

Video Games as Literary Art: The Role of the Protagonist in Narrative Games

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Abstract

This work investigates the position of narrative video games within literary and stylistic studies, focusing on the distinctive textual and narrative properties produced by their interactive nature. While traditional approaches have often opposed ludological and narratological perspectives, this study considers them complementary and examines how interactivity, player agency, and direct address shape the language of narrative games. A corpus of narrative video games, including *Slay the Princess*, *Portal 2*, *Undertale*, *Life is Strange*, *Red Dead Redemption 2*, *Disco Elysium*, *The Stanley Parable*, and *The Elder Scrolls V: Skyrim*, is compared with corpora of literary and dramatic texts.

A significant part of the work concerns the construction and preparation of these corpora. Unlike conventional literary corpora, video game texts are rarely available as clean, directly usable textual resources. Game data was therefore collected through a combination of web-based transcription and text-dump resources, game-specific modding and extraction tools, and direct analysis of game archives. In particular, tools such as *unrpa* were used to extract text and associated resources from compiled archive files, while modding tools were employed to access and recover textual material embedded within individual games. The resulting data was then cleaned, segmented into sentences, and processed to make the different sources comparable. The literary comparison corpus was assembled primarily from texts available through Project Gutenberg, comprising approximately 220 works spanning roughly the late nineteenth to the late twentieth century, with separate fiction and drama corpora. This corpus construction makes it possible to compare video game texts with established literary and dramatic writing using the same computational procedures.

The study combines natural language processing, sentiment analysis, word embeddings, ma-

chine learning, and unsupervised learning to investigate both local stylistic properties and broader stylistic positioning. Particular attention is given to features associated with interaction with the player, including imperatives, emotional variation, sarcasm, and other forms of direct address. These features are detected through computational models applied systematically across the corpus. In addition, an original representation of sentences based on phonetic and structural features is explored. Rather than considering sentences only as sequences of written words, this representation incorporates properties such as phonetic structure and sound-related information. Preliminary experiments show that these features can distinguish textual categories at a rate significantly better than random classification, suggesting that phonetic structure contains stylistically meaningful information that can contribute to computational literary analysis.

The work also investigates textual entropy at several levels. Classical statistical entropy is first used to measure the distribution and predictability of textual elements, including the succession of tokens within a text. Examining the entropy of sequences of words makes it possible to describe how predictable local textual structures are when previous elements are known. However, treating words as discrete and unrelated categories creates an important limitation: semantically or linguistically related words remain completely distinct statistical outcomes. For example, *walk*, *run*, and *travel* contribute to a distribution as separate categories despite their potentially strong semantic proximity. This motivates a rethinking of local entropy using word embeddings, in which words are represented as vectors and their cosine similarity can be incorporated into the measurement. The resulting approach seeks to measure not only how many possible continuations exist, but also how similar those continuations are to one another and to the observed continuation, providing a continuous representation of local

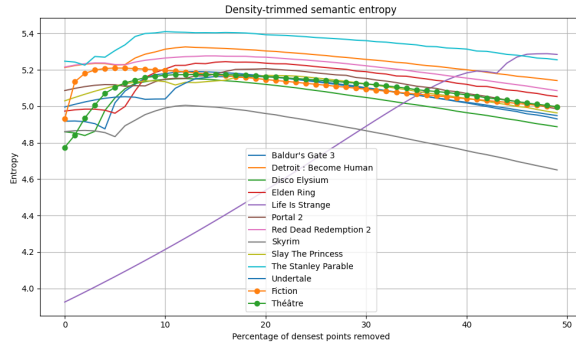


Figure 1: Progressive entropy measures through cluster suppression

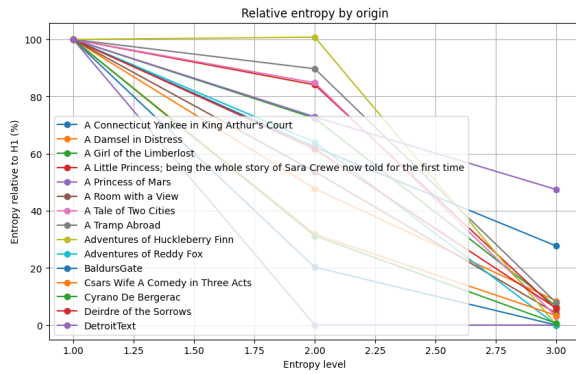


Figure 2: Contextual entropy drop through H values

contextual uncertainty.

The work further examines the possibility of replacing conventional readability measures such as the Flesch–Kincaid scale with a learned representation of stylistic complexity. Rather than reducing complexity to surface measures such as sentence and word length, the proposed approach seeks to learn stylistic distinctions from a corpus spanning literary works, theatrical texts, video game texts, and less traditionally literary material. Word embeddings and supervised machine-learning methods are used to investigate whether stylistic properties can be learned from these heterogeneous corpora and subsequently used to position previously unseen texts. In parallel, unsupervised methods are used to map stylistic and semantic similarities between video game texts and other textual genres, allowing relationships within the corpus to be examined without imposing predefined categories.

The results aim to determine whether narrative video games form a distinguishable stylistic category or occupy an intermediate position between established literary forms, particularly theatre and prose. More broadly, this study argues that the textual dimension of video games warrants literary and computational analysis

not because games reproduce traditional literary forms, but because their interactivity creates distinctive ways of constructing and experiencing narrative. By combining corpus construction, computational stylistics, phonetic analysis, entropy-based measures, contextual word embeddings, and machine learning, this work explores how the textual characteristics of interactive narratives can be quantified and compared with those of established literary genres.