

# Addressing Social Dilemmas and Fostering Cooperation through Computer Games

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## ABSTRACT

The concept of social dilemmas can be used to understand social situations all around us. I am looking at identity formation to help understand why people make the decisions they do in a social dilemma and whether the explicit knowledge of being in these situations help steer them to cooperate within their social groups. First I describe a previous study which clearly demonstrates the need to think about identity deeply and to think of decision-making as happening within specific social contexts. Then I describe on-going ethnographic, action research with a guild in *World of Warcraft*. I am hoping to get an insight into how social norms of the guild, and game in general, can support cooperative behavior. I discover that I must do this through collaborative community management in order to legitimately participate and influence the guild.

## Keywords

social dilemma, identity, situated context, cooperation, deviance, massively multiplayer online role-playing game

## INTRODUCTION

Gamers who play massively multiplayer online role-playing games (MMORPGs) often form clans or guilds so they can benefit from pooled resources and skills. It is generally understood that all the members of a given guild will work together, whether the task is fighting a common foe, helping each other gather resources and craft items, or performing other in-game tasks more efficiently. Yet, some guilds recruit so aggressively and acquire so many new people on the assumption that a larger guild is a stronger guild that members no longer know each other, which in turn leads to a diluted sense of community. This isolation has such an impact that there may come a time when some guild members feel no obligation to the guild at all. These members often become “free riders,” reaping the benefits of the guild while neither contributing nor being an active participant in guild efforts. This, of course, happens all the time in everyday situations on a grand scale and in economic game theory is called a “social dilemma.” I am attempting to address these social dilemmas by looking at how computer role-playing games can be used to foster cooperation. What elements of an in-game community foster cooperation and can any of them be designed through intervention?

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## Social Dilemmas

Social dilemmas can be described as any situation in which participants can choose whether to contribute to a group at their own expense, and where the benefits they receive will only be greater than the effort they put in so long as enough people cooperate. In other words, to make the cooperative choice is to put one's *trust* in other members of the group to do the same. If enough people are already cooperating, however, it is possible for an individual to not contribute and still receive the benefits of group affiliation. The most rational self-interested choice then is to not contribute, but if everyone decided to not contribute all the members of the group would suffer. Examples of social dilemmas include voting, volunteering, paying taxes, carpooling, and recycling. Some people do not feel compelled to participate in these activities even though they may know the benefits of doing so. The satirical newspaper *The Onion* even touched on this with their fake headline "Report: 98 Percent Of U.S. Commuters Favor Public Transportation For Others." [17] The most obvious reason people choose not to contribute is because it takes great personal effort while their contribution to the overall group is very small. [6, 10]

There are many different approaches to encourage people to cooperate. These include creating laws, making free riders feel guilt and shame, and threatening with future consequences. [7] I argue (and agree with Leon Felkins) that the ideal way to foster cooperation is to increase the trust members have in each other. [5] Furthermore, I believe it is possible to appeal to people's sense of morality and ethics by *making their situations explicit*. In other words, if someone knows that they can choose to be either selfish or helpful, he or she will tend to make the cooperative choice because it is the "right" thing to do. Additionally, he or she will be informed and, hopefully, have a greater sense of group affiliation and a realization of agency and wisdom. [16]

## The Role of Computer Games and a Failed Attempt

In my on-going research, I am examining the role computer games can play in both fostering cooperation and in instilling a sense of responsibility in people when they are confronted with a social dilemma. The main idea is that a computer game presents a sandbox environment where players can choose to do things they wouldn't normally do outside of the game. A good computer game allows one to apply different strategies of play where failure in using certain strategies is not necessarily an indication of overall failure. Players could even save and reload their game, each time trying a different approach and thereby taking on a different identity, to find the optimal outcome. In fact, it is through failing at specific strategies and then trying new strategies that players become able to construct their own knowledge of how the game system works.

In a previous project, I, along with two colleagues, examined identity formation of gamers while playing in a simulated social dilemma. For this, we created a custom single-player module for the computer role-playing game *Neverwinter Nights*. [3] We surveyed the participants before and after the game-playing regarding a real-life social dilemma, hoping the act of playing the game would affect their choices in the hypothetical real-life situation. We found that although players tried alternate strategies when playing the game, their game playing did not appear to affect their real-life choices. Game playing, however, did appear to promote deeper thinking about real-world situations when prompted. We concluded that it is possible we didn't find any strong patterns between in-game and real-world identities and behavior because the game we created was not deep enough to realistically simulate the complexity of real-world social situations. We also believed that the results of the game would have been very different if the players had to

interact with other real-world people.

Two major issues have come up through this previous study. First, problematizing “identity” is much more complex than we had originally anticipated. Different people treat games differently. They treat their avatars, other characters, in-game situations, and relationships differently. Much of it is deeply rooted in who they are previous to the game-playing experience. Our pre- and post-treatment surveys didn’t account for individual differences. Second, it is becoming clear that the distinction between online and offline life is not a useful one to make.[20] The problem we encountered was not that the in-game situation was too different from a real-life situation. Rather, it is that the in-game situation was too different from an actual situated experience.

## **METHODS OF CURRENT RESEARCH**

Keeping these in mind, I am currently participating in a group of online gamers that is attempting to create a sustainable cooperative guild with a strong sense of group identity in *World of Warcraft (WoW)*. It is our hope that the guild will continue to thrive even if founding members leave the game and that members of the guild will benefit greatly from membership and come to understand their role in maximizing the efficiency and camaraderie of a cooperative community.

A guild is a group of PCs who have formalized their relationship to each other. They prefer to play together or group together over grouping with non-guild members. They tend to share the same goals while playing the game. Guilds have been likened to extended families, social circles, and sports teams.

While the guild we formed is striving to be as flat as possible in terms of its hierarchy, it should be stated that I am actually the guild leader. This was not by design. Rather, I happened to be the one with enough in-game money for the initial guild charter in the early stages of our game-play. This position has given me more power than I otherwise might have in that members of the guild who joined after the charter was created might put more weight in what I have to say, but it also presents many disadvantages in that much of my in-game time is spent managing the guild.

Also, all of the guild members join knowing that I am doing academic research and that anything they say may be used as evidence. I have made an effort to deliberately not learn the guild members’ real names, and when I present their evidence I change their screen names to further protect their identities. It is my hope that none of the research I do will harm any of the participants (they are like family, after all), but when looking at what constitutes social norms in a group one will eventually find deviance. I must be careful how I report this antisocial behavior with respect to protecting the person who exhibited it.

I hope to use several methodological approaches which I believe will be helpful. First, I’m already engaged in online ethnography. In fact, I am definitely a participant rather than observer within the *WoW* gaming culture. In this sense I am emulating work such as that of Constance Steinkuehler with the MMORPG *Lineage*. [15] More specifically, I am playing *WoW* on a particular role-play server as a member of a particular guild. What I have to say about this guild and its social practices might not be the same things I could say were I in a different guild or on a different server. I’ve already found differences in apprenticeship behavior between my experiences and that of Steinkuehler’s, for example.

Second, I have been using a third-party addon for the game to capture in-game chat transcripts.

Most of the in-game analyses I'm doing is based on the content of these transcripts, and I am particularly paying attention to what constitutes social norms of the group and what constitutes deviant behavior. I am also taking screenshots when I deem appropriate (if I remember) and looking at the guild's online discussion board. Many issues which come up in-game are discussed on the public boards the next day.

Third, I'm taking a hands-on approach to affecting the guild. I am not necessarily interested in what would occur naturally in-game. Instead, I aspire to take a cue from action research and design experiments, to actively intervene when I can to make the guild be as cooperative as possible. I'm doing this collaboratively with the guild members, stressing that we are designing our own interventions and learning from them together. The three main frameworks or concepts I'm using to design the interventions are taken from social dilemma literature [5, 6, 10], New Literacy Studies ideas about identity with a focus on games [9], and ideas about creating a sustainable online community [11].

### **Identity**

It is arguable that online spaces are less risky and allow for a wider range of behavior because users can start anew very easily by changing their screen name [4]. These arguments, however, are mostly made by using instant messaging and online chat communication as examples. An MMORPG, like MUDs before it [18], does not lend itself to the same sorts of persona abandonment because of the amount of time and effort needed to cultivate one's avatar or on-screen character. Miroslaw Filiciak [8, p. 91] writes:

There are enough niches in the Internet to deconstruct one's identity, ... However, maintaining only one, long-term avatar seems to be an optimal variant [in MMORPGs], because of the advantages that follow from its development, which also leads to a deepening of the player's investment in and identification with the avatar. It clearly shows that the residents of virtual lands treat their net-life much more seriously than it would seem to people from the outside.

Constance Steinkuehler says, "[t]hrough participation in a community of practice, an individual comes to understand the world (and themselves) from the perspective of that community." [15] She is basically showing how MMORPGs can be looked at from Lave and Wenger's "community of practice" [12, 19] point of view with a specific eye on identity formation. When people are productive members of the group, they have taken on successful identities. Those who do not fit in, exhibiting deviant behavior, are those people who have not yet discovered or used successful identity strategies.

These two ideas, that an MMORPG persona is valued and that certain people are more successful than others in forming that persona, causes me to think that describing the social context and the behavior of its individuals is important and meaningful. If I can help some of the participants understand social dilemma nuances and why cooperation in a sustainable group is beneficial, won't I have discovered a powerful way of affecting their lives?

### **Online communities**

In an attempt to be inclusive (as is any educator's responsibility and in-line with the guild's ideals), when deviant behavior is encountered, some form of mediation needs to develop other than outright rejection from the group. Somehow designers of communities need to legitimately

introduce rules and boundaries. Too many specific rules from the start about how to interact and communicate with others would seem to limit the amount of “fun” players could get out of a game they purchased and would be met with resistance against this outsider influence. Instead, these guidelines have to emerge from within the guild for its members to value them. I’ll be looking closely at Kollock and Smith’s list of necessary conditions for sustainable online cooperatives. [11] In the end, I can hope to help steer the guild but also realize that sometimes a community has to be defined by who it includes *and* who it excludes.

## DISCOVERIES SO FAR

One problem which was immediately evident was that there is a lot of work that goes into forming and managing a guild (and I assume any self-governing community), especially since players are starting new relationships and don’t have as solid a foundation for what norms are socially acceptable. I’ve found that much of my time is spent on the administrative tasks of introducing members to each other, mediating disputes between members, and actively lessening anger and destructive behavior.

I’ve also discovered a more subtle tension between the community I want to create versus the purpose of the game (which is to have fun) and the natural practice of its participants. This is partially why I have not yet intervened more overtly by introducing certain concepts, even though I believe the guild members should know the purpose of the guild more explicitly so that they can self-assess their own behavior. I don’t ever want the research or creation of the community for specific purposes to supersede the enjoyment of the game. I do not want to impose outsider, non-legitimate behavior onto the other guild members but would rather see cooperation emerge from the context of the in-game social environment.

The culture around MMORPGs has established certain codes of conduct or ways of practice due to the nature of the games. It is sometimes necessary to compete with others for monster kills and item drops. To tackle a difficult set of monsters or a difficult quest, it is also sometimes necessary to team up with a group of player characters (PCs). If, for example, a group of PCs who have allied themselves to each other encounters a group of monsters, it is generally accepted behavior to kill all of the monsters before searching their bodies for loot. If a PC starts looting before all of the monsters are dead, he or she might jeopardize the safety of the rest of the party. Yet, some players will opt to “ninja-loot” for the chance of getting the good items first, preventing the other PCs from having a chance at getting the monster drops. *World of Warcraft* has in-game mechanics to counter this and other types of anti-social behavior, but there are many agreed upon behaviors which are not enforced by any set of in-game mechanisms. New players to *WoW*, and MMORPGs in general, have to learn these social rules. Some of them learn faster than others. The key thing to remember is that people learn them the same way they learn (or not) how to behave in “real” life or other domains or communities.

Some players are less adept at fitting in than other players even if they place much value in their avatars’ identities. I’ve come to the conclusion that some people *in any community* will never fit in. This is depressing news for educators. It is especially depressing to realize that some forms of learning proper behavior are seen as illegitimate by the very community one is trying to join. Just like it is not seen as legitimate to learn about hip-hop culture from direct instruction rather than becoming immersed in the culture [14], it is not legitimate to learn about the social practices of *WoW* through mentoring. I should take a moment to say that my experiences can perhaps only speak about my particular server on *WoW*. Steinkuehler [15], on the other hand, describes

apprentice / mentor experiences in *Lineage*. On my server, the preferred way of learning is by personal observation. A player on my guild's message board wrote, "Most people adapt to our attitudes quickly, I've found. They join, stay quiet for a bit, then once our 'social rules' are observed they feel out talking with us. And everyone wins!" It is absurd for me to talk to players about their behaviors and how they are anti-social, just as it is absurd to give a pep-rally to estranged employees in a corporate environment.

The guild and I have, however, been attempting to treat conflicts as they come up, whether they arise from people stepping out of social norms or from the simple fact that not all people get along with each other perfectly. To this point, these problems have taken the majority of my efforts, but in time I hope take more steps towards focusing the guild towards cooperation.

## CONCLUSION

The challenge the guild and I have to deal with is to steer players in the right direction, to help them socialize into *WoW*'s in-game culture. This is a never-ending process as new people join the guild and as different players meet and interact with each other. Additionally, a basic awareness in guild members of what a social dilemma is and how to recognize that it manifests itself in almost any social setting would help them become a more cooperative guild. The problem is in figuring out how to introduce these ideas and concepts without seeming like an outsider illegitimately trying to influence how the game is played. Hopefully, if the guild members are all focused with the same knowledge, they will continually self-assess their own behavior and collectively monitor the guild's success. I cannot stress enough the importance of addressing social dilemmas. Ideally, if more people were aware of their own situations, we would have a more informed citizenry with agency and wisdom. [16]

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