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Narratology and Creativity

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Abstract

In the previous studies, I discussed the creativity in IMDJ. I discussed it from the perspective of abduction. In addition, I discussed the role of comfortable communication in the creative situation as well as usual situation. In this paper, I will discuss the role of naratology in the creative task.

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1. Introduction

In this paper, I will discuss the role of narratology or story telling in the creative task. Narratology was regarded as a concept in story telling or generation. For instance, literary works generation can be achieved by the concept of narratology^{7,24}. Previously I discussed the possibility of the literary works generation by computer⁷. Also Rolf Jensen showed the importance of story in selling products¹⁶. These can be regarded as creative tasks and by the story or narratology, the creativity enhanced in several situations. Thus story or narratology is very important in creativity.

For the conversation activation with a robot, Yamaguchi, Neguri and Ohtake showed very interesting results³⁶. They conducted experiments in two types of conversation. One was with all human and another was with a robot. The robot presented the reproduced interesting stories. They analyzed the data by the frequency of evoked laughter in each topic and in all participants. The reproduced stories presented by the robot created more laughter than the original stories presented by human. Thus the robot successfully elicited more laughter than the human participants. Accordingly, they concluded that the robot successfully enlivened group conversation through evoking laughter. In fact, their application is the coimagination sessions for the elder persons. And the activity situation was evaluated by the frequency of laughter. The frequency of laughter will not be connected with the creativity. However this result show us the possibility of the introducing of proper robot for the activation of conversation which will cause us to the better creativity.

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Therefore, we also discuss this type of conversation with a robot. Of course the conversation can be discussed in the context of narratology and story telling.

2. Narratology

2.1. *Narratology in literature*

Narratology is very important in several situation. Especially it is discussed in the field of the computational literary works generation. I discussed the possibility of the literary works generation by computer⁷. Where I showed several applications such as the automatic waka generation. I utilized the feature of intertextuality (shown below) to generate literary works. One-hundred waka, included in the *Hyakuninshū* (a waka anthology), were divided into several parts and then rebuilt to generate new waka. Then one-hundred new waka were generated. In fact these waka were generated by combining several phrases from the existing waka. They were not fluently composed, and different seasons were included.

Ogata proposed Computational Narratology^{23,24}. His method is based on the narratology of Propp²⁹ and Genette¹³. Based on these theories, the system automatically generates a story such as a legend from nothing. Moreover, he developed the system to automatically generate image works (films, etc.). He is still developing a story-generation system. Currently, it can generate a story outline after setting characters in the story.

Usually several techniques are used in the computational literary works generation. In fact, one of the special feature can be used in the computational literary works generation is the “intertextuality” proposed by J. Kristiva.

Intertextuality

Kristiva proposed the intertextuality of literature as follows¹⁸:

The word's status is thus defined horizontally (the word in the text belongs to both writing subject and addressee) as well as vertically (the word in the text is oriented towards an anterior or synchronic literary corpus)... each word (text) is an intersection of words (texts) where at least one other word (text) can be read... any text is constructed as a mosaic of quotations; any text is the absorption and transformation of another.

This is a very promising feature. Because computers are good at such searching and combination of small materials. Of course the above applications applied this type of feature in literary works generation.

Geravás et al. discussed the Story Generator Project. In their paper, they reviewed many story-generation systems based on artificial intelligence (AI) as follows:

Neither the under-defined nor the over-specific concepts developed in literary theory and Narratology seem good choices for the AI formalization. In the same vein, the limited scope of predominantly descriptive linguistic models renders these unsatisfactory. Conversely, Artificial Intelligence approaches in Story Generation are generally based on a highly reductionist concept of ‘story,’ which ignores the Humanities ‘disciplines’ insights into the complexity and dynamics of narrative....

In our view, a methodological combination of description, analysis, and generation—in other words: an inter-disciplinary approach—holds the potential for a mutually beneficial qualitative breakthrough in research on Story Generation, and on narrative models in general. This inter-disciplinary approach might start by identifying those existing narrative models in the Humanities whose set of ontological commitments is better suited for the Story Generation task, and by searching for (or producing) computationally oriented implementations of these models¹⁴.

Ryan and Thon replaced “narrative” with “storyworld” and pointed out that “Nowadays, we have not only multi-modal representations of storyworlds that combine various types of signs, and virtual online worlds that wait to be filled with stories by their player citizens, but also serial storyworlds that span multiple installments, and transmedial storyworlds that are deployed simultaneously across multiple media platforms, resulting in a media landscape in which creators and fans alike constantly expand, revise, and even parody them³².”

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