Analyzing Game Discourse Using Moral Foundations Theory

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Abstract: This poster addresses challenges in the study of morals in games and the design of games that elicit moral reasoning by utilizing *Troubled Lands*, a common-pool resource dilemma simulation game designed to support political-style debate and diverse moral conversation (Fennewald and Kievit-Kylar, 2014). Discussions from ten sessions of the game were analyzed using Haidt's Moral Foundations Theory (2012), a theory that describes six moral foundations that are innate yet vary in expression across cultures. We find that players make a number of anomalous actions (actions that would not be expected under standard game theoretic predictions) and that these anomalies are justified using a variety of moral claims analogous to the foundations described in Moral Foundations Theory.

Introduction

As Sicart (2009) and Zagal (2011) point out, games can provide a space in which players can engage in making moral claims and judgments. Several studies of ethics and morals in gameplay take an ecological approach, studying the moral potential of commercially available games; however, a smaller number of studies have been dedicated to the design of morally rich games and game mechanics meant to push the boundaries of what is possible in terms of in-game moral elicitation--a notable example in this regard is Brenda Romero's series *The Mechanic is the Message* (Braithwaite 2010, Swain 2010).

Prior work in gaming studies has applied Kohlberg's Theory of Moral Development (1973, 1981) to gaming (Staines, 2010). An alternative theory of morality that might apply more to in-game moral examination is Haidt's Moral Foundations Theory, a theory that states there are six moral foundations upon which actions can be justified: care—acting to aid those in need, fairness—acting out of proportionality, liberty—acting in ways that preserve self-autonomy, authority—acting out of respect or deference, loyalty—acting in ways that uphold a group or social bond, and sanctity—acting out of respect to something considered pure or sacred. This theory suggests that rather than looking at morals as developing along a trajectory, it is more productive to consider morals as belonging to one or more categories.

Haidt's theory is valuable to game designers, researchers, and moral educators because it suggests that a variety of moral behaviors and reasoning could exist in games. Further, Haidt's theory can be applied as a test of how often particular games elicit particular kinds of moral foundations. For example, the moral content of a game's discourse can be analyzed as one indicator a games moral elicitation potential. This application of Haidt's theory is theoretically significant as it represents an opportunity to conduct a proof-of-concept test of which moral motivations can arise within gameplay for any particular game. This study is also significant because if games can elicit particular moral reasoning from within-game events then this could point the way toward producing more games and game mechanics that emulate moral situations and choices found in real life.

Methods

To expand theory in the area of moral reasoning and behavior in gaming, we first adapt Haidt's Moral Foundations Theory to study moral discourse in games. We redefine Haidt's six moral types in terms of game play and then show examples of various moral claims made by players that include examples of Haidt's six moral types: care, fairness, liberty, authority, loyalty, and sanctity – when players discuss the purity of the ecological commons presented in the game. We look for Haidt's moral six moral foundations (care, fairness, liberty, authority, loyalty, and sanctity) in the game because they are a helpful heuristic for sorting through the diversity of moral action that could exist in games.

Having developed our adaptation of Haidt's Moral Foundations Theory, we apply our adapted framework to the study of ten gaming sessions of *Troubled Lands*, a game that we made in 2014 specifically designed with the aim of eliciting a wide range of moral claims within gaming experience. In the game, three players with different abilities and goals share a common space that is in danger of environmental collapse. Players are asked neither to work as a group nor to compete with each other, but rather to perform as well as they can in their own position. Play is balanced by having each players compete tournament-style against another player who is playing the same character with the same abilities but in another group, such that each group has three roles, e.g. A, B, and C in group 1 and A', B', and C' in group 2. Thus, A and A' are competing, B and B' are competing, and C and C' are competing. This means that in any one group, players are not obligated to collaborate or compete but are rather given the

option to decide freely how much to collaborate, cooperate, or compete. In this way, our game was designed to elicit moral discourse, with asymmetry and inequality among players such that each player represents the rich, the middle class, or the poor.

Results & Discussion

In our study, we find examples of moral claims for many of Haidt's moral foundations suggesting that a wide variety of moral foundations can be elicited in games. In the poster, we provide descriptions of moral foundations and quotations from game play transcripts to illustrate our findings. For example, as evidence of care, we find that some players sacrifice themselves for others. One player states "I'll lose so you guys can win." As evidence of sanctity one player states: "It was like this whole game we were trying to keep things green … because we don't want to hurt the earth." In some cases, players were so motivated by these moral foundations that their actions worked against their in-game success.

Other foundations were also seen. Liberty was observed when players act in their self-interest and refuse to assist or go along with other players, instead opting to score their own points. Not many examples of authority are seen in this particular game, except when one player becomes bossy or when other players follow that players direction, which did occur on occasion. Loyalty is seen in that some groups for a strong in-group identity. Fairness is seen in nearly every game with players acting on reciprocity or taking turns in taking beneficial actions.

Loose connections to Kohlberg's stages are also found, but the connections are more difficult to make between our data from this game and Kohlberg's theory as compared to Haidt's theory. This does not suggest that Kohlberg's theory is incorrect, only that our game does not necessarily elicit development or that development of this kind cannot be detected during a 45-minute play period.

Conclusion

This study is significant as a proof of concept application of Moral Foundations Theory to gaming studies. Further, it documents how a game that can be learned and played in less than one hour can elicit a wide range of moral types.

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