

The Impact of Storyline Complexity on L2 Learners' Written Performance

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Task-based Language Teaching (TBLT) research has provided ample evidence that cognitive complexity is an important aspect of task design that influences learner's performance in terms of fluency, accuracy, and syntactic complexity. Despite the substantial number of empirical investigations into task complexity in journal articles, storyline complexity, one of the features of it, is scarcely investigated. Previous research mainly focused on the impact of storyline complexity on learners' oral performance, but the impact on learners' written performance is less investigated. Thus, this study aims at investigating the effects of narrative complexity of storyline on senior high school students' written performance, as displayed by its complexity, fluency, and accuracy. The present study has important pedagogical implications. That is, task design and assessment should make a distinction between different types of narrative tasks. For example, the task with single or dual storyline. Results on task complexity may contribute to informing the pedagogical choices made by teachers when prioritizing work with a specific linguistic dimension.

Keywords: storyline complexity, narrative writing, task complexity, L2 writers

1. Theoretical Framework

1.1 Limited Attention Capacity Model (LACM), Cognition Hypothesis (CH) and Triadic Componential Framework

Based on task-based language teaching method (TBLT), many theories related to tasks have been put forward, like Skehan's trade-off or limited attention capacity model (LACM), and Robinson's cognition hypothesis (CH), recently reconceptualized in Skehan (2015) and Robinson (2011, 2015), respectively. According to the LACM, working memory and attentional resources are limited, which causes tension and competition between different dimensions of linguistic performance because form and meaning cannot be paid simultaneous attention. Unable to attend to linguistic and non-linguistic aspects of the task simultaneously, learners would be forced to divide their attention over various aspects at a time. Moreover, the LACM assumes that finding the necessary language to express complex relations consumes a considerable proportion of available processing resources (Skehan & Foster, 1997, p. 206), thereby reducing spare capacity to attend to language form. On the contrary, the CH does not foresee such tension (resource-directing variables towards linguistic aspects that can be used in completing the task) and predicts that learners can access multiple and

non-competitional attentional resources. Hence, pooling attention to meaning in order to meet the communicative needs of the task does not detract attention to form. By doing so, form and meaning can be paid attention to, which translates into gains both in complexity and in accuracy. Based on previous claims, the CH further argues that the structural complexity of the language produced by the learner is determined by the cognitive difficulty of the task (Robinson, 2010). While the the most up-to-date and comprehensive task classification system is Robinson's Triadic Componential Framework, which consists of three components: (1) task complexity, which refers to the amount of cognitive effort that a task imposes on learners; (2) task condition, which are characteristics that influence the amount and type of interaction that occurs between learners; and (3) task difficulty, which refers to factors that impact whether learners perceive a task as being difficult. The components of the Triadic Componential Framework are summarized in Figure 1.

Triadic Componential Framework for pedagogical L2 task classification (adapted from Robinson, 2011).		
Task complexity (Cognitive factors)	Task condition (Interactive factors)	Task difficulty (Learner factors)
a. Resource-directing variables [± here and now] [± few elements] [± reasoning]	a. Participation variables [± open solution] [± one way flow] [± few participants]	a. Ability variables [h/l working memory] [h/l reasoning] [h/l aptitude]
b. Resource-dispersing variables [± planning time] [± prior knowledge] [± single task]	b. Participant variables [± same proficiency] [± same gender] [± familiar]	b. Affective variables [h/l openness] [h/l control of emotion] [h/l task motivation]

Figure 1. Triadic Componential Framework for pedagogical L2 task classification (adapted from Robinson, 2011).

2. Narrative Storyline Complexity

Storyline complexity refers to the relationship between elements that need to be considered in a task. In narrative tasks, storyline complexity (± single task in Robinson's framework) is based on the presence or absence of background information, and it has been investigated essentially in oral production. According to Tavakoli (2009, p. 485), the way information is presented in a narrative, i.e. in the foreground (single storyline) or both foreground and background (dual storyline), is an important characteristic of narratives and "should be further investigated".

When addressing the issue of narrative storyline complexity, in the previous research a distinction is made between amount of information and information grounding. The former refers to how much information and the latter to where this information is presented in a picture story (Tavakoli, 2009). Put differently, grounding has to do with the number of storylines in a narrative while amount of information refers to how much information is presented. According to previous research, foreground information in a narrative provides the skeleton, and presents the propositions that are central for the development of the main theme. In turn, the main theme story unfolds primarily through the events that are happening in the background (Hooper & Thompson, 1980). Thus, what background information does is assist, expand, comment, explain or elaborate on what happens in the foreground (Tavakoli & Foster, 2011, p. 42). An example of a task with a single storyline is "Football", which only presents foreground events, in this case a small group of children playing with a ball. In contrast, "Picnic" (also known as "The Dog Story", Munoz, 2006) presents both foreground events involving a boy and a girl, and background events involving their dog. In order to successfully unfold the main theme, learners need to pay

attention not only to the children but also to the dog, who eats their food and spoils their picnic. The current study, however, is concerned with the number of storylines in a narrative; that is, the way information is grounded in the narrative. Though recently explored, the consideration of foreground and background information as a significant design feature of narrative tasks is not new (Tavakoli, 2009). It is argued that foreground material supplies the main points of a narrative, while background, on the other hand, is the part that simply assists, amplifies, or comments on it (Hooper & Thompson, 1980). In this connection, researchers maintain that whereas background information is used to describe ideas that elaborate or explicate the foreground information, foreground information describes those propositions in the story that are more important or central to the development of the overall theme. Bardovi-Halig (1998) also reasons that foreground events in a narrative generally move time forward, whereas background elements elaborate on, explain, or evaluate what happens in the foreground.

3. Empirical Studies

3.1 Empirical Studies Abroad

The effect of narrative storyline complexity on quality of L2 learners' oral production has not been sufficiently researched. In a post-hoc analysis of their L2 narrative task data, Tavakoli and Skehan (2005) used this task design feature to account for unexpected complexity scores in two of the tasks they used. Unlike the other tasks, these had two storylines and a reconsideration of the transcripts revealed enhanced syntactic complexity at moments where the participants attempted to connect the two. In another study, Tavakoli (2009) investigated the impact of storyline complexity on quality of learners' oral production in assessment context. She reported that syntactic complexity of L2 performance and narrative storyline complexity were related. This researcher found that enhanced syntactic complexity was associated with narratives that had both foreground and background storylines. However, the results were not as clear for the effect of storyline complexity on lexical diversity. In a subsequent study, Tavakoli and Foster (2011) examined the impact of storyline complexity on quality of learners' language production in both ESL and EFL contexts. In sum, their findings suggested strong support for syntactic complexity being affected by narrative storyline complexity and ambiguous evidence for lexical diversity being influenced by this task design feature. Generally, it might be inferred, previous research lends support to the positive impact of performing a narrative with both foreground and background information on syntactic complexity of L2 learners' oral production. Hence, by drawing upon the empirical evidence reviewed above, it might be reasonable to predict that performing the task of recounting a narrative with two storylines enhances syntactic complexity of EFL learners' oral performance. The studies discussed so far are based on oral data. When examining written data, though, a similar picture seems to emerge. Overall, the findings seemed to indicate comparatively better results in the structured task, as indicated by the higher lexical complexity and use of temporal connectives that show the sequence of events, even though accuracy and syntactic complexity were roughly equivalent in both tasks.

3.2 Domestic Empirical Studies

In recent years, some domestic researchers began to conduct relevant empirical studies based on Robinson's classification framework. These studies have been conducted on both spoken and written language production. 王静萍 (2013) took the number of elements involved in a task as a variable to examine the impact

of resource-oriented task complexity on language performance in L2 writing. 徐宏亮 (2015) examined the influence of task preparation conditions and task structure on learners' oral English output. In the past decade, domestic researchers have mainly focused on the impact of task types on learners' language output. Since 2010, more and more studies have explored the impact of task complexity on learners' language output based on Robinson's classification framework (邢加新 & 罗少茜, 2016). Comparing the research status of this field at home and abroad, it can be seen that foreign researchers pay more attention to learners' spoken language output, while domestic researchers pay more attention to written language output (李秋雨, 2013). In particular, domestic research on the impact of resource-oriented variables on learners' language production is still very scarce. Although there are still some shortcomings in some domestic studies, it is enough to see that task research has a good development trend in the field of language studies at home and abroad (邢加新, 2019). The influence of task complexity on learners' language output has gradually become one of the focus issues of foreign language researchers.

Summing up, there is an imbalance in studies on written modality in comparison with oral modality (Kormos, 2011) even though at present there is a proliferation of studies on writing. Another limitation is the fact that most of the research has been conducted with adult learners, above all at university and language schools (Sánchez & Sunesson, 2023).

Conclusion

Storyline complexity may have an effect on written performance, as it was different between narratives with single and dual storyline. The impact is found in the dimension of accuracy and fluency, with participants who wrote a complex narrative task outperforming those who wrote a simple task. The largest impact may be found in the dimension of syntactic complexity. To be more precise, a significantly higher incidence of subordination and also a higher mean number of clauses per T-unit will be found.

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