

## SECOND LANGUAGE TASK COMPLEXITY: RESEARCHING THE COGNITION HYPOTHESIS OF LANGUAGE LEARNING AND PERFORMANCE

Peter Robinson (Ed.).

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The sequencing of tasks is a dilemma that has faced researchers, teacher-researchers, and teachers ever since tasks were first used. It is this area of research that *Second Language Task Complexity* (hereafter, SLTC) aims to address. Edited by Peter Robinson, SLTC contains 4 sections. Each section contains research addressing one or more areas of how the Cognition Hypothesis and the Triadic Componential Framework can be used to predict the outcome of tasks.

Briefly, the Cognition Hypothesis is a set of predictions based on five areas, with each area containing a set of predictions that would be expected moving from a simple task to a more complex one. One example, taken from Chapter 1 (Peter Robinson, pp. 19) is that a more cognitively demanding task will lead to greater interaction and negotiation of meaning than a simpler task. The Triadic Componential Framework (TCF) is broken up into three areas; Task Complexity (cognitive), Task Condition (interactive) and Task Difficulty (learner). The data that serve as a means of making the different assertions of the TCF are derived from tests that measure fluency, accuracy and/or complexity. The main theme of SLTC is that, according to the Cognition Hypothesis, sequencing of tasks should be limited to only changes to cognitive factors.

### **Theoretical and methodological issues**

There are three chapters in this first section, including Peter Robinson's introductory chapter, which provides an explanation of the Cognitive Hypothesis and the TCF, as well as providing an overview of the rest of the book. Chapter 2, by Judit Kormos, is a re-examination of the findings of Kormos (2006), in light of claims made by the Cognition Hypothesis. In chapter 3, Stefanie Wulff and Stefan Th. Gries assert that the traditional view of accuracy is too narrow and that utterances also need to be analysed based upon the context which they are taken from. Amongst their recommendations is that input provided over time is better for memory and retention than providing mass input over a relatively short period of time.

**Task Complexity, type and mode**

In the second section there are two chapters that examine the effect of changing modes and task types, as well as manipulating different cognitive variables. In Folkert Kuiken and Ineke Vedder's study (Chapter 4), participants performed an advice-giving task regarding where a friend should vacation. The cognitive variable manipulated was the (+/- few elements). In Chapter 5, Roger Gilabert, Julia Baron and Mayya Levkina re-evaluated two previous studies, examining the same three tasks with the same cognitive factors manipulated.

**Task complexity and interaction, modified output, uptake**

The studies in this section tackled the issue of how task complexity is affected by interactive factors. In Chapter 6, Marije C. Michel examined the effects of task complexity (+/- few elements) and interaction (+/- monologue). Like many studies in SLTC, the results did not clearly support or disprove the Cognition Hypothesis. The next chapter, by Ana-Maria Nuevo, Rebecca Adams and Lauren Ross-Feldman, compared task complexity (+/- reasoning demand) with the use of modified output and L2 development.

Andrea Revesz, Rebecca Sachs and Alison Mackey (Chapter 8) examined the effects of the task design variable (+/- visual support) and the task complexity variable (+/- reasoning demands) on uptake and retention by looking at learners' response to recasts.

**Learner characteristics and perceptions of simple/complexity of task performance**

Chapters 9 (Agnes Albert) and 10 (Judit Kormos and Anna Trebits) are set in Hungary and report on the outcome of narrative tasks. In Albert's study, task complexity and individual differences (creativity), are compared. Judit Kormos and Anna Trebits, however, wanted to chart the effects of task complexity on working memory and the effect such manipulation of working memory has on students' fluency, accuracy, and complexity. YouJin Kim and Nicole Tracy-Ventura's (Chapter 11) study explores the relationship between task complexity (+/- reasoning demands) and anxiety from having to speak in English. The last chapter, by Tomohito Ishikawa, measures how the cognitive variable (+/- intentional reasoning) affects learners' perceptions of task difficulties.

There were two problematic areas that could have improved to make the book easier to understand and follow. The first has to do with possible replication of some of the studies, and the other had to do with a lack of clarity when discussing the particular area of Cognitive Hypothesis or TCF being investigated.

One area that was found lacking concerns replication. In task research this means explicitly stating not just procedures for how data were derived but also detailed descriptions about the tasks that were used. Some studies in SLTC were better at doing this than others. For example, in Chapter 6 (Marije C. Michel) and Chapter 12 (Tomohito Ishikawa), not only are the tasks described in detail but also the materials used to do the task can be found in the appendices. The reader is able to see what was given to students and is thus better equipped to replicate such studies. Unfortunately, the majority of the studies in SLTC do not include a sample of the materials used.

Another area that might have improved SLTC is if all authors had clearly identified at the start of their chapters which variables within the Cognition Hypothesis and TCF were being investigated. Though all studies stated which variables were under investigation in the Methodology section, reading the different studies would have been made much easier if they had been explicitly stated near the beginning. One of the explicit aims that Peter Robinson states at the start of SLTC is to provide a set of exemplars for those wishing to investigate task complexity. Despite the criticisms listed above, the reader will be left with a very strong foundation as to how to do this.

### References

Kormos, J. (2006) *Speech production and second language acquisition*. Mahwah, NJ: Lawrence Erlbaum Associates

### Biodata

Colin Skeates has been teaching for more than fifteen years, and currently teaches at the university level in Tokyo. His main research interests are teacher education, differences between spoken and written discourse and scaffolding to encourage student self-monitoring and self-evaluation.