The Thematic Illustrator: An Automatic Illustrative Approach to Enhancing Narrative Cohesion
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The Importance of Cohesion in Narrative Systems:
Adaptive or generated narratives offer personalised and dynamic delivery of narrative content to users. However their generation or adaption is often based on the literal content of the narrative and not the subtext ignoring many important narrative principles such as narrative cohesion. Based on our existing work on a thematic model we present the Thematic Illustrator; a system capable of generating content relevant themed illustrations for short stories. The system aims to emphasise core themes and as a result improve the thematic cohesion of the story. We investigate whether this has a tangible effect on the cohesion of the narrative as a whole by using five variables to measure the cohesion of a story with themed and unthemed illustrations. Our investigation found that thematic noise can be reduced and that there is a demonstrated link between thematic cohesion and some other aspects of narrative cohesion.

Narrative Cohesion as five variables

Logical Sense
- The linguistic cohesion of the narrative

Theme
- Implicit concepts communicated implicitly

Genre
- Conformance to conventions of culturally established genre

Narrator
- Presence of an identifiable consistent perspective communicating the narrative

Style
- Conformance to authors own conventions. Use of tone of tone and language fits content.

Existing research in narrative cohesion often concentrates on the linguistic cohesion in the text presenting a narrative and its effectiveness at communicating content that makes logical sense. While this is no doubt a part of a narratives cohesion we find evidence to suggest there are significant other underlying concepts that are a part of unifying narrative elements. Core themes may be used as part of a consistent subtext unifying elements. Conformance to the conventions of an established genre can connect narrative elements through led assumptions of the reader.

The Thematic Illustrator aims to automatically improve the cohesion of narratives through themed illustration. Through emphasis of core themes the system aims to improve thematic cohesion by reducing thematic noise.

The system is built on using java, takes an xml input, and generates a html output of the illustrated story. The story is marked up as xml divided into logical parts each forming a 'section' which each has a 'content' attribute. The content attribute stores keywords representing the content of that particular section. The story as a whole also has a 'theme' attribute containing the desired core theme for the story as a whole.

The TMB requires a thematic definition of this core theme and its components to be built in advance which defines how features (which may be detected in image tags) denote motifs and in turn connote themes as explained in our earlier work. Using this the illustrator then for each section in turn performs a flickr search using the content keywords and retrieves the top 30,000 images (or as many as it can find) for that content. Using the TMB these images are then sorted based on their relevance to the core theme and the top image is used as an illustration.

Our results demonstrated two findings. The first was that while illustration was sufficient emphasis to reduce thematic noise the presence of core themes had not been improved sufficiently to demonstrate improved thematic cohesion. Secondly that there was a correlation and as such a possible connection between thematic cohesion and logical sense and genre cohesion.

The Night

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