

Curveship: Adding Control of Narrative Style

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Abstract

Curveship is a system for automatically varying the narrative style of interactive fiction. It offers advances for interactive fiction author/programmers; Additionally, it can be integrated with systems that aim to creatively generate and tell stories.

Curveship and Narrative Style

Curveship is a system for developing interactive fiction (IF) with narrative style; specifically, narrative style that can be parametrically changed. The system is a Python framework, was released as free software on February 2, and can be integrated into other narrative systems and used for other purposes, such as teaching narrative theory. Curveship simulates a world with locations, characters, and objects, providing the typical facilities of an IF development system: a standard “world model” as well as a “parser,” capable of understanding simple natural-language inputs that follow the conventions of interactive fiction.

To these capabilities, Curveship adds the ability to generate text and to change the way that events are told and the way that items are described. This is accomplished using high-level narrative parameters, so that, for instance, a different actor can be focalized (with the narrative told based on that actor’s perceptions and knowledge) at different times and events can be told out of order (allowing for flashback or the telling of events in reverse order). After a character is set as the narrator or after the narrator has been moved in time, the system automatically determines grammatical specifics and renders the text in a new narrative style.

The type of template used for language generation in Curveship, which is called the string-with-slots representation, shows that there is a compromise between highly flexible but extremely difficult-to-author abstract syntax representations and simple strings, which are easy to write but extremely inflexible. The development of the system has also suggested ways to refine narrative theory, offering new understandings of how narrative distance can be framed as being composed of lower-level changes in narra-

tive and how the order of events is better represented as an ordered tree than a simple sequence.

From a computational creativity standpoint, the system is easily integrated with other systems (drama managers, commonsense reasoning systems, etc.) and can be used to provide story generators with the ability to manipulate the narrative discourse, not just the plot, at a useful level of abstraction. Curveship can also be used in the generation of text-based simulated worlds (that is, interactive fiction). The abstractions of the narrating that Curveship provides are meant to offer a more helpful way to build models of narrative and game creativity. In demonstrating Curveship, I will be glad to discuss issues in narrative theory and the motivation behind the system as well as the details of practical matters, such as how to extend the system and how to best integrate Curveship with other systems that seek to creatively generate and tell stories.

The system itself, documentation of it, a list of publications about it, and an explanation of its name can be found at:

<http://curveship.com>