

**RESEARCH PROPOSAL FOR APPLYING  
FOR A JIEDE EMPIRICAL RESEARCH GRANT  
FOR CHINESE PEDAGOGY/CHINESE APPLIED LINGUISTICES**

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## **I. Title of the Study**

Linguistic Complexity and Reading Comprehension Among CFL Beginning Learners

## **II. The Significance of the Study**

According to the statistics provided by the Modern Language Association (Brod & Wells, 2000), despite the downward trend in enrollments in some Indo-European languages, enrollments in Chinese language courses in the United States have been increased continuously since 1995. Currently, Chinese is one of the two most heavily enrolled Asian languages in our department. Compared with last year, the enrollment of this year has increased by 20 percent. It is obvious that the growing political and economic importance of China among Asian countries and its impact on the international community have attracted more and more students to learn Chinese. On the other hand, Chinese has been considered as the one of the most difficult languages to learn by our American learners (Liskin-Gasparro, 1982). Its logographic writing nature and unique syntactical structure have created special learning difficulties. Due to these reasons, learning to read Chinese text has posed a great challenge to American students, particularly in the beginning stage of learning.

Reading comprehension is affected by many cognitive and non-cognitive factors. One major non-cognitive factor is the linguistic complexity of the reading text (Alderson & Bachman, 2000). Research into first language reading comprehension of alphabetic writing systems has suggested that the linguistic complexity includes three levels--surface complexity, interpretive complexity and systematic complexity (Smith, 1988). So far, little comprehensive studies have been conducted with regard to the role of linguistic complexity at any levels of Chinese reading and its effect on CFL learner's reading comprehension. While this information is crucial in understanding how many types of linguistic difficulties that CFL are facing during reading and what kinds of linguistic appropriate reading texts and instructional approaches should be provided to the learners in different reading levels in order to develop their reading skills.

The purpose of this study is to investigate the linguistic complexity and its effect on CFL reading comprehension among beginning learners. Since, for beginning learners, their reading difficulty mainly are caused by the surface complexity of the text, thus, the focus of this study is on the investigation of the surface complexity level of the reading text and its effect on beginning level reading comprehension. The "surface complexity" of the reading text refers to the "linguistic complexity that all syntactic rules have applied but not the phonological and interpretive rules." The determinants of surface linguistic complexity have three: amount, density, and ambiguity. The amount refers to the number of linguistic units (characters/morphemes) that the learner has learned in a sentence, the frequency level of those linguistic units, and the amount of syntactical components in a sentence. The density refers to the way of the distribution of the linguistic units in a syntactical constituent within the sentence. And the ambiguity involves the surface structure interpretation of a sentence. That is, if the sentence has multiple semantic

interpretations rather than just one at the surface structure level, its also means higher complexity level.

This researcher believes that the results of this study will benefit three areas of Chinese instruction. One is that they contribute insights to the establishment of a theoretical model for assessing readability of Chinese text. Second, they provide guidelines for the textbook writers in writing linguistically appropriate textbooks for beginning learners; and finally they replenish the classroom instructors with understanding the way of the development of learner's linguistic knowledge and its impact on reading comprehension.

### **III. The purpose for applying the Jiede Grant**

The purpose for applying for the Jiede Grant is to conduct a cross universities study on the relationship between linguistic complexity of the reading text and the reading comprehension among beginning level Chinese as a foreign language learners. Due to the comprehensive nature of the study, I definitely need a research grant which allow me to hire one graduate or two graduate student(s) to assist me in grading the testing materials, as well as data entry, treatment, and management.

### **IV. The description of the study**

#### **Research questions:**

Four research questions will be investigated in this study:

- What types and how many types of linguistic factors (at surface complexity level) that affect the beginning level reading comprehension?
- What types of correlations exist between the types of linguist factors identified and the reading comprehension (as measured by different reading test instruments)?
- Which linguistic factor is the best predictor for beginning level reading comprehension?
- What are the characteristics in mastering the linguistic knowledge between poor and good readers (as classified by the proficiency test)?

#### **Design:**

The design of this study includes the following steps:

- Define the linguistic complexity (at surface complexity level) for the Chinese reading text based on relevant existing studies.
- Identify measurable factors that can be used to assess the linguistic complexity of Chinese text.
- Determine the assessment means (methods) that are appropriate for assessing beginning CFL learners' reading comprehension levels.
- Select suitable reading materials to be used in measuring students' reading comprehension.

#### **Data collection:**

About 100 first-year Chinese students from two universities in the U.S. will participate in this study. Prior to the data collection, students' linguistic background information and the currently proficiency level in Chinese will be obtained by using a language

background survey and a proficiency test. During the data collection, students will be asked to read two selected reading texts and complete comprehension tasks. They will also be asked to mark the unknown words as they read along.

#### **Data analysis:**

- Compute the word familiarity rate of each reading text for each individual subject.
- Check the word frequency of all words appeared in the reading texts against the word frequency dictionary.
- Compute the length of individual sentence, the number of complex and simple sentences, and the number of syntactic constituents for each reading text.
- Grade the proficiency test and the reading comprehension tests and compute the final scores.
- Enter all data to the computer for statistical analysis which including correlation, regression, ANOVA analyses, as well as reliability analysis.

#### **V. Preparation and Feasibility**

I have started literature review in the related areas since January. I am confident that it is a comprehensive yet manageable study within limited (six months) timetable. I should be able to develop the instruments for the study by the end of April. I have planned to finish the data collection before the end of spring semester. The most time consuming and tedious part of the study is qualitative and quantitative analyses of the data. If I am awarded the grant, I will be able to hire a graduate student to assist me on this part of study during August (before the fall semester).

#### **VI. Dissemination**

The proposal of this study has been accepted to present at the Annual Conference of the Chinese Language Teachers Association to be held in November 2003 in Philadelphia. I have also planned to have this study to be published in a refereed journal after the conference.

#### **VII. Estimated Budget (A total of \$1,500)**

##### **Services required photocopying survey and testing materials (\$150).**

Photocopy survey forms, language proficiency test materials, and reading comprehension tests. Each material needs about 100 copies.

##### **Services required for data management (\$1,350)**

1. Analysis linguistic components of the reading text based on established criterion (40 hours x \$12 per hour = \$ 480).
  2. Grading proficiency test and reading comprehension tests. I myself will serve the first rater but I need to hire a second rater to grade all testing papers in order to obtain an inter-rater reliability (42.5 hours x 12 per hour = \$ 510)
  3. Date entry (30 hours x 12 per hour = \$360)
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## References

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