

## Studies of videogame's discourse: methods and data

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**Abstract:** Despite the widespread use of discourse analysis in research, the field of discourse analysis applied to videogames does not exist yet. This paper explores using computational analysis for the study of digital practices connecting with videogames. The results show how the vocabulary changes through time and the transformation of digital and cultural practices.

**Introduction.** Digital technologies allow people to communicate and manage relationships in new ways that give researchers the problem of choosing the right framework or creating new ones. Digital practices that we can describe "as a matter of the concrete, situated actions people perform with particular mediational means (such as written texts, computers, mobile phones) in order to enact membership in particular social groups" nested with other cultural practices which we have to consider during the discourse analysis of the digital environment. The main question is can we use computational analysis to trace the changes in videogame's discourse. Practices for discourse analysis of video games do not exist yet because a video game is made out of visual images, so it's the semantics of the visual word. Nevertheless, players have their own vocabulary to describe games through mechanics (rules of a world) Thus, we want to unite two discourse practices. The first is video game discourse and the second is interdiscursivity in online consumer reviews. From the perspective of review studies researchers were interested in the importance of different elements of games for players and sentiment classification.

**Main part.** According to the question above, in our study, we understand discourse as a term that refers to broader systems of knowledge that act to regulate what people can say, write or think. We collected data (player's reviews, journalist's reviews, game's abstracts) from the beginning of 2000 to nowadays, we suppose that this range allows us to discover unique attributes for certain time intervals in texts. Three types of data are necessary to understand how digital practices and semiotic elements transfer from one community to another (players, professional journalists, game industry). Data was scraped from Steam and Metacritic using Python's libraries: BeautifulSoup, steamreviews. Not all reviews can be called quality because it may not be related to the game, but to the context in which this game is. We used the length of the comment and the time spent in the game for selection.

We will use text classification, topic modelling and word frequency for computational analysis. Classification models with vector representations of text and TF-IDF will be applied to define key aspects of texts for different years that help the algorithm to predict the year of the text. Topic modelling will show us the main topics of time intervals. Word frequency will reveal the most popular words.

**Conclusions.** The results of this research will allow us to define how digital and cultural practices transfer between communities and times. Using data of different years will help us to track down how the vocabulary changes depending on the experience of the players, the

number of publications writing about games. Finally, we will be able to move the framework to similar areas.

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