Applying story intention graphs to model narrative meaning of a non-linear cinematic adventure game

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ABSTRACT

Telltale games live in a zone untouchable by most modern tools of game analysis. They reside firmly on the story side of the ludicnarrative divide, and rely primarily on natural language with (relatively) unsophisticated computational simulations of physics or other systems. This paper describes an effort at applying an existing modeling approach to a textual translation of the first episode of Telltale Game's The Wolf Among Us using a model of story content and a freely available representation of interactive fiction. This approach constituted one of the first such to apply narrative modeling techniques to existing commercial games, and as such revealed a number of issues with both the method of translation and the limitations of the schemata selected in addressing interactive narratives. The contribution can be summed up as the value of a medium "read" which is distinct both from the idea of a distant read described by FILL IN and from the common method of close play that has much in common with a close reading used in literary analysis. This is accomplished through taking a model of the narrative content to reveal the landscape of core player experiences that make up the tapestry of individual choice-driven gameplay traversals. David Elson developed the Story Intention Graph schemata [1] to capture discourse relationships of story elements.

CCS CONCEPTS

• Computer systems organization \rightarrow Embedded systems; Redundancy; Robotics; • Networks \rightarrow Network reliability;

KEYWORDS

ACM proceedings, LATEX, text tagging

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1 INTRODUCTION

Many attempts have been made to reduce narrative to discrete symbols, to nodes in a graph, and to elements and examine the pieces through taxonomy, combinatorics and grammars. While many areas lend themselves to this approach, the narrative resides primarily inside a human head and only its surface is revealed through the respective media that communicate it. The surface of interactive narratives are no more able contain its effects on readers and players than an ocean yield its secrets to a traditional cartographer seeking to understand its contours and colors.

- Commercially succesful choice-based narrative games
- Narrative in Games
 - Espen Arseth
- Computational approaches to Narrative
 - Generation
 - Understanding
 - Modeling (David Elson)
- Hypertextual Narratives
- SIG

2 NARRATIVE DATA: CORPORA

"The third, and potentially most troublesome, danger of using corpora is that it can drive a field into a âĂIJlocal maximaâĂİ solution. This happens because, despite whatever the known flaws of a particular corpus, it is easier to use that corpus than build another one. [2]

3 READER RESPONSE

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4 SOCIAL EMOTIONS

- "Para-social interaction" from Katherine Isbister How Games Move Us: EMotion by Design (Playful Thinking). Donald Horton and Richard R. Wohl "Mass Communication and Para-Social Interaction: Observations on Intimacy at a Distance"
- "So if we see or hear (or form a mental picture of) a person experiencing feelings in a social setting that we, too, are immersed in, our brains are "tricked" into believing that a real social experience is taking place. loc 406. "Grounded" in experience
- "This capacity to evoke actual feelings of guilt from a fictional experience is unique to games. A reader or filmgoer

may feel many emotions when presented with horrific fictional acts on the page or screen, but responsibility and guilt are generally not among them. At most, they may feel a sense of uneasy collusion. Conversely, a film viewer might feel joyful when the protagonist wins, but is not likely to feel a sense of personal responsibility and pride. Betcause they depend on active player choice, games hav an additional palette of social emotions at their disposal.

5 RESULTS

- Analysis of choices
- "Kernels" vs "Satellites"
- Ambiguity
- Paralinguistic interpreted meaning
- Diegetic & Pragmatic status/effect of choices
 - Influences perception of character
 - Desires unfufilled

6 FUTURE WORK

There are a number of interesting research directions that resulted from the study, some of which are planned as future work.

6.1 Single-Work Corpus

Collecting a set of real-world traversals of a work could be enough

6.2

REFERENCES

- [1] David K. Elson. 2012. Modeling Narrative Discourse. PhD Dissertation. Columbia University. http://scholar.google.com/scholar?hl=en
- [2] Mark Alan Finlayson. 2013. A Survey of Corpora in Computational and Cognitive Narrative Science. Sprache und Datenverarbeitung (International Journal for Language Data Processing) 37, 1-2 (2013), 113–141. http://www.uvrr.de/index. php/anglistik/SDV