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Ruling the virtual world

Governance in massively multiplayer online games

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ABSTRACT This article explores governance and control in Massively Multiplayer Online Games (MMOGs). It examines areas where tactics of control are mobilized: by developers through design processes, by publishers through community management and legal practices and by players through participatory practices. As people with access to online technologies come to live more of their social lives (and work lives) in online environments, and to construct identities and communities in proprietary spaces, the terms under which they do so become increasingly important. In a context where economic value resides in intellectual property and immaterial labour, and where social networks have economic value extracted from them, the corporate practices which harness this value and the responses of participants become interesting for sociocultural and economic reasons. Using *EverQuest* and *World of Warcraft* as case studies, this article traces the flows of power between publishers, developers and players in the networked production of MMOGs.

KEYWORDS computer games, governance, MMOG, online games, social software, video games

Introduction

This article is about governance and control in Massively Multiplayer Online Games (MMOGs). It explores a number of areas where tactics of control are mobilized – by developers in the design process, by publishers through community management and legal practices and by players in their participatory practices. In the field of online media studies the concepts of convergence and participatory media have become commonplace, but the ways in which the practices associated with them are reorganizing and shaping social and economic relations have not been explored fully yet.

MMOGs are engaging social media that are growing in popularity and significance. They are exemplary online applications – social, commercial environments that are fun and often profitable. Millions of people



play them worldwide. They represent a convergence of more than just technologies. They are both media product and media service. Participants not only buy the game, but pay ongoing subscription fees to gain access to the game world.¹ Publishers manage not only the intellectual property of their product but also the ongoing community relations within the virtual worlds that they maintain. Production is not completed at launch, but is an ongoing process, with content produced by players as well as paid developers, and with social networks generated by players a source of economic value.

For the reader unfamiliar with MMOGs, they are persistent online virtual worlds, usually with three-dimensional graphics, where players represent themselves with 'avatars' and navigate the environment in pursuit of a wide variety of game goals. They play with other people inside the virtual world, forming groups, teams, guilds or clans. They are intensely social environments and can retain players for years. The average amount of time spent in an MMOG is around 20 to 24 hours a week (Kline and Arlidge, 2002), with some players spending up to 40 hours a week in game. Surveys have shown that generally this activity is not at the expense of outdoor or offline social activity, but most often replaces other media engagements such as television watching (Brand, 2007). The most successful MMOG to date is *World of Warcraft*, which in January 2007 claimed more than 8 million active subscribers worldwide (Blizzard Entertainment, 2007).

The circulation of cultural meanings and the building of, and access to, cultural capital increasingly occurs through participation within these proprietary spaces. Publishers own, and to varying extents control, virtual worlds where cultural capital is built, and where participation increasingly will enable cultural and social inclusion. This article examines the conditions and practices of governance within two MMOGs (*EverQuest* and *World of Warcraft*) in an attempt to understand the effects of ownership on the cultural and social activities of the users. Does the proprietary status of MMOG spaces shape the social relations within them, and in what way? How does the fact that social networks are of increasing economic value to proprietors affect the kinds of services offered and the kinds of control exerted? How do users respond to publishers' attempts to shape their interactions?

Participatory media represent a major shift in the structures of media production (Bruns, 2007; Humphreys, 2005). A linear media production process consists of an author, a finished text (such as a book) and a publisher which distributes the text to an audience that consumes it (but does not change it). The networked production of participatory media, where the 'text' is launched and then added to by users in a continuous process of development, significantly changes the concepts of 'author', 'text' and 'consumer'. In the process the organizing institutions are challenged.² In networked production environments, where 'consumers' have become



productive users, authorial control is dissipated and the text is never finished, the institutions associated with linear production models struggle to maintain control.

A company publishing an MMOG must come to terms with its new role as a manager of communities as well as intellectual property, and in the process negotiate a different form of control. Authorial control in an MMOG is present in the basic platform code of the game, but the very nature of participatory media is that they are emergent. Unexpected outcomes and developments emerge from having so many people contributing to the creation of the ongoing 'product'. Control of the text, so firmly in the hands of the author in a medium such as the book (although control of meaning is another matter, of course), has slipped to some extent into the hands of users.

The framework offered by Foucault (1994[1978]) on governmentality presents some useful tools for analysing how control manifests in these media environments. In tracing the development of the 'art of government' from pre-modern regimes of sovereign power through disciplinary power to the modes of power used in 'governmentality', he identifies an array of complex strategies, knowledges and effects of government. Nikolas Rose, building on Foucault's work, argues that

it is possible to differentiate the exercise of power in the form of government from simple domination. To dominate is to ignore or to attempt to crush the capacity for action of the dominated. But to govern is to recognize that capacity for action and to adjust oneself to it. To govern is to act upon action. This entails trying to understand what mobilizes the domains of entities to be governed: to govern one must act upon these forces, instrumentalize them in order to shape actions, processes and outcomes in desired directions ... To govern humans is not to crush their capacity to act, but to acknowledge it and to utilize it for one's own objectives. (Rose, 1999: 4)

MMOGs are environments owned and run by corporations interested in turning a profit. However, the good governance of game spaces is one of the things that will determine their profitability. How is compliance with the game rules and the goals of the corporation achieved? How are satisfied communities generated and supported? How are players mobilized in the service of the game? Trying to understand the ways in which government is achieved within these spaces is the focus of this article. What are the 'multitude of programmes, strategies, tactics, devices, calculations, negotiations, intrigues, persuasions and seductions aimed at the conduct of individuals, groups, populations' (Rose, 1999: 5)? Further, while achieving corporations' objectives, can governance be achieved through means that do not necessarily diminish the lives of the participants? The exercise of power is a generative process, and the players in MMOGs are often cognisant of their own position, working both with and against publishers in strategic ways that advance their own goals. Sometimes those goals align with those of the publisher, and sometimes



not. It is not always an oppositional relationship and although power is held unevenly, players do have agency. The tactics of media publishers are met by the tactics of productive players. We can understand the processes of government deployed by the publishers as an attempt to work with the capacities and potentials of the populations within their game worlds, rather than any outright project of domination. While a virtual world is not on a scale that represents society-wide structures, the tools or the 'analytics of government' suggested by the work of Foucault, Rose (1999) and Dean (1999) offer a useful way for teasing apart the heterogeneous practices of governance and control in a virtual world.

Building on Foucault's work, Dean (1999) identifies four key, interlocking axes which are helpful in identifying 'regimes of practice'. The first, 'fields of visibility', concerns the techniques used to make the population visible and hence knowable. These include surveillance, the generation of statistics, maps and so on. These are necessary to understand what governments and organizations seek to govern. There are various methods of surveillance available in online environments and the production of data on populations within games is easier than it has ever been for other media. How these data are used reflects the structures and demands of the commercial enterprise.

The second concerns the technologies and techniques that constitute the minutiae of the government practices that seek to shape the behaviour of those governed. This article focuses on the techniques employed through design and code to suggest or compel some forms of behaviour over others. It examines the disciplining techniques and legal mechanisms which make up part of the multiple strategies of government in this environment.

The third, as Dean suggests, is that forms of knowledge that arise from and inform the activity of governing are important. There are discourses which construct certain understandings of what constitutes the 'truth' of a situation over others. This article identifies several key discourses that construct particular understandings of what an MMOG is and why some behaviours are seen as problematic. The discourses of intellectual property, of the productive co-creative user and of the consumer, are all deployed strategically (if somewhat contradictorily) to provide a rationale for various acts of governance.

The fourth is that attention to the formation of identities within the space of governance is necessary. What kind of ideal 'citizen' do those who govern want, and how do they go about shaping that identity? Dean points out that it is not that those who govern determine the identities of the governed; more that they suggest, facilitate, reward and foster various attributes, the more that people identify with them. Thus 'much of the problem of government here is less one of identity than one of "identification"' (Dean, 1999: 32). Who is the ideal gamer in an MMOG and how do the publishers and developers seek to foster that identity?



A shift in marketing practices can be seen as one of the strategies of identity formation at play in broader new media environments. It is certainly an element of the formation of an ideal gamer identity. In MMOGs we see an example of complex new media environments where the distinctions between consumers and producers are breaking down. Players are productive (as are bloggers, MySpace (www.myspace.com) and Facebook (www.facebook.com) users, Wikipedia (<http://wikipedia.org>) contributors and so on). The marketing circuits of capital³ now work with the idea of harnessing the productive energies of users. Increasingly, we are urged not just to consume in the marketplace, but to produce for the marketplace through participation. It is noticeable that the marketing strategies for the latest converged media technologies are full of verbs that encourage the audience to *do* things: to participate, act, produce. A recent Nokia advertisement was full of screens with a single verb on each: 'talk', 'argue', 'shout', 'participate', 'share', 'witness' and so on.⁴ The harnessing of our desire not just to consume, but to produce and communicate, into the global flows of capital is intensifying. Participation has become a part of consumption. We are no longer citizen consumers, watching broadcast media and its advertising, creating identities out of consumption practices, but citizen producers, producing for corporations – producing content, social relationships and networks. It is not that capital has produced these identities and relations – as Terranova points out, these relations are immanent to the networks of informational capital – they are played out in a field that is 'always and already capitalism' (Terranova, 2004: 79). It is more, as Dean suggests, that particular practices are fostered.

This article draws on an ethnographic study of *EverQuest* between 2002 and 2006 which included participating in game cultures, a series of interviews with players, observation of and conversation with developers and textual analysis of game interaction, bulletin board postings and fan websites.⁵ More recently I have conducted participant observation in *World of Warcraft*, and some textual analysis of bulletin boards and fan sites. This article will canvass four main sites within these MMOGs where attempts at governance can be identified. The first is at the level of code and rules, where design of the environment determines the affordances and constraints that shape players' behaviours in significant ways. These techniques are based on particular knowledge and seek to shape particular identities in the players. The second is the relationship between the publisher and players as manifested in the practices of community management and the customer service team, which polices the game communities. Foucault (1994[1978]) positioned the complex form of power found in governmentality as reliant on apparatuses of security, and the government of MMOG worlds relies on a number of these. The third is that of player-to-player interaction and considers the community norms generated by players themselves and the identity formation and self-government practices produced through the combination of publisher



and peer surveillance. The final is legal constraints encoded through the contracts known as End User Licence Agreements (EULAs). The juridical apparatuses of policing are examined as a further aspect of security. In each of these four areas a combination of the fields identified by Dean contributes to strategies that seek to influence the 'conduct of conduct'.

Code and rules

Constraints are laid down in the social environment using software technology. Code is one of a number of modalities of control operating in online environments (Lessig, 1999). This section explores some of the specific constraints, techniques of control and mechanisms for knowing and attempting to shape the player population enabled through code. It examines several ways in which code can be used to facilitate particular social formations. It canvasses hacking and the creation of machinima⁶ as two ways in which players become engaged with code. Finally, it looks at spyware used by publishers on players.

The decisions about what constraints are coded and what affordances are enabled should be understood always as social decisions made by developers and publishers with particular goals and agendas and who operate from their own positioning within corporate hierarchies. Kline et al. (2003) have discussed how the industry perpetuates particular ideologies through its choice of content. However, coded rules and design are also instrumental, serving not just symbolic needs but social and economic imperatives as well.

Code and social behaviours

Coded rules in the game are what give it its 'gameness'. Unlike virtual worlds such as *Second Life* (www.secondlife.com), games are structured through rules and constraints which set up very specific forms of challenges and goals. Within these rules, choices made by developers can encourage further particular kinds of sociality. For example, in *EverQuest* the game engine is coded with disincentives for solo play as well as rewards for playing in groups. These features are part of a series of structures designed to build strong social networks and ties within the game. The facility to create guilds or clans within the game, with chat channels, member areas, banks and so on, are all designed to enable strong social bonding. In a business that relies on ongoing subscriptions for its profits, the extended play and loyalty that result from players having strong ties within the game is translated directly into monetary value. Thus the publisher's goal of profit is pursued through mechanisms that work with players' disposal to be social. Design fosters and encourages collaborative and cooperative identities within the game world.

154 Computer games technologies have the ability to quantify, measure, differentiate and compare players' actions. The cybernetic feedback loops



that make this possible allow particular kinds of play to be rewarded and encouraged (Juil, 2001). These can be read as disciplining mechanisms which resonate with Foucault's (1977) discussion of the 'correct means of training': hierarchical observation, normalizing judgement and examination, in the production of subjectivities amenable to the goals of particular institutions (schools, armies, etc.). Coupled with the panopticon-like surveillance within digital environments, players can be encouraged to self-regulate within the game. These technologies – surveillance, assessment of performance and reward systems – encourage the production of a subjectivity amenable to the goals of the publisher:⁷ cooperative, law abiding, nice to other players, creative, active, competitive and so on. Developers create typologies of game players (see, for example, Bartle, 1996; Mulligan and Patrovsky, 2005) then seek to shape in-game mechanisms to suit the needs of these players. 'Problem players' are those who seek to step outside the constraints of the game, perhaps to commercialize their activities; who disrupt other players, causing them to be unhappy or leave; and those who break the rules. While this article focuses on the constraints imposed by the publishers and developers, it should be noted that the affordances that generate much of the gameplay are specific aspects of governance that facilitate pleasure, fun and enjoyment. 'Training' takes the form of challenges, goals and skill-building with satisfactions and rewards of a very pleasurable nature: this is why so many people engage with these media.

An example of behavioural management through code can be seen in the implementation of player versus player (PvP) combat. Some games are free-for-all combat arenas where anyone can be attacked at will. Other games apply rules that restrict these behaviours. They may allow PvP play only on particular servers, areas of the game or between consenting players. The degree to which it is possible to attack other players (or be attacked) will have an impact on social relations within the game. Games that pit the player against the environment and computer-generated 'mobs'⁸ encourage collaboration among players against a common 'enemy' and discourage players from conflict with each other. However, the artificial intelligence that animates the mobs is hard-pressed to provide the level of complex play that a human adversary might provide.

Thus, introducing PvP shifts some of the responsibility for creating good gameplay (content) onto the players themselves. The degree of PvP play allowed can be read as an attempt to manage the level of conflict between players at the same time as it attempts to manage the level of content required from the developer to sustain gameplay. These design decisions have social and economic impacts. Through coding particular rules, players are brought into the cycle of content production, and there are both economic outcomes for the publisher and social outcomes for the players.



Players and code

Hacking is seen by some as the most obvious resistance to the 'laws of the code'. From my observations,⁹ a kind of meta-game between hackers and developers evolves as they race to break each others' code. In a dialogic relationship, the hacker breaks the code, then the developer finds a fix and attempts to block the hackers' next move. Some hackers and many 'modders'¹⁰ claim that they create new code for games in order to make them better. This form of engagement can look very much like an alignment of hackers and developers rather than any form of resistance, as both work toward creating better games. Hacking is condemned when it has economic impacts, but can be read also as innovative practice which ultimately may lead to better code, and new and better games.¹¹ If both hackers and paid developers are read as doing the work of game development, we can understand this as yet another instance of consumer productivity – sometimes useful and yet unruly.

Aside from hacking, players can take the coded affordances of a game and turn them to unforeseen purposes. Machinima is an example of players taking the motion capture and replay facilities within a game and using them to make movies of their own, on either game-related or non-game-related themes. Derivative work often leads to conflict over ownership, as publishers seek to control the generative outcomes of their platforms.

Spyware

The use of spyware is a final area of code to be considered in the exercise of government by publishers in their attempt to make visible the population that they govern and to police their actions. Some publishers make it part of their terms and conditions that the user allows them to install spyware on their computer which can monitor and track central processing unit (CPU) usage, and check the cache of users' web browsers. The rationale for such invasions of privacy is that the publisher wants to determine whether players are buying game goods illegally on the web.¹² Ostensibly, monitoring CPU activity is required to determine whether players are running third-party programs that enable them to cheat (usually, the use of such software is banned in the EULA). The use of pattern recognition softwares such as spyware to identify suspect behaviour threatens to implement the 'tyranny of pattern' (Kozlovski, 2005: 12), whereby particular behaviours are normalized and any deviation from the norm is punished or investigated. Quite aside from the direct effects of such surveillance, Foucault (1977) argued that the presence of surveillance apparatus that gives us 'diagrams' of control act to induce self-government; 'Surveillance takes hold not in Blizzard's ability to police the actions of players but in the players' ability, skill and willingness to police themselves' (Simon, 2006: 2). The success of this process is a moot point. It depends to some



extent on how much a person identifies with their in-game character and invests in it affectively.

Players are banned on the basis of these automated data-mining processes, as was evidenced in an incident with *World of Warcraft*. A group of players using a Linux-based operating system, Cedega, were banned when the *World of Warcraft* spyware produced ‘false positives’ which led to the automatic banning of any player using Cedega. The players found the process involved in getting their accounts reinstated very opaque. They were sent form letter responses to their appeals to customer services. No indication was given that an investigation was underway and there was no way to know whether any of their complaints were being addressed. The lack of transparency and the realization that there would not necessarily be any ‘justice’ was a source of great concern. Eventually, Blizzard found that it was a technical fault with their spyware and reinstated the accounts.

Discussions broke out on various forums during this incident. Some postings vilified the banned players as cheats and ‘whining Linux users’. That there could be 20 pages of discussion on a forum over the integrity and credibility of the banned players highlighted the absence of a mechanism whereby their ‘innocence’ could be tested and adjudicated upon publicly. In an economy where reputation and status hold high value, the capacity of the publisher to destroy player credibility must be read as a significant power. Their capacity to deny access for no reason is an even greater one.

Publishers’ capacity to data-mine in-game data, CPU and browser activity allows for very finely-honed demographic profiling. This profiling can be sold to third parties and become part of the consumer data that enables more highly targeted marketing. The profiling is also part of the information strategy implemented by the publisher in order to understand and manage its populations. Those seeking to govern require an intimate knowledge of those to be governed. ‘Social maps’ generated through data-mining identify players’ relationships to each other (Pizer, 2003). They allow the publisher to track in-game transactions and to identify community leaders who can be used to generate in-game events or sought out for feedback.

Rules

Not all rules can be coded. Rules of behaviour must to some extent be detailed and enforced through other means. As with public law in the offline world, the enforcement of rules is discretionary and sometimes arbitrary. The full enforcement of the rules would require a level of surveillance too cumbersome to implement and too invasive of people’s privacy to warrant. Thus the rules of a game might ban obscene language, but the level of monitoring required to enforce such a rule would be unachievable. Bad language filters are offered,¹⁵ and punishment may occur if complaints are made, but the actual use of obscene language cannot be stopped.



Rules that govern social behaviour exist as both suggestive guidelines and mechanisms for punishment. They mostly rely on players monitoring each others' behaviour and reporting it to the customer service team. Rules are part of an attempt to establish in-game cultural norms that are generally inclusive. This is the most desirable outcome for the publisher – to be able to involve as many players in the game and keep them as happy as possible for as long as possible in order to maintain a steady stream of subscriptions, and hence profitability. In this sense the goals of the corporation coincide, at least to some extent, with those of a majority of players. However, achieving a consensus on what actually constitutes a healthy and contented community is not a simple process, either on or offline. At one point, Blizzard banned a guild that advertised itself as Gay Lesbian Bisexual Transgender (GLBT)-friendly on the grounds that it might incite sexual harassment of its members and was therefore against the rules (Doctorow, 2007). Given how little they police the harassment of players on the grounds of sexuality (a very common form of abuse within the game), the irony did not go unremarked. After considerable adverse publicity, Blizzard reversed its decision. The control exerted by the publisher in implementing its own version of a healthy community must be understood as an exercise that ultimately will target the most profitable outcome rather than the most equitable social outcome. As one *EverQuest* player interviewed said:

I think they've become much more aware of the need to have good customer service. Although I do think they really try to do customer service on a low budget. There's not enough GMs [game masters], and you know, people [numbers] keep going up and it's not a proportional relation, right? But that's a business decision and that's their business decision. (Male player, *EverQuest* Fan Faire, Chicago, October 2003)

It is a project of identity formation, where the publisher fosters particular values. Profits must be understood as partially dependent on having functional affective networks. To this end, the involvement of community managers becomes necessary.

Customer service and players

Community managers and customer service teams are the interface between publishers and players. Most MMOGs have staff working inside the game, using avatars to inhabit the game world and monitor and police aspects of the conduct of the game and the players within it. They also communicate with players through bulletin boards, emails and sometimes through fan websites. This section examines the key areas dealt with by customer services, the use of players to assist in policing norms and the somewhat different role of the live development team.

Customer service teams act as the in-game 'police' of large virtual worlds such as *World of Warcraft* or *EverQuest*. In smaller games they may act



as events managers and take a role in moulding the sense of community. However, in large-scale games their role tends to be more authoritarian. They operate in an environment lacking transparency and are generally free from the constraints of accountability. Their practices can be read as an inconsequential part of a peripheral cultural activity (MMOGs are still a very small part of overall cultural activity, after all), or they can be read as part of broader structural shifts towards the privatization of space and the privatization of policing (Kozlovski, 2005). Their practices are worthy of attention precisely because it is at the periphery that we witness new tactics and strategies for dealing with the messiness of new formations. If we recognize the potential for these practices to become more entrenched, and to be incorporated into the operations of power in a more ubiquitous fashion, to become institutionalized, then their actions become more broadly relevant.

Customer service interventions vary from game to game. Some games employ too small a customer service team to be heavily involved in the game community. Customer service teams are perceived by players to be interested mostly in maintaining the in-game economy, and thus focused on cheats and 'gold-farmers'¹⁴ who upset the mechanisms of that economy. As one interviewee from *EverQuest* said:

They don't care about the players, what they care about is the integrity of their game as a money-making machine. You know, you can do all kinds of things to other players, but as long as it doesn't threaten the integrity of the game, they're likely to let it go. (Male player, Austin, TX, September 2003)

These perceptions reinforce a sense that the economy is of paramount importance. Herman et al.'s (2006) study of *Second Life* argues that the discursive construction of intellectual property and the exchange market is pervasive and has successfully conned people into misrecognizing their social activities as part of the exchange economy. However, players play for a multitude of reasons, and the ethnographic research that I have carried out indicates that, far from being persuaded by this rhetoric, many players resist it. They ignore and circumvent it in various ways, even as others embrace it.¹⁵

Rising populations in game worlds mean rising service costs for publishers. Many customer service teams are overstretched and unable to attend to every aspect of service.¹⁶ One implication of this is that an overworked customer service representative, policing the player populations and banning players, is not infallible. The lack of transparency in these contexts adds to the sense of precarious citizenship within the games.

The customer service team of *World of Warcraft* encourages players to report on other players. A news item posted to the *World of Warcraft* website by the customer service team in December 2006 announced that it had banned more than 105,000 accounts in November for using third-party software, sharing accounts or 'gold farming'. Toward the end of the item came the following paragraph:



Many account closures come as the direct result of tips reported to our GMs in game or emailed to our Hacks Team by legitimate World of Warcraft players. If you suspect that a World of Warcraft player is using an illegal third-party program to farm gold or items, or is otherwise violating our Terms of Use, please report the suspected infraction. (<http://www.worldofwarcraft.com/news/rss-12-2006.xml>)

From my observations (although the diversity of in-game cultures makes this observation particular rather than general), there is not a culture of high player-to-player surveillance of this nature. The encouragement to report to customer services is not backed with structural rewards. It is one of a number of strategies interwoven into a system of government that shapes the culture of the game. The discursive construction of legitimate and illegitimate players is part of this.

EverQuest also uses players to police in-game behaviour through voluntary 'guides' who take on minor conflict resolution and investigate complaints between players. In return for six hours of work a week they receive a 'free' account on *EverQuest*. Positioning players within the hierarchy of authority in the game can be read as a move toward granting players greater control of social governance, or as a cynical move to outsource the work of customer services to an unpaid labour force. The guides interviewed were involved for reasons ranging from 'giving something back to the community' to wanting a free account. One guide from *EverQuest* said:

I feel that, even though I don't work for Sony, I am a representative of Sony. When a customer comes up to me, I represent the game. (Female volunteer guide, *EverQuest* Fan Faire, Chicago, October 2003)

Players take up the affordances within the game environment in a variety of ways that belie any simple and overarching explanation.

The final aspect of publisher–player interfaces involves the development team rather than the community management team and represents an interesting reversal. MMOGs continue to develop post-launch, with patches and expansion packs. Some players spend more time playing and have more expertise in the game than the developers. 'Live dev' teams – developers who create content for the game post-launch – consult these players on functionality and future directions. I witnessed the *EverQuest* live dev team taking careful notes in feedback sessions with players at the 2003 Chicago *EQ* Fan Faire.¹⁷ In 2004 Sony flew players from the top guilds in the game to a meeting in San Diego to garner their suggestions on future directions for the game.¹⁸ The players who attended indicated they were happy to be consulted at this level and understood their role as contributing to creating a better game in a collaborative effort with the paid developers. This represents a significant shift in the location of expertise between professionals and amateurs and eventually may be a factor in developing alternative power-sharing arrangements.



Are these players dupes of ideology, misrecognizing their contributions, or agents involved in collaborative processes in voluntary and knowing ways? Is this unpaid consultancy exploitation by the corporation or participatory design? Kücklich (2005) points to the industry's own discursive construction of its relationship to players as focused on the collaborative relationship between developers and players, striving for quality. He suggests this masks the profit-seeking motives of the industry and the uneven power relationships between players and developers. However, from the players' own discursive constructions of this relationship, they seem to be aware of the value that they create for the publisher – there is no 'masking' involved here. There is an active choice on the players' part to pursue a passionate interest for rewards that are non-monetary. It is possible to understand this as an alignment of social and financial economies, where each stakeholder is achieving their desired outcome without exploitation or animosity. It is also possible to understand it as the successful shaping of productive, contributing subjectivities through governance strategies which work to facilitate participants' 'capacity to act' (Rose 1999: 4).

Player-to-player control

As with any community, online or offline, members institute their own group norms and ways of policing each others' behaviour. In MMOGs, where populations can range from a few thousand to more than 8 million, there are many communities within the game and most develop social etiquettes and group rules.

In *EverQuest*, group cultures varied from high-end 'raiding' guilds to 'family' guilds, who socialized within the game without much organization or regimentation and never raided. A raiding guild might require time commitment, expertise, pre-raid research and a standard of play which, if not met, could result in sanctions of both a formal and informal nature. It is important to understand this diversity of available cultures within games, in order to avoid overgeneralizing statements about the nature of in-game culture and to note that the control mechanisms of the code and rules of the game are not totally prescriptive. There are many aspects of social relationships and networks that exceed the reach of the publisher. The publisher may seek to shape a certain disposition in its players and succeed in some areas, but never all.

Inevitably, such diversity leads to conflict and the methods of conflict resolution reflect the mechanisms of control available. Thus some players look to the customer service team to resolve conflicts with other players, while some attempt to resolve the conflict between themselves (by fair means or foul). One player of *EverQuest* who was interviewed followed a player around the game for a week, having him killed repeatedly by attracting computer mobs to attack him. He did this because the player



had harassed his 12-year-old daughter in the game. Other interventions include public shaming of players – shouting their name and crime throughout the zone or on bulletin boards. Reputation is a key element of social value to many players. The accumulation of social status is part of the reward for participation (Herz, 2002).

Players institute their own regimes of surveillance. T.L. Taylor has pointed to the use of lateral forms of ‘co-veillance’ or ‘participatory surveillance’ through such mechanisms as ‘damage meters’ and ‘high end raid tools’ (2006: 326) – software mods created by players which help them to monitor the performance of other players in their group and manage the execution of raids more efficiently. These give players access to extra data about other players’ performance. She notes the ambivalence of some players towards the use of such tools, as they are prone to inaccuracy, yet can shape social relations in significant ways. One *EverQuest* player interviewed commented that he thought the customer service team was necessary because:

The problem with player government is that player government can really really reach mob mentality – the punishment doesn’t fit the crime, personal prejudices of people in power can make things really ugly for someone. (Male player, Austin, TX, September 2003)

This article has pointed so far to the social, technical and socio-technical mechanisms deployed by publishers and developers to make player populations visible, and shape the identity and activities of players, in pursuit of financial goals. An additional layer of juridical control is implemented largely through the EULAs or Terms of Service. It operates to constitute both the hierarchy of control within the game, and the obligations and rights held by stakeholders in the world external to the game.

EULAs, accountability and access

The EULAs for online games are standardized ‘click through’ contracts which have become ubiquitous in the software world. EULAs construct one-sided terms that favour the publisher. Although most publishers do not enforce their EULAs to their limits, the very staking of the claim is an assertion of power that has an effect on the participants. While some commentators think that EULAs are unenforceable, no one has taken a publisher to court to test this yet. The likelihood of a player challenging the terms of the contract in court is almost nil.¹⁹ Thus publishers insist on terms that may exceed the limits of the law but are unlikely to be challenged in a court. This section examines four areas: the power to exclude, lack of diversity in the marketplace, privacy and freedom of speech.

British, European Union and Australian legislation addresses substantive unfairness, particularly in standard contracts.²⁰ However, in the US, the



courts restrict themselves to procedural unfairness rather than looking at the actual terms contained within contracts. In some jurisdictions outside the US, the uneven bargaining power of the individual consumer seeking to challenge the terms of a corporate standard contract is seen as procedural unfairness and can be taken into account by the court (for example, in Australia, the New South Wales Contracts Review Act 1980). As many of the major MMOGs nominate US jurisdictions, US law determines the rights of players across the globe. Cross-jurisdictional issues are far from resolved in these global media contexts.

The power to exclude

The most glaringly obvious substantive unfairness in EULAs is the right to exclude for no reason at all. Thus many contain phrases such as:

We may terminate this Agreement ... upon gameplay, chat or any player activity whatsoever which we, in our sole discretion, determine is inappropriate and/or in violation of the spirit of the Game. (*EverQuest* EULA)

Blizzard may suspend, terminate, modify, or delete the account at any time with any reason or no reason, with or without notice. (*World of Warcraft* EULA)

These are the terms of access. They determine the accessibility of a person's online identity and online community through the creation of private law (Crawford, 2004). These terms make the corporation unaccountable in decisions to exclude.

Many claims are made, particularly in neo-liberal discourses, about the 'exit power' of consumers and its capacity to check unfair behaviour by publishers. Such claims tend to ignore the very high switching costs associated with exit for players, who may have invested years of their lives in the game and whose social networks may reside within the game. The lack of publisher accountability is of even greater concern when we consider that online social spaces are growing, and that increasing numbers of people are subject to private regimes of law where there is little or no expectation of justice or transparency of process.

Lack of diversity in contracts

Other areas of concern in EULAs centre on lack of diversity between contracts, loss of privacy and issues of freedom of speech (Herman et al., 2006). As shown above in excerpts from two popular virtual worlds (see *Second Life* and *MySpace* for similar contracts), the lack of diversity of contracts demonstrates that there is little differentiation between the licences on offer in this marketplace. The 'exit power' of the consumer assumes a diverse marketplace where choices are available. The almost uniform standard contracts available for virtual worlds demonstrate a market failure that puts the lie to the argument of consumer empowerment through choice.



Privacy and private policing

Most EULAs include terms that allow the publisher to collect and share information with third parties for any reason they choose. Thus demographic profiling, financial and credit information may be shared with other companies and with government agencies. The dialogue between public and private agencies is of particular concern here, as an example of the shift toward private policing in many different areas and in ways that compromise privacy. Private police are not subject to the same rigours of accountability as public police (Joh, 2004): for example, they are able to obtain information without needing to seek a court order. Information thus gained, without the checks and balances afforded by accountability measures in the public sphere, is then made available to the public police (Joh, 2004). The emerging models of governance often 'escape the restraints which limit the use of policing power' (Kozlovski, 2005: 1). The terms of operation and powers claimed by the publishing corporations in MMOGs can be seen as part of a much larger pattern, where contractual terms replace citizen rights. Participants are being recast as consumers (despite their productive activities). The discourse of the consumer presents both ineffective tools for empowerment (the flawed concept of exit power) and a form of knowledge that erases participants' productivity.

Freedom of speech

Freedom of speech is another area where values and law differ across different jurisdictions. The US is very focused on the protection of such rights. Thus, while contractual law in the US might disadvantage players in its blindness to substantive unfairness, freedom of speech is an area where being located in the US may be an eventual advantage. The capacity of publishers to restrict freedom of speech is a looming debate. As online social softwares such as MMOGs (but also environments such as MySpace or Facebook) become so large that they begin to resemble public space, inevitably the issue of free speech will arise. Are these spaces quasi-public, much as shopping malls are, and as such should public law apply in this area? Jankowich (2006) identifies a number of areas where speech is restricted in MMOGs, mostly through practices legitimated by the EULA. However, the 'abandonment of constitutional protections' (2006: 28) that Jankowich examines should be understood partly in relation to the 'gameness' of MMOGs. By their very nature, games involve artificial restrictions and constraints in order to create their field of play. However, some EULAs encompass behaviour external to the game: for example, they attempt to forbid public critique of the publisher. Whether such terms are legal is untested, but they can produce a chilling effect on speech.

Players do find ways to circumvent EULAs. Banned players in *EverQuest* often just go and buy a new account (illegally) on the internet. Although they have to bear the cost of re-establishing the account and building a new character, the publisher's attempt to exclude is unsuccessful. Some



players play instrumentally – to make money by trading game items for real world money – and make no investment affectively in either the game or the character that they are playing. Governmental strategies to induce self-government fail with these players – they refuse the identity-formation sought by the publishers. Other players become intensely emotionally attached to their online character and view it as a manifestation of their identity, which would be unthinkable to lose. Many players never read the EULA or Terms of Service, lengthy documents written in legal discourse impenetrable to most of the world outside the legal profession. Thus while they are still subject to the effects of these contracts, should they come into conflict with the publisher, the chilling effects of the EULA are limited.

The EULA operates as a discursive practice that legitimates a particular organization of power and control. It attempts to constitute the grounds for action. The threat of exclusion or punishment serves as a behaviour modifier and mechanism of government. The EULA ultimately controls access but also, in combination with the code and the social practices of the publisher, establishes norms and attempts to shape behaviour. Jenkins (2006) is hopeful that participatory media spaces will generate a more collaborative, co-creative partnership between users and publishers. Mechanisms such as the current EULAs must be seen as an obstacle to a genuine partnership.

Returning to one of Dean's axes of the analytics of government, that of knowledge, there are particular discursive constructions of an environment that are used by those in power to rationalize their actions and justify the ways in which they seek compliance from participants. There are several possible ways of understanding MMOGs. One is that the corporation authored and completely owns and controls the virtual world that it runs, and therefore can do so according to its own private law. If people do not like it, they are free to leave. An alternative construction might be that, building on previous games, the publisher has created a virtual world in which players create some of the content, thus it is not authored entirely by the publisher. Furthermore, some of the content consists of social networks and relationships that cannot be turned into property or owned. Players' ability to leave is constrained by their long-term social investments; as such it is more than a piece of intellectual property that can be owned and exchanged.

The first version conceptualizes this media in old-style industrial terms as property and legitimates power in the pursuit of economic gain. As Herman et al. (2006) have pointed out, the use of the rhetoric of intellectual property legitimates the valuing of market-based exchange forms over any other understanding. The second version understands it in post-industrial terms that take account of social relations and the co-creation of content by players, and would legitimate a dilution of the absolute powers sought by the publisher.



Conclusion

As people with access to these technologies come to live more of their social lives (and work lives) in online environments, and to construct both their identities and communities in proprietary spaces, the terms under which they do so will become increasingly important. In a context where economic value resides in intellectual property and immaterial labour, and where social networks have economic value extracted from them in new ways, the obligations of the companies which harness this value must be addressed. In some ways, the strategies of government implemented by the major publishers are unobjectionable, enabling participants to explore, engage and create in ways not previously possible. In other ways, 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 publisher accountability needs to be taken seriously. However much individual players may subvert or circumvent the system, and however much institutionalizing these new regimes of power may seem like a minor event in the bigger picture of transnational flows of corporate power, they may have a much broader impact as precedents are established and new practices involving unfair and unaccountable processes become entrenched. As Rose argues:

It is, most often, at this vulgar, pragmatic, quotidian and minor level that one can see the languages and techniques being invented that will reshape understandings of the subjects and objects of government, and hence reshape the very presuppositions upon which government rests. (1999: 31)

This article has attempted to show some of the multiple layers of control and power negotiations that occur in the government of an MMOG. The converged media environment, where social economies and financial economies coexist, is interesting terrain for observing the reconfiguration of relations: between 'producers' and 'consumers' as user-produced content (particularly of a social nature) shifts toward the core of production practices (Benkler, 2006); and between 'old' institutions and entrenched media practices, and emergent media that have unpredictable characteristics. As we are encouraged increasingly to participate, contribute and produce in media environments, the terms of our participation become more important and more directly the object of capital's strategies in the pursuit of economic ends.

It seems that many of the technologies of governance do not diminish participants but work with their desires and creativity. However, the effect of commercial interests on the shape of social networks is apparent in the closing down of entrepreneurial activities, the refusal to acknowledge joint creation of content and the restrictions surrounding accessibility, free speech and privacy.



Notes

1. Some MMOGs operate under different business models, for example, by offering free access to some game areas and features but requiring payment for 'premium' services that open up the whole game to players. However, the most successful business model in western markets has been the subscription model. In South Korea alternative models using prepaid credits in the PC Baangs have been successful as well.
2. For example, the institution of Intellectual Property relies on texts as finished work, having an identifiable author and 'passive' consumers.
3. Identified by Kline et al. (2003) as a key element in the political economy of the games industry.
4. Nokia Mobile Phone advertisement (N70 and N90 series) available at: <http://www.youtube.com/watch?v=35q7HGdKGu8&mode=related&search=>
5. The research into *EverQuest* was both online and offline. In some ways it was an ethnography of a virtual world, in that many of the people I encountered and developed relationships with I never met face to face. I spent hundreds of hours immersed in a virtual world which became integrated into my life and offline world in interesting ways. However, the ethnography and my understandings were not restricted to online environments, nor restricted to players. Thus I met face-to-face some of the players I played with in-game. In attending a large fan gathering I was able to interview many more players whom I had not encountered in-game. I attempted to gain an understanding of the publishers, developers and customer service teams as well. The Fan Faire was an opportunity to observe the customer service team and live-development team relating to players in an offline environment. The game developers conference in Austin, Texas was also fieldwork for me, and gave valuable insights into how some of the leading developers of online games conceptualized their work, the players they were creating for, and their relationship to the financial machinery of the publishing industry to which they were beholden. Being a subscriber to the mud_dev email list also allowed me to understand the debates and dilemmas facing developers as they argue about many aspects of control and governance.

My interest in online games stemmed from two places of earlier work. I was involved in some research in the mid-1990s into early online graphical chatrooms which convinced me that the social aspects of the internet were its most interesting. I also worked for a games developer for a year as a technical and PR writer. This gave me a basic understanding of the processes of development and the often-fraught relationship between developers and publishers. I had decided at the time that games were the most engaging use of the technical capacities for interactivity that were emerging. Although vilified by the press I thought they were the most obviously successful new media application and worthy of attention. Multiplayer online games represented to me a convergence of the two most successful capacities of new media (social networking and interactivity), and so studying MMOGs was an obvious direction for my research. This is not to suggest I am a good player, but I enjoy playing immensely. The difficulty in studying MMOGs is the amount of time they require in order to master them. As I have an already busy life I am



unable to devote the hours necessary to become an aficionado: at my peak research times I could muster 20 hours a week and these periods were only sustained for a few months at a time. Thus I make no claim to expertise as a player. This is why interviews with high-end players and observation of them (in an offline environment) is an important part of the research: I myself cannot access many aspects of the game worlds because I am not a high-end player. This works against me being able to develop the kind of experiential understanding an ethnographer hopes for, but access to high-end players mitigates this somewhat. No ethnographer can ever hope to experience a culture fully. But I hoped to be able to become aware of aspects of the gamer environment not immediately obvious to an outsider. My research has succeeded in this to some extent, but my insights into high-end gameplay are necessarily limited. On the other hand, being on the outside affords critical possibilities not available to those immersed in the culture. These are not new dilemmas for the field of ethnography and the politics of representation they embody.

6. Machinima are movies made inside games using the game engine and environment as a means of creating a derivative work that may or may not be related to the game. The machinima are distributed outside the game on the internet. (See <http://www.machinima.com> for examples.)
7. Garite suggests more broadly that players are being trained to be part of the surveillance regime of the control society through the practice of data-mining the games screen:

Like detectives at the scene of a crime, players are regularly called upon to process screen images and scan displays in order to visually monitor the playing field for signs of enemy movement. Regardless of narrative content, game screens always function as fields of data waiting to be mined. Thus, like the modern workplace, video games present users with an extensive series of information processing tasks ... when we strip away the particulars of content, gaming is essentially an aestheticized mode of information processing, and therefore the digital economy's ideal form of leisure. (Garite, 2003: 9–10)

8. 'Mobs' is the name given to the monsters or opponents generated by computers.
9. In particular a session on cheating delivered at the Austin Game Developer's Conference in 2003 by Dave Weinstein. Also developer discussion lists such as `mud_dev`.
10. Modders are players who develop game modifications to enhance or change the gameplay (see Postigo, forthcoming).
11. Games such as *Counter-Strike*, which were developed entirely by users based on the game engine from *Half-Life*, are a prime example of this harnessing of expertise from player ranks.
12. There is a large secondary market for in-game goods and accounts (sold for real money), banned by most publishers. This has not prevented it from growing to have an annual turnover estimated as up to \$880 million (Salyer, 2004).
13. A bad language filter turns any words recognized by the software as obscene (a predetermined list) into either symbols or alternate nonsense



words. It misses any alternate spellings of obscene words and cannot, of course, filter obscene sentiment.

14. Gold farmers are players who play instrumentally rather than for fun, and accumulate in-game goods to sell for real money on the internet black market. They often camp out in one area and repetitively kill the same mob over and over to loot it. They are said to impinge on the other players' enjoyment by making those areas inaccessible to others, and to play havoc with the in-game economy through their repetitive actions. However, they also make a real income from their activities.
15. It should be noted that *Second Life* is a virtual world with a heavy emphasis on market exchange as a key activity. It is not a game like *World of Warcraft* and *EverQuest*.
16. Numbers are hard to obtain, as corporations tend not to release the number of subscribers or employees. At the *EverQuest* Fan Faire I attended in 2003, the customer services team claimed to number about 50, with a player base of about 450,000. Thus there would be one customer service representative for every 9000 players. In *World of Warcraft* a private estimate from an industry insider (and thus a very unsubstantiated claim) was that Blizzard Entertainment employed about 750 customer services representatives when the subscriber base was about 7 million. This also works out to a figure around the 1:9000 ratio.
17. A gathering of players offline organized by the publisher which happens on a quarterly basis. The contrast between the attitudes of the live dev team and the customer services team toward the players at the same event marked the heterogeneity of the publisher team in an interesting way.
18. Similar practices are carried out by Lego in harnessing the expertise of its fans – in particular with the *Mindstorms* game (see Koerner, 2006).
19. The cost of mounting a case, when the economic value of the subscription is just \$15 a month on average, makes it seem most unlikely that a player would bother engaging in such a contest, although perhaps a class action suit will be mounted at some stage in the future.
20. For example:

A term is considered unfair if it causes a significant and unreasonable imbalance in the parties' rights and obligations arising under the contract to the detriment of the consumer. (Australian Federal Government, 2004)

References

- Australian Federal Government (2004) 'Unfair Contract Terms. Discussion Paper', Standing Committee of Officials of Consumer Affairs Unfair Contract Terms Working Party, Canberra.
- Bartle, R. (1996) 'Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs'. [Accessed 5 November 2007: <http://www.mud.co.uk/richard/hcds.htm>]
- Benkler, Y. (2006) *Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven, CT: Yale University Press.
- Blizzard Entertainment (2007) 'Press Release', 11 January. [Accessed 30 January 2007: <http://www.blizzard.com/press/070111.shtml>]



- Brand, J. (2007) 'Interactive Australia 2007. Facts about the Australian Computer and Video Game Industry', *Interactive Entertainment Association of Australia*. [Accessed 5 November 2007: http://epublications.bond.edu.au/hss_pubs/95/]
- Bruns, A. (2007) 'Prodisusage, Generation C, and Their Effects on the Democratic Process', in *Proceedings of Media in Transition 5*, MIT. [Accessed 14 May 2007 at <http://eprints.qut.edu.au/archive/00007521/>]
- Crawford, S.P. (2004) 'Who's in Charge of Who I Am? Identity and Law Online', *New York Law School Law Review* 49(1): 211–29.
- Dean, M. (1999) *Governmentality. Power and Rule in Modern Society*. London: Sage.
- Doctorow, C. (2007) 'Why Online Games Are Dictatorships', *Information Week*, 16 Apr. [Accessed 14 May 2007: <http://informationweek.com/news/showArticle.jhtml?articleID=199100026>]
- Foucault, M. (1977) *Discipline and Punish*. London: Allen Lane.
- Foucault, M. (1994[1978]) 'Governmentality', in J.D. Faubion (ed.) *Michel Foucault. Power. Essential Works of Foucault 1954–1984, Vol. 3*, pp. 201–22. London: Penguin.
- Garite, M. (2005) 'The Ideology of Interactivity or, Video Games and the Taylorization of Leisure', paper presented at the Level Up, Digital Games Research Association (DiGRA) Conference, Utrecht, 4–6 November 2003. [Accessed 14 May 2007: <http://www.digra.org/dl/db/05150.15436>]
- Herman, A., R.J. Coombe and L. Kaye (2006) 'Your Second Life? Goodwill and the Performativity of Intellectual Property in Online Digital Gaming?', *Cultural Studies* 20(2–3): 184–210.
- Herz, J.C. (2002) 'Harnessing the Hive: How Online Games Drive Networked Innovation', *Release 1.0* 20(9): 1–22.
- Humphreys, S. (2005) 'Productive Players: Online Computer Games' Challenge to Conventional Media Forms', *Journal of Communication and Critical/Cultural Studies* 2(1): 36–50.
- Jankowich, A. (2006) 'EULAs: The Complex Web of Virtual Law-Making in Virtual Worlds', *Tulane Journal of Technology and Intellectual Property* 8: 1–58.
- Jenkins, H. (2006) *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.
- Joh, E.E. (2004) 'The Paradox of Private Policing', *Journal of Criminal Law & Criminology* 95(1): 49–135.
- Juul, J. (2001) 'Games Telling Stories? A Brief Note on Games and Narratives', *International Journal of Computer Game Research* 1(1). [Accessed 4 June 2002: <http://www.gamestudies.org/0101/juul-gts/>]
- Kline, S. and A. Arlidge (2002) *Online Gaming as Emergent Social Media: A Survey*. Vancouver: Media Analysis Laboratory, Simon Fraser University.
- Kline, S., N. Dyer-Witheyford and G. De Peuter (2005) *Digital Play: The Interaction of Technology, Culture, and Marketing*. Montreal: McGill-Queen's University Press.
- Koerner, B.I. (2006) 'Geeks in Toyland', *Wired* 14(2). [Accessed 10 October 2006: <http://www.wired.com/wired/archive/14.02/lego.html>]
- Kozlovski, N. (2005) 'Designing Accountable Online Policing', *Yale Law School Information Society Project*. [Accessed 10 October 2005: http://islandia.law.yale.edu/isp/digital%20cops/papers/kozlovski_paper.pdf]



- Kücklich, J. (2005) 'Precarious Playbour: Modders and the Digital Games Industry', *Fibreculture* 5. [Accessed 12 January 2006: <http://journal.fibreculture.org/issue5/kucklich.html>]
- Lessig, L. (1999) *Code and Other Laws of Cyberspace*. New York: Basic Books.
- Mulligan, J. and B. Patrovsky (2003) *Developing Online Games. An Insider's Guide*. Indianapolis, IN: New Riders.
- Pizer, P. (2003) 'Social Systems in Online Games: Building the True "Global Village"', paper presented at the Austin Game Conference, Austin, TX, 11–12 September.
- Postigo, H. (forthcoming) 'Of Mods and Modders: Chasing Down the Value of Fan Based Digital Game Modifications', in J. Rutter (ed.) *Digital Games Industries: Work, Knowledge and Consumption*. Aldershot: Ashgate.
- Rose, N. (1999) *Powers of Freedom. Reframing Political Thought*. Cambridge: Cambridge University Press.
- Salyer, S. (2004) 'Virtual Property and Real World Markets', paper presented at the State of Play II Conference, New York University Law School, 6–8 October 2005. [Accessed 14 May 2007: http://web.stream57.com/nylaw/102904_virtualproperty0004.htm]
- Simon, B. (2006) 'The Databased Self: Perfect Surveillance in the Age of Virtual Worlds', paper presented at the Society for Social Studies of Science Conference, Vancouver, 2–4 November.
- Taylor, T.L. (2006) 'Does *WoW* Change Everything? How a PvP Server, Multinational Player Base, and Surveillance Mod Scene Caused Me Pause', *Games and Culture* 1(4): 318–37.
- Terranova, T. (2004) *Network Culture: Politics for the Information Age*. London: Pluto Press.

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