Abstracts of the Chinese papers in English

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Chinese and Japanese speech features under Lombard condition and corresponding cognitive competence on language acquisition

Speech auditory feedback is the speakers' self-monitoring or self-regulation of his/her own voice during speech production. Previous studies have shown that auditory feedback plays an important role in acquisition and monitoring of the phonological properties of speech. A classic experiment for investigating the function of feedback on speech production is Delayed Auditory Feedback, in which the speaker's own auditory feedback is delayed by a set amount. The speaker's production increases in vocal intensity, changes in vocal pitch, and result in disfluencies in the time-delayed condition. In an alternative method to determine what aspects of auditory feedback are critical for fluent production, the noise of voice feedback in continuous speech studies is added. This is called the Lombard auditory feedback experiment.

The speakers' monitoring of their own speech behaviors during speaking is the application of the human's cognitive competence on language communication. Such competence, in essence, is equivalent to speech auditory feedback. Chinese is a typical tonal language, where the meaning of a word depends on the pitch of the syllable. Japanese is recognized as a pitch-accented language where the pitch change is rich and can bring about meaning variations but only for some words. The similarities and differences between these two subtle pitch-changing languages call for detailed investigation under the Lombard condition.

Based on comparative analysis, the experiment probed the differences between speech features and their cognitive mechanisms for Chinese and Japanese speakers. Eighteen Chinese and eighteen Japanese speakers participated in a Lombard experiment and were required to produce a sustained /a/ for 6 seconds, to read words in Mandarin Chinese or Japanese, and to read sentences taken from Harry Potter (Chinese translation for the Chinese subjects and Japanese translation for the Japanese subjects). In the experiment, a 70 dB [sound pressure level (SPL)] pink noise was added when speakers listening to their own voices.

In order to analyze and compare the speech features between two groups, the voice pitch, intensity and speech rate were calculated for each participant. The result showed that the intensity of speech is susceptible to noise while the pitch

is stable and there is no significance in speech speed. This result validated the Zhao's view that Chinese language enjoys the advantage in transmission under Lombard condition with the help of its pitch differentiating the meaning of words. Secondly, the semantic and pragmatic factors could have a significant influence on the intensity and pitch of speech. Thirdly, speakers of different languages types showed universality and specificity in the auditory feedback competences. In light of speakers' performances in this study, the theory and application of second language acquisition are further discussed and elaborated.

Keywords: noise, Lombard, auditory feedback, cognitive competence, language acquisition

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Preposition incorporation and the lexicalization of *V+xiang*

According the prepositional-incorporation theory, in this article the grammaticalization of *xiang* (向) in Chinese is probed at first, the lexicalization of *V+xiang* is mainly discussed, and the restrictions and syntactic environment of the lexicalization of *V+xiang*, with respect to the types of verb, object and the interaction between them in the construction of *V+Prep+O* are analyzed in detail, and finally preposition incorporation is discussed cross-linguistically.

As the prerequisite of the lexicalization of *V+xiang* the grammaticalization process of *xiang* from verbs to prepositions is analyzed briefly. The preposition *xiang*, budded in the period of Han Dynasties, matured in the period of Wei Jin Dynasty and Southern and Northern Dynasties and appeared in the diversity of its uses. In the Tang Dynasty and the Five Dynasties, the prepositional function of *xiang* finally developed fully and became stable, thus *xiang* completed its lengthy grammaticalization process towards preposition.

From the perspective of preposition incorporation, the lexicalization of the structure of *V+xiang* is demonstrated by the result of the mutual information calculating and the language intuition questionaire of the structure *V+xiang*, The experimental results shows that the structure *V+xiang* has a very high level lexicalization, which is a typical phenomenon of preposition incorporation.

The investigation of the restrictions and syntactic environment of the lexicalization of *V+xiang* indicates that the type of the verb and the object, the interaction between them in the segment *V+xiang+O* have significant contributions to the lexicalization of the *V+xiang* construction. It is found that the following three types of verb can enter in this construction: the subject-displacement verbs, the subject-non-displacement verbs and the verbs that indicate the motion statement

of object; and that six kinds of object expressing location, indication, target, destination and terminal point can enter this structure. It also argued that *xiang* indicates the direction of actions when it is used as a preposition following verbs, that is to say, only when a pure verb is combined with the preposition, *xiang* will be able to describe the directivity of actions exactly.

The preposition incorporations in other languages such as Chamorro, Bahasa Indonesia in South Pacific Islands and Tuscarora among Iroquois have been probed according to the preposition incorporation theory. As to the incorporation of the Chinese preposition *xiang*, we hold that a trace is left at the left blank position of *xiang* when it is incorporated into the proceeding verbs in the structure of *V+xiang*. Just like other preposition incorporation phenomena, *xiang*'s incorporation is an important means of lexicalization of *V+xiang*, however, it can be impossible for the lexicalization of *V+xiang* before *Xiang* completes its grammaticalization.

Keywords: *V+xiang*, *xiang*, preposition incorporation, grammaticalization, lexicalization

Ying Xuefeng

Prosodic pattern of bounded predicate-object and modifier-head structures

Based on the nonspeculary between 1+2 and 2+1 structures, taking into consideration the grammatical meaning of narration and denotation, the study intends to propose a consistent explanation on the prosodic pattern of the predicate-object structure and modifier-head structure.

Syllabic combinations 1+2 and 2+1 are not in a mirror-image relationship, which can be seen from the weak stresses of the two kinds of structures. In terms of prosodic patterns, 2+1 conforms to a stressed-unstressed pattern while 1+2 conforms to a less stressed-stressed pattern. The two patterns are not antithetical opposites. In terms of narration and denotation, forms with the stressed-unstressed pattern are often modifier-head structures while forms with the less stressed-stressed pattern can be predicate-object structures or modifier-head structures.

We claim that while modifier-head structures are often referential in semantic meaning, the degree of referentiality might differ in discrepant structures. There is some kind of descriptivity in the fact. For predicate-object structures, the semantic meanings are often narrative.

We hold that 2+1 structures, which are referential, conform to stressed-unstressed pattern. In contrast, 1+2 structures, which possess a less degree of

referentiality than that of 2+1 structures, conform to less stressed-stressed pattern. 1+2 structures can be referential or narrative. If we have to establish a relationship between 1+2 / 2+1 structures and predicate-object / modifier-head structures, we claim that 2+1 structures correspond only to modifier-head structures while 1+2 structures can correspond to predicate-object structures or modifier-head structures. However, when they correspond to predicate-object structures, the correspondence is unmarked.