Player production and innovation in Online Games – time for new rules? Dr. Aphra Kerr¹

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Introduction

Capitalism's relentless search for innovation and creativity, or what used to be called novelty, drives a constant search for new ideas, new sources of ideas (not just internal research and development departments but also suppliers, clients, users and others) and for new ways to appropriate these ideas. Academics have attempted to understand these trends with a range of theories focused on the changing user-producer relationship and innovation processes. Within what is called innovation research there is currently much research into open processes of innovation (Chesbrough, 2003), distributed knowledge networks (Asheim and Gertler, 2005) and strategies to appropriate knowledge from lead users and to democratize innovation (von Hippel, 2005). Within design research we have seen attempts to foster user-centred, participatory and peer to peer design practices (Benkler, 2006, Kerr et al., 2009) and within media research the growth of studies on participatory and co-creative audiences (Jenkins, 2006). These new discourses, design practices and relationships involving producers and users are often seen as democratizing innovation, and empowering users. An implicit or explicit rational is that they will improve the usability and usefulness of an artifact for users and therefore improve sales and profits. A critical perspective on these trends would suggest that all is not as it appears in the dominant discourses and we need to ask serious questions about who is producing and creating value in these innovation networks and who has the right to appropriate it (Kücklich, 2005, Terranova, 2000).

The traditional approach to production in most media and games textbooks tends to focus on professional media workers in public and private companies who deliver finished artifacts to their users. Fan productions tend to fall into the audience section of the traditional textbook. My own book was no exception (Kerr, 2006). However, with the spread of the internet, the development of Web 2.0 and the diversification of online games, from massively multiplayer online games (MMOGs) to networked PC and console games, the role of the professional producer has been shifting to incorporate more service type activities (infrastructure and community support, paratexts, content updates etc.) and the role of the player has been shifting to incorporate a wider variety of productive roles (content generation, testing, marketing and recruitment). This chapter starts from the position that production does not stop when a product is launched in the marketplace, and particularly with online games, the form and nature of the relationship between the professional producer and game players is crucial to the ongoing success of

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¹ The author wishes to acknowledge funding support from the Irish HEA PRTLI Cycle 4 programme. For more on the Future Communication Networks and Services project see http://futurecomm.tssg.org.

the game. Thus we need to see production as an ongoing process involving a range of actors many of whom are trying to create various forms of capital (social, cultural and economic) and value (exchange value, use value, sign-value) from the process. These actors and values often come into conflict and while these production networks are sometimes conceptualised as participatory or co-creative production networks this chapter wishes to explore if these concepts are adequate to capture what is going on here.

The chapter cautions against taking an overly optimistic or overly negative approach to such developments. It asks us to consider what is behind the increasing tendency to encourage user productions and what do empirical examination of such productions reveal? Is what we are observing actually co-creation or is it that the professional media industries are finding new ways to encourage player production and to appropriate and extract value from this labour? Finally, are the relationships between professional game producers and game players governed and regulated in the most effective and fair manner to recognize and reward each actor? Online games provide a fertile, but diverse, ground to empirically and conceptually explore the concept of player and community production and innovation.

Elsewhere in this book authors have explored the legal structures restricting player agency and there is an ongoing debate in economics and in media studies as to the effectiveness of intellectual property law as a means to regulate and reward cultural producers. Drawing upon both primary and secondary research on amateur and professional player productions and user knowledge accumulation this chapter hopes to contribute further empirical and conceptual insights into the changing role of the player in relation to game production and innovation². In what follows we will firstly explore the rise of the 'user' in innovation and media theory³. We will continue by examining some contested forms of player production and their potential contribution to value generation including data generation, game governance, user generated content and cheating. We will then move on to explore how these micro player practices reflect and link into broader political economic trends in the professional games industry, namely outsourcing of certain aspects of production and training. We conclude by examining the implications of the implicit and explicit ways by which professional producers facilitate and accumulate amateur productions and by calling for new rules to govern these new forms of production.

The turn to the user, unfinished designs and user production in games

Elsewhere I have written about the process of game design in a small games company

² This paper draws upon my postdoctoral research on the global games industry which involved face to face interviews with workers in game companies in Ireland, the UK and the US from 2000-2005 and ongoing research into national policies to support the games industry. Part of the paper draws upon an online survey of Irish game companies conducted in 2009 with Anthony Cawley. Finally, the paper draws upon ongoing collaborative research with Stefano De Paoli, whose post-doctoral research involves participant observation and archival analysis of the online game Tibia, and Max Keatinge, whose MLitt project involves participant observation in World of Warcraft and Eve Online.

³ While web 2.0 applications are relatively recent theoretical and empirical work on for example user panels and participative design have a much longer history.

and how game design teams tend to design games that they like themselves and how this is further influenced by the needs and wishes of publishers, marketing departments and other external actors (Kerr, 2002). For many game companies who produce off the shelf boxed products the engagement with users is primarily mediated by publishing companies who tend to want to replicate previous successes and market to existing markets. This approach is still prevalent in the cultural industries despite the rise of strategies to explicitly and implicitly involve users in the design process in other sectors, such as product design, and there is often very little contact between designers and their users in boxed off the shelf media products even if the games are play tested with actual game players (Oudshoorn et al., 2004). Over ten years ago Silverstone and Haddon (1996:51) noted that designers' knowledge of users was often tacit, contradictory and untested and in this uncertain environment powerful sub-groups compete to determine design. By focusing only on upstream production processes we are in fact falling back on the old linear innovation models which placed user involvement at the end of the process and discussed them mostly in terms of consumers, impacts and effects. Indeed Stewart and Williams (2005) argue that many theories still conceptualize design and production as an upstream process which delivers a finished product to the market place which contains particular conceptualizations of 'the user' and 'user activities' and which the user encounters and must adapt to.

By contrast, the growth of web 2.0 and online games in the last decade have opened up new opportunities for professional producers to engage with game players: explicitly, through online forums and community support and implicitly, through tracking and monitoring player behaviour. While professional development companies design the environment and attempt to configure how the player engages with the game, they are also faced with new community and network challenges and ongoing production issues. If we view production as a social process involving multiple cycles of design and use then we have to recognize the unfinished nature of artifacts which are launched on the market, the fact that technical artifacts change over time and that part of this change over time is induced or produced by users and/or their knowledge, or knowledge about them, and their labour. This line of thinking takes seriously concepts from the sociology of science and technology which argues that we should view technology as malleable, and as something whose meaning, use and interpretation changes over time and only stabilizes as networks of human and non-human actors coalesce (Bijker, 1995, Callon, 1987, Mackenzie and Wajcman, 1999). It also accepts that the design of technological artifacts involves political decisions and that the design of artifacts may exclude certain users and actions (Wajcman, 1991, Oudshoorn and Pinch, 2005). Digital networks in general, and online games in particular, enable us to research and explore the extent to which production and innovation occurs throughout the lifecycle of an artifact and an STS perspective alerts us to the degree to which users are constrained, negotiate and indeed translate technological artifacts in the marketplace. This perspective highlights how the role of game players may move beyond beta testing, focus groups, purchasing and gameplay and how conflictual issues may signal the need for alternative rules and practices.

A crucial outcome of this line of thinking is that game players are more than consumers and the relationship between producers and users needs to be respected, symmetrical and

governed in such a way so as to reflect this important role. In other words professional producers (i.e. developers/publishers) need to be transparent in their relationship with game players and conceive of new ways to reward and involve game players beyond game play which reflect the fluidity of boundaries between amateur and professional producers and the online and offline world. Of course not all users and players contribute in the same ways but what are sometimes called deviant users (e.g. cheaters, farmers, etc.) or those engaged in transformative play, while usually viewed as problematic from the designers perspective, can also be viewed as contributing to value generation and the innovation trajectory, as we will discuss later. Finally, we also need to move beyond concepts of individual player and user innovation to what Van Oost et al. (2009) call 'community innovations' to recognize the collaborative efforts of players who often work together in groups, guilds, teams and networks. Most writing on users and co-creation theories tend to individualise such activities and indeed tend to follow individualized actors in a tendency to replicate the romantic auteur approach rather than follow the interconnections and overall assemblage. As with production in professional game companies, non market player productions can be collaborative as well.

It is important to situate these micro activities and concepts within broader macro trends, i.e. to examine the broader context of game and cultural production. While it is clear that increasingly the tools of production are being made available to end users and game players, it is also clear that there has been a strengthening of legal regimes and the development of new techniques to enforce intellectual property regimes and appropriate the products of these tools at a national and international level. In a recent chapter David Hesmondhlagh (2008) examines the marketisation of cultural production and the strengthening of copyright laws globally. His overall point relates to how 'forms of creativity and knowledge which were not previously conceived as ownable are brought into the intellectual property system, making them available for the investment of capital and the making of profit' (2008:97). Quoting the work of the critical geographer, David Harvey, who in turn builds upon the work of Karl Marx, he notes that what we are seeing are new forms of 'accumulation by dispossession' and this is particularly evident in attempts to convert common collective property rights into exclusive private property rights (2008:106). Hesmondhlagh argues that in accumulation by dispossession one of the key trends is the privatisation and commodification of previously public and communal goods. A similar point is made by Kline et al (2003:216) when they argue that the socialization of production in games has 'a clandestine implication: erosion of ownership'. Thus when we speak of production we need to also examine who owns the rights to the production, who asserts these rights and in what ways.

Thus the emergence of a greater range of user production practices, facilitated and governed by professional producers in transnational production networks, has to be seen in the wider context of global capitalism and neo-liberalism. The current phase of capitalism has seen the development of new 'majors' in the media industries and in games, i.e. large global networked organizations who act as a control hub governing finance and distribution while overseeing large numbers of small units of production. Lash and Urry (1994:125) argue that you can have decentralization of production along with centralization of distribution. Where once the trend was towards highly centralized

hierarchical corporations we now have a variety of corporate forms including multidivisional structures in which certain productive activities and other responsibilities are decentralized but where overall control remains with a centralized higher management. While these divisions compete with each other in terms of profitability and may be geographically distributed to operate close to markets and users, they remain vertically integrated. Wayne (2003:86) in his examination of the film industry stated that 'production was broken up and 'outsourced' to other companies, whether subcontractors or subsidiaries'. It would appear that this trend is also occurring in the games industry and the fragmentation of production into smaller units is continuing and is now being distributed across a variety of market and non market units. With the growth of information and communication networks, control of these units can remain highly centralized and regulated even if this control is contested and negotiated. The driver for this dispersal of production is the need to maintain the pace of innovation through engagement with a diverse range of users and knowledge, while reducing the overall cost and the risk of product failure. It is within this wider context that we have to view the trend towards player's explicit and implicit involvement in productive practices and value generation in online games.

Implicit forms of accumulation and value acquisition

Akrich (1995) notes that designers use explicit techniques, like market surveys and consumer testing, and implicit techniques, such as the 'I – methodology' (or designing for oneself), experts and information on competing products to inform their design processes. Based on her research she concludes that implicit methods are often more powerful and important than explicit ones. What is new about online games, social networking sites and other online communities is the extent to which **implicitly gathered** data on user or player behaviour can be easily collected, analysed and used. This information can be used in a positive manner to model player behaviour and adapt and shape the game environment (Charles et al., 2007) or in less positive ways to supplement revenue through its use in targeting advertising and product placement or to monitor and discipline the game player. While actually exploiting and deploying this data may be far from straightforward for the producer, this is a qualitatively different form of user involvement in innovation and design that methods deployed to date and is largely unseen and unmonitored by players. As van Dijck notes, what is often left out of accounts of new Web 2.0 applications is the 'substantial role a site's interface plays in maneuvering individual users and communities' and that users 'willingly and unknowingly' provide important information to site owners and metadata aggregators (van Dijck, 2009).

Space will not permit a full treatment of all the uses that player data can be put to and in fact much research remains to be done to explore producer practices in relation to implicit information gathering and use. In what follows we will briefly focus on game governance and player disciplining. When a player signs up to an MMOG and accepts the terms of service, players are submitting to the monitoring of self and of one's computer and to providing information to the company who publishes/develops the games and in some cases third parties. By installing and accepting the license agreement to a game players

submit to both the external and the internal game rules and they must agree to ongoing monitoring of their play behaviour and their machines. Most hardware and software interventions in games are introduced under the guise of increasing security and improving the game play experience but the impact is that all players are monitored and are open to automatic disciplining and in some cases mistaken disciplining (Taylor, 2009, Taylor, 2006). Unfortunately most players have little knowledge about the gathering of such data until they infringe upon certain rules and regulations and discover that they have been flagged for 'cheating' or deviant play and punished in some way. Indeed it is clear that the relationship between producer and player in MMOGs in particular is not symmetrical and while there is much monitoring, most games lack channels and procedures whereby the player can defend themselves. This is not to say that game players have no agency, but they are aware that some of their activities may contravene either the explicit rules of the game or more informal community rules, and in the absence of means to defend themselves they develop a range of strategies from selfsurveillance to purchasing third party software to protect their avatars and accounts (De Paoli and Kerr, 2010).

The move to what Poster (1990), Taylor, T. L.(2006) and Albrechtslund (2008) would call 'participative surveillance' certainly introduces a new element to the producer-user relationship which may or may not be to the benefit of the user. It also signals the degree to which surveillance is not all top down, but that game companies rely on players to coregulate and report on deviant behaviour. In line with contemporary neo-liberal regulatory systems in Western economies where regulation has moved from state forms of control to co and self-regulation by industry, it is informative to observe the ratio of game masters to players in games and the degree to which game producers rely on automatic tools and player cooperation and reporting to police their games (Humphreys, 2008, de Zwart, 2009, Humphreys, 2009). One example of direct player involvement in game governance and design can be found in the democratically elected committee of nine players who comprise the 'The Council of Stellar' in the MMOG, Eve Online. However, depending on your perspective, these players are engaged to 'govern' other players in Eve and have no formal power or are 'empowered' players who are elected to negotiate future design directions with the professional development team. Again however the role comes with some rather onerous requirements including that they should reveal their true identity on the forums and be prepared to monitor and report back on player concerns. It remains to be seen how this works in practice.

An area which has received some attention from game studies scholars in the recent past and again provides useful empirical material for thinking about information gathering and monitoring, producer-player relationships and how player practices can be productive is the area of **cheating**. Cheating in games is a negotiated practice and some activities which may be defined as cheating are accepted by player communities while others may not be. Again different publishers taken different approaches to cheating but many now rely on automatic tools to implement their EULAs and to supplement player reporting. Consalvo (2007) has provided the most comprehensive investigation of the practice to date and provides useful detail on the extent to which the industry capitalizes economically on the practice (through providing cheat codes, walk throughs etc.) while

needing to appear to regulate it also. However, we can also view cheating as a practice which provides forms of knowledge that may result in further innovation by the producer (who acts to exploit and regulate the behaviour), by third parties who offer cheating services to players and by players who attempt to deal with the practice (De Paoli and Kerr, 2010).

In ongoing research being conducted with De Paoli, S. in the MMOG Tibia⁴, we have found extensive online negotiations between players and third party companies who produce commercial cheating software and a number of responses from Tibia's publisher which have included mass bans, updating licenses and the development of an automatic cheat detection tool (De Paoli and Kerr, forthcoming). Each new iteration of the automatic cheat detection tool results in a new process of research and development for the software cheating companies in consultation with their lead users, i.e. players who cheat in this game. Indeed the cheating players must provide initial data from their playing experience as to how they believe the cheat detection tool works and need to test in-game any new cheating technologies. So the cheating players are performing much of the initial research and indeed the testing of the tool. They then provide feedback via online forums. It is again evidence of the circular nature of innovation, the value that players, and the knowledge they have of a game, can provide to professional producers and the economic benefits that different companies can derive based on this free labour. It is unclear at this point to us as researchers, to the cheaters and to the cheating software companies how exactly the cheating detection tool operates but evidence from other games, especially World of Warcraft, would suggest that such tools are very invasive and operate as spyware sending back regular screenshots of one's computer to the monitoring centre and scanning a player's hard drive for offending software and copyright infringements. Again much of this activity is not transparent to the player and while they willingly agree to the 'consent to monitor' clause in a game's EULA, the manner in which this is executed would appear to be well beyond what is necessary in an entertainment product.

One of the key rights asserted in EULAs relates to ownership of intellectual property. We can see the struggle for ownership quite explicitly in relation to user generated content and more specifically game **modding**. In game studies scholars have been attempting to critically assess the economic value and social capital created by volunteer game players. They also highlight the contentious area of ownership over the content created and document how publishers have penalized copyright infringements in user generated content while at the same time benefiting themselves economically from the productions (Postigo, 2003, 2007, 2008, Kücklich, 2005, Taylor, 2006, Nieborg and van der Graaf, 2008, Søtamaa, 2007). The focus in this work has been on the immaterial labour of game players (de Peuter & Dyer-Witheford, 2005) or playbour (Kücklich, 2005). As Postigo 2003:597 notes 'hobbyists' leisure work is converted from gift to commodity, what results is the circumvention of the initial investment risk for the commercial developers as the development work is transferred to the fan base where costs are negligible.'

Player motivations for modding can be diverse and include accumulating social capital

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⁴ www.tibia.com

and demonstrating skills to potential employers in the games industry in order to move from amateur to professional roles within the industry. However restricted players are by the tools and engine they use to mod, there is nevertheless scope for incremental innovation in this type of user activity and examples exist of mods which were commercialized. Indeed not all mods circulate for free, although selling one's work for a fee usually infringes upon the terms and conditions of the initial license of the game. At the very least the circulation of mods for a game extends the life of a commercial title and can provide valuable branding capital during the period between game releases or updates. Most modders circulate their work for free on the internet, encouraged and facilitated by online spaces provided by commercial companies. Much of the existing academic work on modding notes that players participate willingly in these relationships and their participation is '[s]imultaneously voluntarily given and unwaged, enjoyed and exploited' (Terranova, 2000).

Mactavish (2008) notes that player behaviour is simultaneously submissive and resistive and his work on modding has found that companies are developing practices which 'support player modification at the same time that they protect intellectual property and maximize profit.' Mactavish talks of 'authorised production' signaling that the locus of control in modding relationships rests with the producer. While these relationships vary from company to company, the trend is towards companies seeing their community as a potential source of marketable content. The recent changes to the licensing agreement of 'Little Big Planet' by Sony and their moderating of the user generated content is just another example of how corporations are attempting to exercise control over content produced by users (Ralph, 2008). What has annoyed users is that this action is taken without consultation and the entire player produced level is removed from the host site, not just the offending material. A statement from Sony on their 'threespeech' website outlines the extent of player creation taking place and the high level of plays by other players of user generated levels. It also states that that there have been very few infringements of copyright, that many complaints have come from other users and that the company is actively working on improving their communication procedures with users⁵. Again what we are seeing here is control of user behaviour through a network of human and non-human actors, and involving EULAs/licenses, code, automatic detection tools and player complaints. The data gathered and the techniques used contribute to the economic goals of the publishers, as Humphreys details in her study of Everquest and World of Warcraft, but, as she concludes, 'the forces of government they bring to bear seem to exceed what is necessary for the functioning of such environments and to compromise the rights of participants. The lack of accountability of publishers needs to be taken seriously (2008:166).' The taken for granted position in Western commercial games currently appears to be that companies assert ownership of everything they can and even if they do not assert these rights immediately, it is within their power to do so when they wish.

Nieborg and van der Graaf (2008:187) talk about modding as 'the practice of systematically outsourcing certain design and innovation tasks from the locus of the game

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⁵ Se http://threespeech.com/blog/2008/11/littlebigplanet-community-content-update/ accessed 16th of November 2009.

developer to the user'. The case studies provided by Banks on games produced by Auran in Australia point to explicit attempts to develop new forms of collaborative production in the early stages of a game's development (Banks and Humphreys, 2008). In these cases specific tensions arose over whether or not user generated productions should be freeware or payware and over the introduction of fixed timelines for delivery of amateur work. Both of these points signal that production relationships between professionals and amateurs may see entirely different expectations and goals come into conflict. Banks has gone on to argue against automatically assuming that what we are seeing in user and amateur production is the displacement of labour and exploitation and argues for seeing the development of new 'hybrid production networks' (2008:405) or 'social network markets'. What appears to be missing here is an analysis of power differentials between actors and the tendency for markets and firms to encroach on and attempt to possess nonmarket productions. The point is well taken that the relationship is not necessarily exploitative but there would appear to be points in this story which are. Banks admits that one motivation for encouraging user input was that Auran needed to reduce costs of production and some online sources state that the company needed users to help in the translation of the game and in the development of regional/localized content for the game, something that is highly costly and challenging. In line with Mactavish, he notes that what is needed is a new understanding of the mutual obligations of users and producers in these emergent online relationships.

More explicit forms of accumulation and value generation in games

As Kline et al. note, the digital games industry is part of the 'perpetual innovation economy' (Kline et al., 2003: 66) and the willing, but largely implicit and not necessarily transparent, participation of players in information and knowledge provision, content generation and game governance indicates a range of areas where player practices are adding to the economic value generated by professional companies. This is in addition of course to their contribution to the game through gameplay, player subscriptions and micropayments. It is worth situating these emergent player practices within more macro political economic trends within the digital games industry including the move to offshoring and outsourcing production, spurred by regional competition for producers, and the accumulation of knowledge and intellectual properties through company acquisition and programming competitions.

Certainly globally we have seen an increasing trend towards offshoring and outsourcing of parts of the production process to Canada, South Korea, China and Eastern Europe. Primarily this trend is driven by an attempt to reduce labour and capital costs and by attractive local industrial and fiscal policies. A recent survey of the Irish games industry found that online community support, porting and marketing functions are the new 'footloose' areas which multinational games companies are locating outside their home market and close to their target markets (Kerr and Cawley, 2009). Over half the jobs in Ireland in the games industry are in customer support with a focus on the European and Asian markets. Blizzard for example has a large 'European customer support' branch in the Republic of Ireland which employs a range of European nationals and provides support mainly for World of Warcraft. In an interview about their recent expansion in

Ireland, the chief operating officer stated that costs in Ireland were very competitive and that 'local employment laws struck a good balance between the rights of staff and employers' (Collins, 2009). Most companies who responded to our survey stated that access to labour was a key reason for locating in Ireland and the diverse range of nationalities employed and relocated to Ireland points to the international dimension of their work and perhaps to the less than favourable balance in employment laws elsewhere in Europe. It is also notable that there would appear to be, across the industry, a very low participant rate in unions. Less explicit, but nevertheless important, has been the significant support, financial and otherwise, of the local industrial development authority⁶. The current system of supports is not game specific but Ireland has a corporation tax rate of 12.5% which is highly attractive to companies who are making a profit!

When we look at the type of work being undertaken by small game companies in Ireland, both with Irish and foreign ownership, the focus is on work for hire, on porting games across platforms, and on acquiring and aggregating intellectual properties. For successful companies, the trend has been for them to be acquired by multinational companies. For example in the past three years Demonware, a network middleware company was acquired by Activision while Havok, a physics middleware company, was acquired by Intel. Both companies were successful in commercializing what were initially university based research projects. At least in the case of Demonware it is clear that their technology is now only available to Activision projects, much to the dismay of their former clients (Fahey, 2007). Company acquisition is of course a key strategy to acquire successful intellectual properties and to restrict access to them without having to invest in the initial risky idea. Overall, the past decade for the Irish games industry has seen good growth in employment in support functions in multinationals and in middleware but also tremendous flux in the content creation part of the value chain.

In other countries offshoring and outsourcing of elements of the game production process has been encouraged by game specific supports and would appear to have included more professional production work as a result. Canada, for example, at both a national and regional level has been successful in attracting elements of the global games industry using tax incentives and employment supports (Dyer-Witheford and Sharman, 2005). In 2008 France introduced a tax credit system that enables game producers (regardless of nationality of employees and including outsourced work) to apply for a significant 20% tax credit on production costs (excluding testing and support) of particular types of games. In the UK there is ongoing lobbying of the government to provide tax credits and other financial supports to game developers (in particular) to help them to compete with Canada, South Korea and other rapidly emerging centres of game production (Oxford Economics, 2008). It would appear that countries are keen to encourage, to relocate or to keep production activity in their countries and are receiving significant public funding or reductions on tax to locate in particular areas. Thus production activity and labour are moving to lower cost sites — a fact borne out when we see that more German nationals are

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⁶ See http://idaireland.com/why-ireland/

⁷ See Commission Decision of 11 December 2007 on State Aid C 47/06 (ex N 648/05) Tax credit introduced by France for the creation of video games.

employed in the Irish games industry than Irish citizens (Kerr and Cawley, 2009).

Programming/modding competitions are another example of this tendency to outsource, but these relate more to training and the provision of a constant supply of suitably trained staff. In an industry where passion and portfolio are as important as a university qualification, the rise of industry sponsored amateur game production competitions requires some critical investigation. On the surface game production competitions appear to be a great way for students and 'indie' developers to gain experience of working on particular technologies, under conditions similar to those in a professional company and in some competitions to obtain advice and mentoring from industry professionals. What is clear however is that the sponsors in some cases, and affiliate companies in others, use the competitions as a way to introduce and market their tools to students, - a type of outsourced training - which is used to supplement the more general education obtained by most students on games and related courses. As with user generated content, the games produced often become the property of the competition organizers and sponsors and participants must agree to their image and information being used in media promotions during and after the event. Indeed participation in the competitions is strongly regulated with extensive terms and conditions. An added bonus for the students and companies is that the 'hothouse' competitions lead to a final 'beauty pageant' where the winning teams and participants meet companies who are recruiting and receive free sponsored hardware and software. When these activities are placed alongside the relatively low level of expenditure by game companies on in-house training of staff (Grantham and Kaplinsky, 2005), the high costs of using recruitment agencies, the rapid pace of technological change and the requirement for staff to keep up to date with new software and hardware, mostly through learning by doing on the job, and the 'brain drain' of talented and experienced staff from the industry one suspects that these competitions require more critical investigation (IGDA, 2004, Kerr, forthcoming)⁸. As Søtamaa (2007) notes 'mod competitions bring together a variety of industry practices ... to enculturate the free modder labour' and amateur gaming competitions would appear to work in a similar way.

What is clear from the examples provided is that professional game production and related functions are moving to lower cost locations and that they are becoming increasingly active in the development of gaming competitions and related events which is yet another strategy through which they encourage amateur productions, acquire intellectual properties and recruit amateur developers. These competitions would appear to operate as a public/private partnership given that countries forego taxes, industrial development bodies provide space and money to run competitions and lecturers/teachers give up time and curriculum space to facilitate such competitions. In addition amateurs and students give up their leisure or study time to work on these projects. When we place these examples alongside the increasing interest in player generated content we should not be surprised at the youthful age profile of the professional games industry and its

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⁸ While I have not systematically analysed these competitions I have noted their rise in Ireland and the UK. These competitions attract significant local public funding and time. Many university courses in the UK and Ireland also have sponsored labs, equipment and or software from game companies and there is an ongoing debate about the need for third level institutes to 'train' students with 'specific skills' for the workplace.

ability to continually generate and acquire new game concepts and new technologies but we should ask about the impact such trends are having on professional working conditions, diversity in the workplace and reward structures (Kerr, forthcoming).

Concluding comments

We have discussed in this chapter a limited number of ways through which players are explicitly and implicitly involved in game production, innovation and value creation: from game governance to modding and cheating. We have related these micro forms of player production to wider trends within the industry to offshoring and outsourcing elements of production in order to reduce costs and maintain levels of production. What these examples have in common is the extension of rules governing professional production to amateur production and the increased commodification and accumulation of legal rights over amateur productions.

The examples we have examined in this chapter of player production can not I believe be seen as 'co-creation' in the sense that they are created in a symmetrical and transparent process. It is an uneven playing field. The rules are not the same for the different actors and they vary from game to game and from territory to territory. Player rights and worker rights vary, from modders to cheaters and from workers in Ireland to workers elsewhere in Europe or in the United States. Professional producers exercise their rights in different ways but increasing they codify them, survey them and punish them in similar ways. Overlaid on these player activities are discourses of empowerment, co-creation and participation – discourses that do not in fact, in their deployment in commercial spaces, confer power to the user. If we re-label these amateur practices as innovative activities and recognize that player knowledge is expert not lay knowledge, we may be able to adopt an empowering discourse that can argue for more power and rights for players. If we acknowledge the collaborative nature of game production we must move beyond the heroic inventor/designer models to more distributed, collective and transparent understanding of production.

Players are not free to do what they want, these are offered contingent freedoms (Jarrett, 2008), and like any freedoms they should be open to negotiation and reformulation. Many current strategies for encouraging player production appear to have considerable drawbacks for players including: considerable time and effort expended for little explicit reward, dispossession of ownership rights, potential to unknowingly infringe on property rights but nevertheless to be punished, the valorization of expert user needs and values to the detriment of absent or unknown players, and the infringement or exploitation of players personal information. There are some interesting examples of attempts to introduce more explicit and transparent relationships between producers and players but few attempt to develop new revenue sharing business models, creative commons licensing agreements or transparent player monitoring practices. These would indeed be welcome innovations in the games production field.

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