

A Thematic Model for Narrative Generation

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ABSTRACT

In this poster we explore enriching automatically generated narratives with thematic content. We are developing a model that aims to represent the various thematic elements that construct a theme within a story so that we may use it to construct themes as an underpinning to full discourse generation.

1. INTRODUCTION

Narrative is a prevalent form of representing human experiences that is used in communicating information in much of the world around us. There are a wide variety of different projects and research work that is being done on the topic of automatic narrative generation; where using different techniques, ranging from structured grammars such as Artequakt[1] to storytelling agents such as The Virtual Storyteller[2], custom stories are automatically generated. However such systems often generate bland, directionless narratives that lack authorial voice, we seek to give richness to generated narratives through a thematic underpinning.

2. MODEL

Authors use themes to communicate a subtext within a narrative. This subtext may be an agenda or simply an emphasis of a particular part of the narrative or even simply an emphasis of the authors own style. This subtext gives a narrative direction beyond merely communicating a chronology leading to deeper narratives and giving an authorial voice to stories. We propose a thematic underpinning to narrative generation techniques so that richer narratives with direction may be generated.

To do this we go back to Tomashevsky's structuralist work on thematics[3]. *Features* within the narrative denote *Motifs* and from these *Themes* can be identified.

We assume a situation where a story is compiled with many small segments of narrative that are structured together, in this case the selection of these small atomic segments and their content are key to communicating a theme. We use the term Narrative-Atoms or *Natoms* to describe these segments; small

atomic pieces of narrative that cannot be further broken down, for example a single photo or paragraph. The content of these natoms is rich with information, we call the visible computable elements of this information *Features*. Natoms contain any number of features which may or may not work towards connoting a theme in a story. Features can each denote a motif, a basic thematic object that has connotations within the story, for example the feature *cake* denotes the motif of *food*. These motifs in turn connote broader themes in the context in which they are presented, for example *food* in the context of a gathering may connote *feasting*. These themes, when combined with other themes or motifs could in turn be used to further connote other themes, for example *feasting* might connote *celebration*.

This forms the foundation of our thematic model of a narrative:

- **Natoms** contain tagged **Features**
- **Features** denote **Motifs**
- **Themes** are connoted by other **Themes** and **Motifs**

This model is only an underpinning for a narrative generation system, it contains no rules for the presentation of elements or the narrative structure. However it can be used to select natoms to be used within a discourse. As such we could use themes constructed from this model to influence the story selection in grammar or emergent narratives to give them a thematic subtext.

3. CONCLUSION AND FUTURE WORK

Thematic content is lacking from existing methods narrative generation and this model allows us to begin exploring its affect on automatically generated stories and whether its use could lead to richer narrative generation. From here a prototype is being built to investigate how story selections of natoms may be influenced by themes with a view to a system with full discourse generation of rich narratives with thematic content in the future.

4. REFERENCES

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