Chapter 5

Narratology and Creativity

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ABSTRACT

In previous studies, the author discussed the creativity in IMDJ. The author discussed it from the perspective of abduction. In addition, the author discussed the role of comfortable communication in the creative situation as well as usual situation. In this chapter, the author discusses the role of narratology in the creative task.

INTRODUCTION

In this chapter, the author 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 (Abe, 2016; Ogata, 2016). Previously the author discussed the possibility of the literary works generation by computer (Abe, 2016). Also Rolf Jensen showed the importance of story in selling products (Jensen, 1999). These can be regarded as creative tasks and by the story or narrative, 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 Otake showed very interesting results (Yamaguchi, Nergui, & Otake, 2014). 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, the authors also discuss this type of conversation with a robot. Of course the conversation can be discussed in the context of narratology and storytelling.

**BACKGROUND**

**Narratology in Literature**

Narratology is very important in several situation. Especially it is discussed in the field of the computational literary works generation. The author discussed the possibility of the literary works generation by computer (Abe, 2016). Where the author showed several applications such as the automatic waka generation. The author utilized the feature of intertextuality (shown below) to generate literary works. One-hundred waka, included in the Hyakuninisshyu (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 (Ogata, 1998; Ogata, 2016). His method is based on the narratology of Propp (1987) and Genette (1972). 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 (1980).

**Intertextuality**

*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.*