initiatives have also been supported including the "Scottish Games Alliance" and more

recently "Creative Scotland".¹⁷ Regional branding is one way to obtain European regional development investment funding. In Ireland a corporation tax rate of 12.5 per cent seems to have attracted quality assurance and online community support type jobs, and a new scheme launched in 2010 aimed to financially support indigenous start-ups in Internet and games companies.

Although the main discourse has revolved around research and development and production tax credits to boost production, a secondary focus in public discourses relates to skill shortages. Again the key players in this discourse are TIGA, UKIE, NESTA and Skillset although one or two people, including Ian Livingstone, seem to have pivotal roles. In 2002 the Spectrum report noted that although there was development and publishing talent in the UK there was a weakness in business and project management skills. This skills gap had become a more generalized skills shortage across all areas towards the end of the decade. A more recent statement on skill needs and education is presented in the Livingstone and Hope review Next Gen. The authors state that a brain drain, in particular of skilled and experienced staff, to subsidized studios overseas is beginning to bite (Livingstone and Hope 2011, 10). The report calls game workers "talent", a key pointer to the wider creative industries discourse, and a neoliberal discourse that views education as a factory that produces certain types of graduates to meet industry needs (Banks 2007). Amongst other things they advocate the creation of a "talent pipeline" whereby students will be introduced to computing and other relevant skills earlier in their education.

¹⁷ See http://www.creativescotland.com/ and "Britsoft Firms Back Official Campaign for Tax Breaks" available at http://www.develop-online.net/news/29856/UK-gaming-greatsget-ready-to-rally-Government (both last accessed 09/03/2012).

In the executive summary of the Livingstone and Hope report it is declared that the authors felt that the "education system was not meeting the needs of our industries". Despite the growth in university and third level game related courses there is still, it is stated, a skills shortage and it is claimed that many third-level courses have "serious flaws". These involve courses which do not provide hands-on access to current platforms or do not provide teaching in industry-standard programming languages. Nowhere is there a discussion of the costs involved in maintaining industry-standard laboratories or the risk of skill obsolescence if universities or colleges were to train their students in specific tools and techniques. Indeed TIGA is now involved in promoting privately offered distance education courses through its Train2Game (T2G) scheme and Skillset has been running an accreditation scheme since 2006 to "accredit" courses acceptable to the industry. Only nine computer degree courses have been accredited to date. In Ireland a similar discourse is occurring with articles published on the website www.gamedevelopers.ie debating the issues, key companies like Havok highlighting their difficulties recruiting and the Expert Group in Future Skills highlighting the need for particular skills and the need to adapt third-level courses (McNaboe 2005).

As an academic I can hardly be an independent commentator on the issue of universities supplying industry-relevant skilled graduates. However, as one who has studied the games industry for the past ten years what I feel is missing from this debate is a discussion of why the industry has problems attracting and retaining experienced staff. If we move away from skills to focus on workers we bring in a different perspective. Might the skills shortages have something to do with working conditions in the industry, remuneration, training and accreditation (Kerr 2011)? What is also missing is an acknowledgment that this industry already has a very highly qualified workforce, according to Skillset, with 80 per cent having achieved a degree while the

average for the wider creative industries is 57 per cent. Thus what the industry appears to be suggesting is that university graduates do not have the "particular" skills that certain sections of their industry require and it does not want to have to pay higher salaries to attract/retain those people into the industry from other sectors or to compete with growing industries in other countries or engage in training themselves. A survey of twenty-four game companies in 2010 in the UK found that the first comparative disadvantage for games companies in the UK was labour costs, followed by the low quality of education and skills shortages (Bakhshi and Mateos-Garcia 2010, 4). The fact that labour costs were top is revealing. Although there are probably instances where certain colleges and universities may have inadequate resources and experience to teach certain aspects of video games, the larger debate over whether or not universities are about training or about education looms large. What is missing from this debate is any questioning of the relative role of third-level educational institutions and the industry itself in "training" workers. Should universities in particular be training graduates narrowly for particular jobs or giving them a broader education to prepare them for a career in a highly volatile industry?

Conclusion

At present game companies in the UK and Ireland are involved in all areas of the games production value chain, and changes in the global games industry in terms of technology and restructuring have had a significant impact over the last decade. The UK is still a significant development location in European and global terms both in relation to employment and revenues in real terms. However, it is clear that the growing presence of multinational publisher/developers (employing over half of employees by some estimates) is fostering a sense of greater precariousness and a discourse which focuses on labour costs, talent/skills gaps, government supports and the need for greater IP protection. In the last section of this chapter we

have tried to point to anomalies and contradictions in the discourse of the trade associations and consultancy reports. We have noted that overall employment is growing in Ireland and may be growing in the UK. We have noted that there is considerable public sector support already at the regional and national levels in the UK and that the industry already employs more highly qualified graduates than most media industries. Further, many academic institutions engage directly with the industry (through UKIE, Skillset, Women in Games and student competitions like Dare to be Digital) despite its discourse of skills shortages, brain drains and low-quality education. What the statistics point to is "relative" decline compared to other rapidly developing industries and may indeed hide a good deal of "labour transfer" between branches of multinational companies.

The discourse of the creative industries, nation branding and the development of "strategies of distinction" (Tremblay 2011) clearly informs the current discourse by the trade associations in the UK and their "creative" use of statistics. What needs to be discussed in national cultural and industrial policies are questions related to who and where IP is owned and who is benefiting from its exploitation. We need to discuss working conditions, demographic structures and contractual practices in the industry. We need to ask who is being represented by trade associations and interrogate their reports, statistics and press releases more earnestly. We need to question how "independent" research consultancies and agencies are, and see who they are "independent from". When these reports narrow discussions to focus on the need for government support, on "talent" and on "skills" we need to broaden the agenda. The same actors are arguing for government financial support in the UK and Ireland while they argue for "free trade" and "less regulation" elsewhere.

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