Abstract

Games shape player behaviour by presenting goals which players attempt to fulfil. This is the most common “folk” theory of the relationship between game design and player behaviour. It is also one central to most game design literature and to much work within the game studies field.

In this dissertation, the simple idea that players try to win is explicated through a “Rational Player Model”, a tool for understanding the relationship between game goals and the behaviour of players who try to reach these goals. The model is discussed and applied in two capacities:

A) As a model for formal analysis which can used to understand and categorize certain aspects of games related to goals. Here, video games are studied through the lens of (economic) game theory in order to determine, for instance, the types of conflict dynamics the games will elicit given Rational Player assumptions.

B) As an ideal type of actual player behaviour. Here, the model is used to derive concrete predictions about video game player behaviour which are then compared to actual play in an empirical study of multiplayer console gaming.

The dissertation finds that the Rational Player Model is one of four models of player behaviour common in the game studies/design literature and that it is the predominant model within game design. Also, the model is found to often operate at so deep a level as to be unstated. Applying the model analytically, video games are categorized as competitive, semi-cooperative or cooperative and it is shown how the number of players influence a game’s conflict dynamics. This leads to an analysis of “strategicness” of different game types; a combined measure of the degree to which other players matter to the choices of the “rational” player and the range of these choices.

Finally, deriving behavioural predictions from the model and comparing these to data from a study on multiplayer console play, players are found to behave “rationally” within the gamespace itself while working to fulfil various social functions in their verbal interaction.