

# Co-Creative Game Design in MMORPGs

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## ABSTRACT

This paper proposes a model for co-creation of games as alternative media. The model uses actual play practices to understand the political and cultural influence co-creation might have in the relationship between the owner of the game and the players. The model requires for player creation of a text or communication infrastructure that changes the properties of the game from which play emerges not only for the player herself but for a considerable group of players who share a particular practice of play. This change has to be accomplished not only by playing the game but through changing how others play it in a distinct creative activity. It needs to have the potential to subvert or contest the original design of the game. This model is useful for understanding different kinds of player co-creation as well as the extend of co-creative game design and can be a tool for political work towards participatory cultural production in games.

## Keywords

Co-creation, Game Design, Authorship, MMORPGs, World of Warcraft,

## INTRODUCTION

In game studies there is an ongoing discussion about authorship and control around the issue of co-creation of games and game design (Taylor, 2006, 2008; Lastowka, 2010; Kow and Nardi, 2010; Johnson, 2009; Humphreys, 2005; Pearce, 2006). A particulate focus in academic writing lies on the question of the creation of financial value through player creation and the exploitation of unpaid labour (Postigo, 2007, 2010; Nieborg and van der Graaf, 2008; Humphreys, 2005; Humphreys et.al., 2008; Terranova, 2000). While they generate financial gains, modders are often unpaid and even work in a state of precarity (Kücklich, 2005). Prompted by this use of free labor (Teranova, 2000) critical authors raise questions about exploitation (Humphreys, 2005) and ownership leading to the question: “Whose game is this anyway?” (Taylor 2006). A perspective taken by many producers is that “unruly modders require new management methods” (Humphreys, 2005).

Another perspective on player co-creation stresses the role of players in the creation of culture, community, and society in and around games. (Pearce, 2006; 2009; 2011) In the case of Massively Multi-Player Online Games (MMOGs) co-creation of the game is presented as “the norm” (Taylor, 2012:160). However, these different perspectives

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ranging from political economic and critical views on games and their production to cultural studies and even game design research understand co-creation of games and game design in very different ways. It is not clear what player co-creation of game design is, where it starts, and what influences on games, culture, and business it has or should have. This paper then proposes a model of co-creation of game design based on a theoretical tool to tests if player-created content can be seen as alternative media (author, forthcoming). Using a number of examples some of which have been introduced in earlier research, this paper argues that there are numerous kinds of player co-creation than can reach as far as co-creating game design and the paper defends the notion of co-creative game design against possible criticism. This somewhat flipped approach where the model is proposed first and defended and reasoned for afterwards makes sense here because it a) a similar model with a focus on games as alternative media has been published elsewhere (author, forthcoming) and b) because this way the model contextualizes the theoretical discussion below and makes it more approachable for the reader.

This paper will use the example of the Massively Multi-Player Online Role-Playing Game (MMORPG) *World of Warcraft* (WoW)(Blizzard Entertainment, 2004). VWs and Massively Multi-Player Online Role-Playing Games (MMORPGs) like WoW as media are particularly open for appropriation and customization by the players because player participation is a necessity for this kind of game to come to life in terms of culture, economy, and social interaction (Taylor 2009; Steinkuehler 2006, 2007; Castronova, 2005; Bartle, 2004). WoW is a particularly good example for the study of player co-creation because it features an application programming interface (API) that allows players to write small programs, add-ons, which modify the interface of the game for players who use them. WoW has over the years incorporated more and more player-created interface features into its default interface (author, 2012) which also allows for a discussion of the influence of player creations on the design of the game.

*“We create. You play. You provide feedback. We iterate.” (Zarhym, Blizzard Community Manager, 05/05-2012)*

However, Blizzard Entertainment explicitly defines game design along the institutional lines of their organization (Zarhym, 2012) which also points out the conflicting perspectives around co-creative game design that can be seen in existing research that among other things make this paper necessary.

### **Model of Co-creative Game Design**

This model is based on a theoretical tool to tests if player-created content can be seen as alternative media (author, forthcoming). The models four requirements for co-creative game design can be found in Figure 1:

Model for Co-Creative Game Design:

1. Player creation of a text or communication infrastructure that modifies the properties of the game and from which play emerges
2. for a considerable group of players who share a particular practice of play
3. not only by playing the game but by changing how others play it in a distinct creative activity
4. with the potential to subvert or contest the original design of the game.

**Figure 1** Model for Game Co-Creative Game Design

The first three criteria are motivated by the theoretical discussion about co-creation in games across media. The first stresses that co-creation is not limited to changes in the game software but can happen in other media as long as it has an impact on play. The second criterion, being the focus on a particular group of players, takes into account mangle (Steinkuehler, 2006), assemblage (Taylor, 2009) of play and vastly different play styles. It underlines the importance of researching different practices and defining co-creative game design in respect to each sub-culture. The third criterion limits co-creativity to distinct non-play activities in order to keep creative play in virtual worlds out of the definition. The final fourth criterion is normatively motivated and oriented towards what co-creative game design should be. This criterion does not assess if co-created content contests the original design but if it has the potential to do so. Here the model is linked to research around alternative and critical media and citizen participation in the creation of culture. These issues are also relevant here. However, discussing them would not fit into the frame of this paper and will have to be done at a later point. As it stands now the fourth criterion assesses if a player creation is simply continuing the design of the game designer and cannot do anything else or if it has at least the potential for subversion of the designer's intent. This would point towards a relationship of equals between the player creators and the producers of the game that should exist for player co-created game design to step out of a logic of exploitation and become participatory media.

## **METHOD**

While this is mostly a theoretical paper here are some methodological considerations about the study of games and play that are relevant to the collection of the examples used later on. While scholars such as Aarseth (2003), Konsack (2002) and Mäyrä (2008) stress broadly the importance of actually playing games in order to study them Malliet (2006) and Consalvo and Dutton (2006) have developed a somewhat more concrete toolbox for studying game design. This paper uses the tools *interface study* and *gameplay log* from Consalvo and Dutton (2006) as well as a community data collection following Aarseth's (2003) suggestion in order to broaden ones view on the game and to go beyond the researchers own experience.

The *interface study*, Consalvo and Dutton recognize the importance of the interface for specific games, and the importance of the interface design for games in general (see Laurel, 1990). While studies of add-ons as player-created content (with a focus on game design) have traditionally not been centered around changes to the game interface, and have instead addressed changes to the game design that came through interface

modifications, these studies could not have been carried out without a detailed analysis of interface modification.

Finally, the *gameplay log* presents a methodological framework for analyzing the game world. For example, a key question that can be answered with a gameplay log is: “*Are there situations that appear that the producers probably did not intend? What are they, and how do they work?*” (Consalvo and Dutton, 2006). The gameplay log is tasked with “the exploration of emergent aspects of the game” (Consalvo and Dutton, 2006), which in the case of WoW can also mean the emergent effects of the interaction of the game and interface modifications. This category, which makes gameplay as an object of analysis, makes it possible to discuss the impact an interface modification has on the design of the game, again, by looking at resultant play. This methodological understanding of game design being mediated through play is reflected in the first requirement of the model in the emergent play.

## **ANALYSIS AND DISCUSSION**

### **Play as Co-creation**

The concept of co-creation and similar concepts have been discussed in relation to not only games but also social media. Humphreys explains the particular qualities of games in comparison to other media in terms of co-creation:

*“These are firstly that the game is both textual and social [...] Secondly these assets are created by both the paid labour of the developer/publisher, and the unpaid labour of the players. Finally, that the text is dynamic, mutable and emergent – all qualities that differentiate it from conventional linear media.” (Humphreys, 2005)*

Like in this quote about virtual worlds, the notion of co-creation in games is often used to describe how the game world emerges from the actions of the players in the world (Adams, 2010; Bartle, 2004). Humphreys (2005) stresses this interaction of the game world that is created by a developer using paid labor and the player action. Social rules, governance, and culture emerge from this interaction (Pearce, 2006). That means that the other players and their activity create the game as an activity that extends beyond the mere software artifact. This level of player creation naturally occurs in all virtual worlds. (Bartle, 2004) This player participation increases the value of the game for other players and leads to financial gains of the producer. (Humphreys et.al., 2008)

However, in a taxonomy of player creation calling the creation of the game for other players through play co-creative is problematic. The fact that this happens naturally though play allows for a useful comparison to similar kinds of free user labor in social media like Facebook. In both virtual worlds and social media players/users automatically create content for others by using the space and consuming content (that has in turn been created by others). The phenomenon of the merging of production to consumption or production to use have been termed “Prosumption” (Bruns, 2008; 2012; Humphreys, 2005) and “Prodisage”(Fuchs, 2011;Ritzer, 2010; Ritzer and Jurgenson, 2010;Deuze, 2007). These concepts describe well this level of players creation in the game and give a useful access for analyzing the way free player labor is exploited in games as well. The virtual world becomes in this perspective a platform for user/player interaction were the players create all the content for each other while following the affordances of the platform, the design of the game. Such a basic level of user creation is not particular to

games and can thus be treated with critical media theory and terminology. The term “co-creation” can be limited to exclude this level of player authorship. As Bartle (2004) pointed out and the notions of produsage and prosumption imply this level of player authorship is always automatically connected to play. If this would be conceptualized it as co-creation of the game than all play would automatically be co-creative. This would limit the utility of the term and needs to be rejected. Just play cannot be co-creation of game design. This is also reflected in the third condition of the model presented above. Co-creation needs to happen through a distinct creative activity other than play. The next level of player authorship is modding (Scacchi, 2010). Modding is the creation of modifications of the game like the addition of new levels or the coding of interface modifications for existing games. An example of a well-known and (financially) successful mod is Counter Strike (Minh Le & Jess Cliffe, 1999) for Half Life (Valve, 1998). There are two differences between the creation of content through play and modding that are central to this discussion.

First, modding is the creation of content though a creative activity distinct from play. This is not to say that modding cannot be seen as a way to play a game by the modders (Sotamaa, 2010) but that the creation of mods is not happening through the gameplay designed for the game. Bartle presents this distinction between modding and play as content creation from a designer’s perspective. Here Bartle compares players to designers and developers and awards authorship only when they create content through a distinct activity:

*“Players ‘add content’ whenever they play by their in-context actions. Anything they do that affects the virtual world or its inhabitants is adding content. [...]Although designers recognize its importance, normally when they talk about player-created content they mean content explicitly created by players; players as designers and developer, in other words.”(Bartle, 2004)*

Second, content created through mods can influence the game for all players far beyond those who could even remotely be influenced by one’s play. The amount of players that actually use and/or play with a mod depends on a number of factors like the quality of the content, the effectiveness of content distribution structures like community websites that facilitate exchange, and the particular practice of play the mod is coded towards. However, content created in this distinct way has the potential to reach a considerable amount of players. Content creation on this level can be termed co-creative without eroding the meaning of the term. This does not mean that just play is not productive. As stated above especially in MMOs players do create through play the game they are playing as much as the culture of the game. (Pearce, 2006; 2009; 2011) “Rather than static out-of-the-box software products, MMOGs are ecosystems in which co-creation – between a game company, technologies, and users – is the norm” (Taylor, 2012:160) and “you cannot untangle production from play. They are interwoven.” (Taylor, 2012:169) Taylor stresses that MMOs are co-created because the culture of the game does change the game for all players. She uses e-sports as an example here.

*“Just as we can talk about MMOs as co-created products (between a game company and its players), e-sports are as well.” (Taylor, 2012:170)*

While Taylor makes a good point here she also acknowledges that e-sports is not just play but a complex endeavor between work, play, education, professionalization, and

showmanship. (Taylor, 2012) This means that the boarder of what is to be understood as co-creation of a game or as co-creative game design is also related to political issues of power and production. Existing understanding that see even just any act of creative play as co-creative game design weaken the concept of co-creation to the point where it loses its critical political impact and role in the discussion around media and cultural production in a democratic society. However, uses of the term co-creation for these kinds of ubiquitous player-creation through play weaken the concept of player co-creation of game design. Even with the here proposed more narrow understanding co-creation of game design still happens constantly. However, if we understand co-creation this way we need to acknowledge the impact of players on game design and we have to discuss player co-creation in relation to control, power, IP, and ownership to understand if this is real participatory media production or another round of exploitation. However, there are more arguments against co-creative game design that need to be discussed.

### **Game Design as Second-Order Design**

Mauger (2012) defines game design in the “Encyclopedia of Video Games”(Wolf, ed. 2012) as “the conception and realization of interactive systems that produce context for strategic and quantitative outcomes.”(Mauger, 2012:224) After a short explanation of the origin of the term “design” Mauger writes about game design as a second-order design and the relationship between game design and play.

“The practice of game design is the design of systems of meaning, establishes by a set of rules and procedures to apply them. This explains why game design is considered a second-order design problem: players enacting those rules are engaged in the experience of play, which the game designer crafts only indirectly. “(Mauger, 2012:225)

Mauger’s notion of a “second-order design problem” is explained by Zimmerman (2003) where he states that the designer creates a structure, much like a building, and the player encounters it and plays with it much like a person walks through a piece of architecture. The game designer does not directly design the experience of the player but can only influence it through the environment the player gets to have the experience in. This perspective acknowledges play as a creative activity because the player is involved in the creation of her actual experience and without here there would be no play despite any efforts of the designer. This activity of the audience is nothing new or specific to games and has been found for audiences of other media like books and television as well. The difference between games and (most) other media in this respect then is that games require player input and effort in order to be played (Aarseth, 1997). This perspective of player activity as active does however not grant players the power to influence the design of the game but limits their creativity to their own play. Players might be using the game environment in ways that the designer did not intend, much like a parkour (a urban running sport where the runner re-appropriates architecture around herself to create a running track) athlete uses buildings and architecture in ways that the designers did not plan for, but that does not mean that they can influence the game. Their creativity is limited to their own practice, even if it may be a subversive practice or what Flanagan (2009) would call critical play.

Also this point is reflected in the model above. This is the most central point to be taken from the discussion of game design as second-order design. If game design does not directly create play but is limited to creating the environment from which play emerges (for all players that is or at least a sub-culture of players) then everything else that is doing the same can be considered a part of the game design. From this point then there

needs to be a specific reason for something to not be seen as part of the design of the game if it fulfills at least also the first two requirements of the model above and modifies the properties of the game and from which play emerges for a considerable group of players who share a particular practice of play. The following arguments against classifying player-created content as co-creation of game design have been collected from feedback from both peer reviews as well as oral feedback from presentations and discussions with other researchers.

### **Time of Creation**

The argument that the time of the creation decides if it is game design or a kind of play is problematic. Especially in the case of MMOs there are many patches and changes of the game even from the side of the game producers and the design and balancing of the game is not a task finished at the release data but an ongoing effort. Many social games are in a constant beta state. It is also important to note that some player-created content is already developed and changes a game before that game is officially published and then typically based on beta versions of the game or data-mined information. This means that the time of the creation of content cannot be used to decide whether it is game design or not.

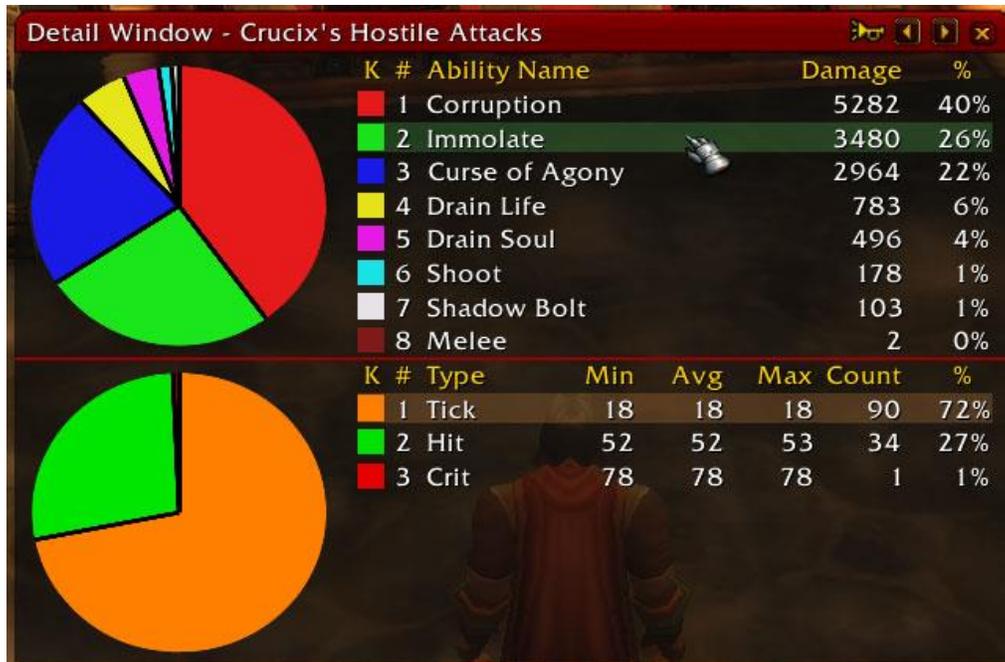
### **The Software Artifact**

An initial difference between different kinds of co-creative content is if the content is accessible inside the game artifact or if the player needs to leave the game in order to interact with it. An example here would be a WoW add-on that provides information about item drops from NPCs inside of the game (atlas loot, on curse.com) or a website that offers the same information but needs the player to tap out of the game to use it but can in turn provide more detailed information, a better search function, and a useful graphic representation of a map pointing where to find things in the world (wowhead.com). The add-on is immediately accessible inside the game and might have a bigger impact on the way play evolves and players interact. The website wowhead.com offers more in-depth information with comments and tips by other players. This might motivate a practice of tapping out of the game for fast access of the page. The website gets its information from an add-on that collects the data from players that have it installed and reports the mined information back to the database of the website. However, both the website and an add-on that offers similar information are in the way they impact play near identical. Stating that one of them can change game design while the other cannot is thus a problematic position.



**Figure 2** Example for a Raid overview of Damage dealt and taken in a fight in WoW presented by the add-on recount (<http://old.wowace.com/Recount>) (accessed 18/07/2014)

Another example worth considering here would be tools to measure player performance, typically damage, in WoW as an interface modification or as a website. These tools parse the combat log in the game and present data in sophisticated graphical representations that can be used to analyze performance and that would not be useable by human beings otherwise. These tools have been shown to be social actors that are highly used on in higher level play and that change the emerging play and social structure (Chen, 2008; Nardi; 2010; Latour; 2005). A typical add-on doing this would be *recount* (<http://www.curse.com/addons/wow/recount>, accessed 02/12/2012 ), a massively successful add-on with at the time of access 1.7 million monthly and 38 million total downloads. A website offering a similar service is *worldoflogs.com* (<http://www.worldoflogs.com/>, accessed 02/12/2012). Both present combat log data in sophisticated ways but are used very differently from each other. For two examples of the graphic representation of combat log data see figure 3 and 4.

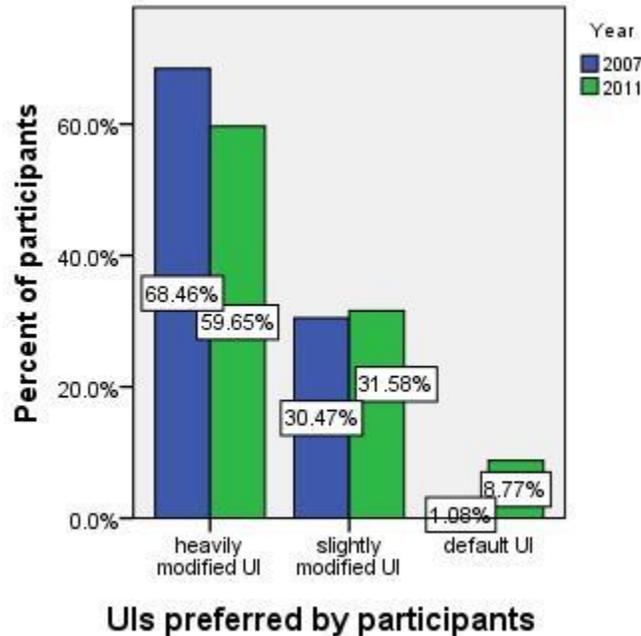


**Figure 3** Example for an analysis of a characters damage sources in WoW presented by the add-on recount (<http://old.wowace.com/Recount>) (accessed 18/07/2014)

Recount is again more accessible directly in the game but also more limited in terms of functionality. *World of Logs* (<http://www.worldoflogs.com/>, accessed 18/07/2014), a website for “In-depth World of Warcraft Log Analysis”, also makes it possible to compare combat logs to other users and over time, to analyze large amounts of data put in by users, and to generalize about the performance of for example different classes in different situations. *World of Logs* is used in high-end raiding guilds as an analysis and recruitment tool because it allows the observation of the past performance of applicants. It updates quickly and can be used during play to for example assess different tactics while trying to kill a boss for the first time as it could show how much damage the raid was able to deal or much damage came in different tries using different tactics. The use of *World of Logs* though is so central in some circles of high-end raiding guilds that players are expected to have an account and logs of their past performance for example when applying for a position in a guild raid. This means that in that particular sub-culture of WoW players using *World of Logs* is not only necessary to play, it is the way the game is being played as it allows for fine-tuning of one’s performance that is near impossible without it.

However, this use is fairly limited to more ambitious raiding guilds and not as widespread as damage meter add-ons. The add-ons being inside the game also offer the possibility to broadcast the collected data in a group to motivate or shame group members. This enables for example mobbing (Taylor, 2008). Both these tools influence the emerging play and sociability of the game in a similar way, but for different groups. This also shows that when defining co-creative game design it is important to take different game sub-cultures and niche practices into account where something might be changing game design for a certain group of players and not for another one. (Steinkuehler, 2006; Taylor, 2009) As seen in figure 5, even after a number of inclusions of add-on functionalities into

the default interface in 2011 less than 10% of the WoW players played with the default UI.



**Figure 4** Percentage of WoW players using heavily modified, slightly modified, or default user interfaces (Targett et.al. 2012)

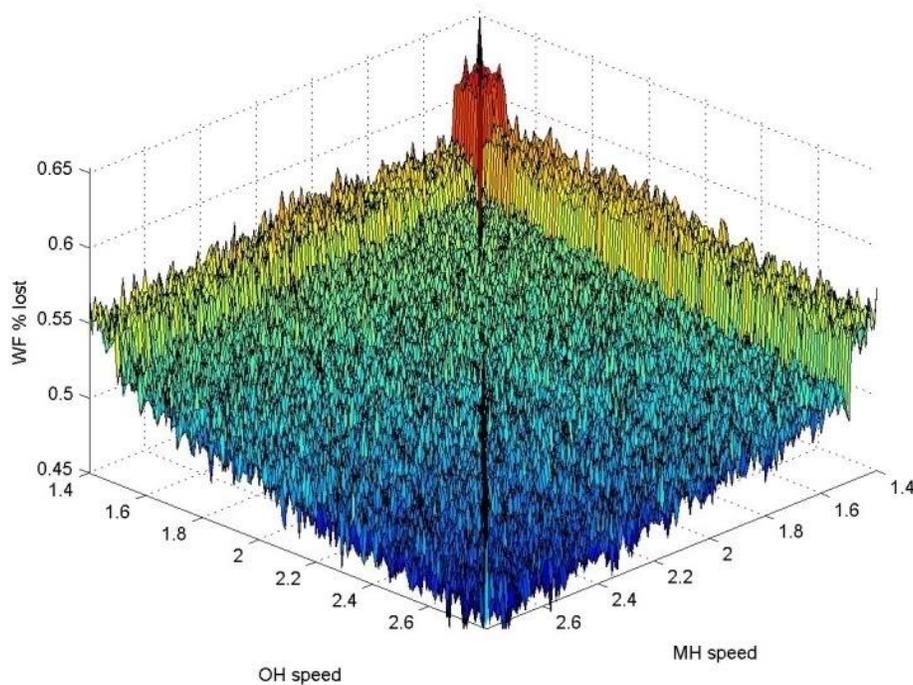
The point remains that it is problematic to argue that *recount* is co-creating game design while *World of Logs* is not solely based on that *recount* is available inside the game. Discarding this requirement would open the definition of co-creative game design up to a vast amount of other creative activities. These are hinted at with the inclusion of “communication infrastructure” into the first condition of the model. Examples here are guild management websites or theorycrafting, but also (video) guides and high end raiding.

Theorycrafting is an interesting example here. “As an emergent practice of World of Warcraft (WoW) players, theorycrafting is the search for the optimal set of strategies with which to play WoW. By using statistical analysis and mathematical modeling, theorycrafters seek out the underlying formulae that govern WoW, largely in an attempt to play WoW better.” (Paul, 2011:1) So theorycrafting is backwards-engineering game mechanics. See figure 12 for an example of what theorycrafting might look like. The figure shows a graph created by a theorycrafter to understand how the attack speed of the two one-handed weapons of an enhancement shaman, one of the classes in WoW, impacts the damage output of the character. The impact of theorycrafting on different player groups and the way it participated in separating these groups and their play practices from each other has been discussed by Ask (2011a, 2011b) She finds that the differences between players of different skill levels and with different use of theorycrafting and add-ons nearly play different games. This leads to a problem for the designers of the game.

As theorycrafting (and add-ons) change the proficiency of the players by such a substantial amount it becomes impossible to design content that is challenging, but beatable, for both groups of players. Those who use theorycrafting and add-ons for optimization and self-diagnosis will easily beat any content that would be challenging for those players who do not participate in these practices and do not use these tools while content that would be fitting for these players would be trivial for those players who optimize their play. This substantial meaning of add-ons for the interface design of WoW is also reflected in an interview with Soren Johnson, lead designer/ programmer for *Civilization 4* (Firaxis, 2005) and *Spore* (Maxis, 2008):

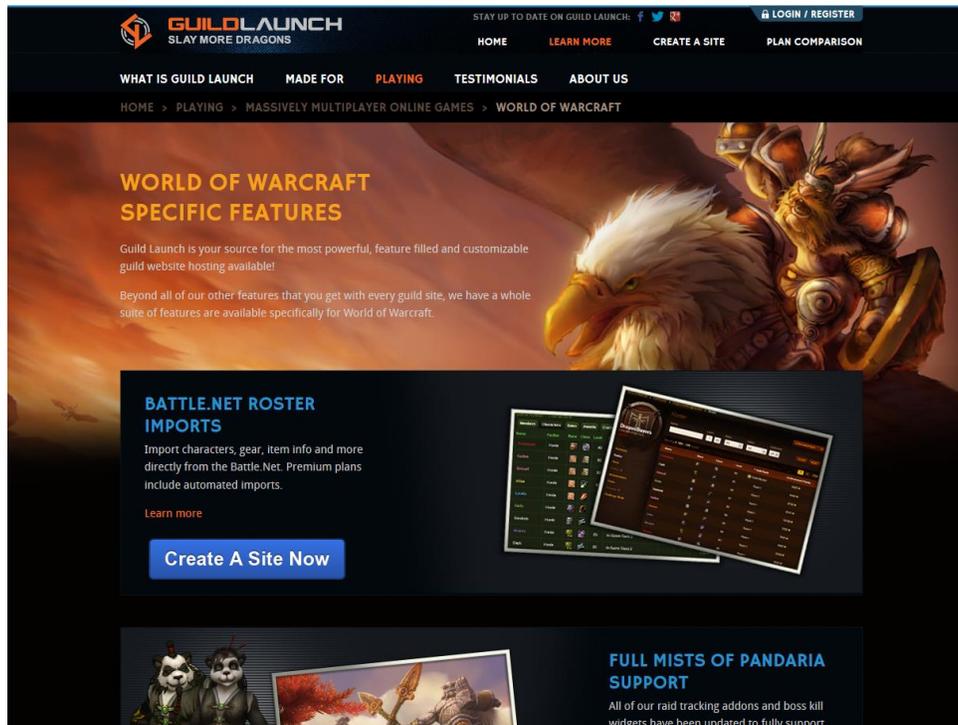
*One of the most impressive things about that game (WoW) is the flexibility it gives users to create their own custom interfaces. The interesting thing about this decision is that while it taps into the incredible resources of the user modding community, it is also a tacit admission that a game's interface is best developed in concert with the players (emphasis in original). (Johnson, 2006, para. 1)*

That means that the designers of the game have to relate in some way to the power increase that these tools offer and either design for them being used or designing ignoring them and letting them trivialize the game. By designing for optimized play the game designer acknowledges that these optimization tools and collective learning practices like theorycrafting are a necessary part of the game. The game is simply not playable without them any more at this point. There is thus a clear connection between the game design from the side of the publisher and player-created content as “*this player-created practice has fundamentally changed how WoW is played, while also reshaping the relationship between players and designers.*” (Paul, 2011:1) However, the point here is to investigate whether or not theorycrafting could be considered co-creative game design. As theorycrafting is happening completely (or at least mostly, there might be some testing of theories with in-game data or in-game data collection) outside of the game but has a documented impact on the way the game is being played and even forces a response from the game publisher this is a useful example to decide if the borders of the software artifact are also the borders of co-creative game design. Similarly to the way add-ons have been included into the default interface of WoW some aspects of theorycrafting have also been made available inside of the game. An example here is the calculation of the needed hit rating, an attribute found on gear in WoW. Originally the amount of hit rating needed to guarantee that nearly every attack hit the enemy was determined using theorycrafting. Then players had to adapt their gear to archive the needed hit rating while overshooting the necessary amount as little as possible (as every excessive point of hit rating was useless and should be spent in another attribute on gear). However, the calculation of the needed hit rating was incorporated into the default interface of WoW. Now a player only needs to look at her character statistics to see the exact amount of miss chance and hit rating needed. This change is a change in the design of the game because it changes play. However, this change is done by including information that previously was available outside of the game in the game. As in this case the only difference is the inclusion into the software artifact this would not be a good reason to deny theorycrafting the title of co-creative game design.



**Figure 5** Ownedcore World of Warcraft Guides (31.03.2008), Graph illustrating windfury procs lost to the off-hand weapon depended on the attack speed of both weapons,

Another example here is the mentioned guild and raid management websites. For an example of one of these websites see Guild Launch in figure 6. Community websites around games take over important tasks for the players and often make the game playable in the first place. The typical guild homepage for groups in massively multi-player online games (MMORPGs) makes managing a large group of people possible in the first place and provides for example a calendar for raids in which players can sign in if they want to participate. Similarly to add-ons and theorycrafting WoW has adapted the key functionality of these websites and included a guild calendar into the default game that makes it possible to sign in for future raids. This is a change of information infrastructure that changes play and when included into the software is a clear game design change. This is not the only contribution of community websites to game design. Game community have been show to facilitate collective information collection (Sherlock, 2009), collective learning and scientific reasoning (Steinkuehler and Duncan, 2008 ) and are an important part of the varicolored practices that is play in virtual worlds (Taylor, 2009; Steinkuehler, 2007). If they satisfy the conditions of the model for co-creation above then they should at least potentially be included into co-creative game design.



**Figure 6** Guild Launch, World of Warcraft specific features. <http://www.guildlaunch.com/playing/guild-hosting/world-of-warcraft-guild-hosting/> (accessed 18/07/2014)

### Co-creative Design as Corollary Design

Another argument against player co-creation of game design is that whatever players do is only corollary design. The point is that players are only filling gaps left open by the game designers and that their actions and creations just trivially follow from the design put in place by the game designer ahead of time. If the game designer has already planned for players to create these extra texts and tools that are influencing the play of others then this could still be a part of the original game design.

In an essay about the player's role in design Zimmerman also writes about iterative design as the "blending of designer and user, of creator and player"(Zimmerman, 2003) with a focus on letting the designer become the player. The notion of iterative design also limits the role of the player to giving feedback to the designer and to enabling the designer to see her creation from a different perspective. The players here also have no agency, influence, or creativity that might in any way influence the design of the game. This perspective presents designers as all-powerful and relegates players to using, albeit in their ways, whatever the designers hand them over.

However, this perspective leaves some questions open when the creations of the players are breaking or colliding with the original design and intention of the games producers. Assuming that even player creations that subvert and twist the original design of the game are still part of the intended corollary design of the game designer is self-contradictory. It is also problematic to see every player action as corollary when game design has been defined as second-order design. Any notion of critical play and player

freedom, hacking, and ethical play with the game contradict this notion strongly. Even outside of just games this is a very designer-centric or author-centric notion. Consider for a moment flash fiction. It would be near comical to claim that Snape/Harry alternative readings and flash fiction is corollary to Rowling's writings instead of creative. Any notion of an active audience in construction of meaning and even any communication model besides the simple Shannon/Weaver contradicts the notion of corollary design.

What is left then of this perspective that could be summarized with seeing game design as what the game designer does is that aims to give recognition and a certain creative freedom to game designers. There is something to say in favor of the political work this perspective does for the recognition of game designers as cultural creators and game design as a form of cultural impression. However, it disregards the influence of the player creators. It does not make sense to decide if a certain feature that influences the emergent practice of play of many or even all players is a part of the design of a game based on who created it. It must be possible to judge a design feature based on its influence on play and not only on who authored it. However, the company that created WoW as you can see at the above explicitly defines game design along the institutional lines of their organization (Zarhym, 2012).

### **Institutional Authorship**

*“legal provisions for extensive brand policing are put into end-user license agreements and terms of service or use that players must regularly accept to play the game.” (Taylor, 2012:160)*

At this point the argument against co-creative game design is boiled down to a stress of institutional authorship of the company producing the game. From this point of view then then the institutional borders of the game production company are the borders of game design. This perspective is reflected in a statement from a Blizzard community manager: *“We create. You play. You provide feedback. We iterate.”* (Zarhym, Blizzard Community Manager, 05/05-2012)

This perspective does even lead to conflicts with player co-creators around ownership and control over their creations. Conflicts of this kind can be found in the example of the AVR add-on presented above where Blizzard disabled an add-on. However, in a very detailed analysis of a major conflict between Blizzard and WoW player creators Blizzard resorted to threatening player creators with legal actions leading Kow and Nardi (2010) to ask: “Who owns the mods?” In this kind of conflicts between game companies and player creators about creative and intellectual property rights players are not on equal footing with the game developers in terms of power (Kow and Nardi, 2010; Johnson, 2009). Game companies enforce intellectual property and ownership often through legal actions (Lastowka, 2010). Here game companies frame themselves as sole creators and owners of their games. Examples are the conflicts evolving around breaches of End-User Licence Agreement (EULA) like the use of bots or Real-Money-Trade (RMT) as well as conflicts about the ownership of virtual items and the framing of virtual worlds, digital games and virtual items as a service (Lastowka, 2010). If player creators were seen as co-creators of these games who also have a right to this content, many of these conflicts could be seen differently. While there are conflicts between game producers and player creators co-created content is not necessarily subversive or revolting against the overwhelming power of the game producer but often seen as active participation by the developers themselves. (Herz, 2002; Humphreys, 2005) However, exactly what positions of power the player creators have is a central piece of this puzzle. In relation to e-sports

Taylor made this point of the power difference very concisely. *“When a game company can, in essence, take the ball and go home we’ve entered some new territory.”* (Taylor, 2012:171) In terms of player co-creation that means that as long as a game producer can simply shut down the players’ contributions there cannot be a relationship of equals.

Co-creation should imply a kind of partnership between equals. It should not be some kind of sub-creation where one party gets to create as long as the other does not mind and has no chance of speaking up for their rights or interests. These conflicts show the relevance of the political forth condition for co-creative game design in the proposed model.

## **Conclusion**

The result of the analysis is that there is no clear-cut divide between player creators and institutional game designers in terms of how they are influencing play for others. Instead player creators can have a real impact on how the game is designed in a number of ways that warrant stronger claims for recognition and partial authorship of the game they participated in designing. The political results of this are that there are increasing possibilities for activism in digital games through player-created content and that the claim of players and player creators for more control over and reward for their work are stronger than ever while institutional authorship as a concept becomes harder and harder to justify.

However, the model for co-creative game design does hold in the discussion of the critical points and a number of examples. Players can and do influence and change the design of the game considerably through numerous kinds of player production. These changes have to be considered to at least potentially modify the design of games even against the will and vision of the producers of the game. Players can co-create the design of a game when certain conditions are met. They can do that through 1. Player creation of a text or communication infrastructure that modifies the properties of the game and from which play emerges 2. for a considerable group of players who share a particular practice of play 3. not only by playing the game but by changing how others play it in a distinct creative activity 4. with the potential to subvert or contest the original design of the game. This understanding of player co-creation of game design is more narrow than co-creation threw play which helps it maintain political power while still including a vast number of cases of player co-creation. This model of co-creative game design can be useful for future discussions of ownership and cultural production as well as exploitation.

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