

Language as Constraints on Interpretation and the Chinese Language Acquisition

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概要

“Sapir-Whorf 学说”的产生早于乔姆斯基“语言生成理论”。但由于“语言生成理论”在 20 世纪 70-80 年代代表一种蓬勃增长的新生力量，对语言学界产生着广泛影响，“Sapir-Whorf 学说”相形见绌。近年来，罗仁地教授(Randy LaPolla)将“Sapir-Whorf 学说”发展成为独立、系统的“语言制约理论”，受到语言学界广泛关注，并越来越被广泛运用于语言学研究，特别是运用该理论于汉语研究，已经取得重大成果。本文将简要介绍罗仁地教授对“语言制约理论”的阐述和贡献。

Language as a set of social conventions

Professor Randy LaPolla (2003) has developed a theory of language and communication known as the theory of Language as Constraints on Interpretation. The theory grew out of his work on Chinese and related languages, and so it is applicable to the study of the Chinese language and particularly the acquisition of Chinese as a second language. Because of this it is increasingly becoming popular in studies of Chinese as a second language. This article provides a briefly discussion on this theory and its application to language teaching.

Human communication, according to LaPolla (2003; developing ideas outlined in Sperber and Wilson 1986/1996), involves only ostension and inference. When one person (the communicator) wants to communicate some information to another person (the addressee), the communicator performs an act that gets the attention of the addressee so that the addressee will become aware that the communicator is trying to relay some kind of information. This act is called an ostensive act. The addressee will use inference to recognize the communicator's communicative intention, and then use further inference to create a context of interpretation (a set of assumptions) in which the ostensive act achieves relevance, that is, "makes sense", and in doing so the addressee will understand what the communicator is intending to relay. Communication, as LaPolla emphasizes, is not a matter of coding and decoding. To avoid the addressee exerting unnecessary effort to create a context of interpretation that will allow him/her to infer the relevance of the ostensive act, the communicator will also, before performing the ostensive act, make some inferences (guesses) as to what information is

available to the addressee, and tailor the ostensive act accordingly. In other words, the communicator will tailor the ostensive act so that it constrains the process of interpretation (the creation of the context of interpretation) to the necessary degree for the addressee to be able to infer the intended information without expending unnecessary effort.

Communication is successful only when the addressee has appropriately comprehended the communicator's intended information. An ostensive act, according to LaPolla, "can be linguistic, but it need not be, as communication can and often does occur without language." LaPolla, 2003: 115), Language, in LaPolla's view, is not the basis of communication, but simply an instrument used to help the addressee comprehend the communicator's intended information more easily and quickly. In other words, the role of language in human communication is to constrain the inferential process by restricting the assumptions that could be part of the context of interpretation (LaPolla, 2003: 115).

In the process of using vocalization as a tool for constraining the inferential process of communication, different types of linguistic structure develop. In other words, "language is the unintended by-product of human's attempt to communicate effectively (constrain the addressee's inferential process effectively) on an individual level" LaPolla, 2003: 123). When a certain pattern is repeatedly used for constraining the interpretation of utterances in a particular way, that particular pattern then can become conventionalized. Language, like other aspects of culture, is a set of social conventions and personal habits. The use of particular patterns to constrain the interpretation, in LaPolla's view, reflects the particular ways of construing and representing the world of the speakers of

that language, and can sometimes reflect environmental factors. Citing the example of the Qiang language in Sichuan, China, LaPolla points out that the Qiang people live on the sides of mountains along river valleys, and that they have conventionalised in their language a complex system of direction prefixes, including prefixes marking 'up-river' vs. 'down-river' and 'up the mountain' vs 'down the mountain'. He argues that this is not a coincidence, but the development of particular types of linguistic structure is not teleological; they evolved in the particular way they have in that society in response to the need to constrain the inferential process involved in communication in particular ways thought to be important in that society (LaPolla, 2003: 123-124).

LaPolla believes that "each language is a unique set of language-specific conventions, and so each language should be described on its own terms" (LaPolla & Poa, 2006: 270). The theory is a step forward from the Sapir-Whorf Hypothesis, a traditional theory named after Edward Sapir (1929-1939) and Benjamin Lee Whorf (1897-1941) which argues that language is culture and habit, and reflects and influences our understanding of the world:

Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of communication or reflection. The fact of the matter is that the 'real world' is to a large extent unconsciously

built upon the language habits of the group. (Sapir, 1958 [1929]: 69)

Different from the behaviourists, Whorf (1956) thinks that the relationship between language, thought and culture is close. Different languages reflect different views of the world and different thinking patterns:

We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way - an agreement that holds throughout our speech community and is codified in the patterns of our language. The agreement is, of course, an implicit and unstated one, *but its terms are absolutely obligatory*; we cannot talk at all except by subscribing to the organization and classification of data which the agreement decrees. (Whorf 1940: 213-14)

What this means is that speakers of different languages will understand and talk about the world in quite different ways. When speaking in a certain language, one can only use the words of that language, and as those words embody some convention (what Whorf means by “an agreement”) that reflects some understanding of the world (e.g. what type of animal the word *dog* represents), speakers must follow (“subscribe to”) that convention in order to be understood. This becomes a habit of use and thought which influences how we think of things.

Other scholars, such as Corder and Keller also discussed the relationship between language and social activities and culture. Corder (1973) argues that in learning language you in

fact learn its culture. Keller (1994) explains that language is not a conscious product but a sort of by-product of attempts to communicate.

However, LaPolla did not just limit himself to the description of the Sapir-Whorf Hypothesis and the description of the relationship between culture, thought and society; he has developed it into the theory of Language as Constraints on Interpretation, and applied it to actual language analysis.

LaPolla explains that language develops to constrain the inferential process between the interlocutors. The development of a language is not teleological (does not develop for a particular purpose), but as with Keller, mentioned above, LaPolla argues it develops as a by-product of attempting to constrain the interpretation in particular ways over and over again. He believes that different languages conventionalize different constraints, so every language has its own characteristics and different degrees of constraint on particular semantic domains and using different morphosyntactic methods. He argues that there are no necessarily universal grammatical categories, as any grammaticalized categories in a language must be the result of the conventionalization of particular repeated patterns of usage, and these differ between societies.

In the article “On Describing Word Order”, LaPolla and Poa (2006) have analysed the grammatical organization of the clause in English, in Chinese and in Tagalog. They state that

. . . the organization of Chinese discourse is not so ‘elusive’ or ‘mysterious’, it is simply different from the Indo-European languages in that Chinese has not

grammaticalized the same types of mechanisms (such as use of word order, case marking, verb agreement, tense marking, cross-clause co-reference pivots) for obligatorily constraining the identification of referents, the particular semantic relation of a referent to the action it is involved in, the identification of the temporal location of the event mentioned relative to the speech act time, and certain other functional domains. That is, the hearer must rely on relatively unconstrained inference in determining the speaker's communicative intention. (LaPolla & Poa 2006: 273-274)

In a different article (LaPolla & Poa, 2002: 205-207), LaPolla & Poa illustrate the differences between Chinese and English constraints. They use the following two groups of sentences to explain the different constraints found in different languages:

Example one: constraining or not constraining the relationship between the time of the utterance and time of the action talked about:

English: Zhang San goes to school.
 Zhang San is going to school.
 Zhang San went to school.

Chinese: 张三去学校 Zhang San go school.

English obligatorily constrains the inference of the time of an action relative to the time of speaking by using tense marking. Chinese does not (it has no tense marking) so the Chinese sentences are ambiguous in this respect without the context of the time of speaking and the time of the action being inferentially accessible or by being specified lexically.

Example two: constraining or not constraining the identification of a particular referent:

English: Zhang San is washing his hair.

Chinese: 张三在洗发 Zhang San is washing hair.

The interpretation of the Chinese sentence can be

Zhang San is washing his hair.
or Zhang San is washing another person's hair
Zhang San is having his hair washed by someone

English obligatorily constrains the inference of the person whose hair is being washed, while Chinese does not, so the inference of whose hair is being washed is not constrained by the grammar (see also LaPolla, 2003:133-134). LaPolla also discusses how, even if two languages both constrain the interpretation of some semantic domain, they may do so to different degrees and using very different methods.

The nature of language and Chinese language structure

LaPolla has defined the nature of language as a set of social conventions for facilitating communication by constraining the process of inference in communication. A language reflects the common values and understanding of the objective world of that society.

Language constraints build up in a language through the process of the survival activities of a community where the language is used. The long process of language progress forms

the regulation accepted through common practice, and is a tool for better communication. In other words, each individual, community and society has particular habits and conventions of using language which in turn reflect the values and conventions of the individual, community and society. LaPolla does not believe that language is hard-wired in the brain (Chomsky, 1968, 1979) or that the social and cultural factors of the speaker's background have no effect on language learning (Pinker, 1995). On the contrary, language is based on general cognitive abilities and its development is closely related to social and cultural factors (LaPolla & Poa, 2002). In summary, LaPolla believes that (1) language is based on social culture, it is the collective habitual behaviour of a community, and grammar is a set of conventions; and (2) grammaticalization is in fact conventionalization.

The theory of Language as Constraints on Interpretation has provided us with an approach to understanding the uniqueness of languages rooted deep in particular societies, cultures, and philosophies. Therefore, language study cannot be separated from the understanding of the survival processes of a community or a nation.

Through linguistic research of the Chinese language, as many scholars may have noticed, we can see that

The structure of the Chinese clause is then quite different from that of the English clause. In English the grammaticalization of the constraints on referent identification we lump together under the names "subject" and "direct object" have led to there being tight logical relations between those particular referents and the predicate. Other referents which are mentioned

can only be added through the modulation of minor processes (prepositions), and so are clearly marked as peripheral . . . The conception of the clause for speakers of English and similarly structured languages is based on these relations, and has implications outside of language (e.g. the development of Aristotelian logic). In Chinese the conception of the clause is based simply on a function-argument type of loose relationship, with the topic-comment relation being the main determinant of word order, without regards to obligatory explicit marking of the semantic or grammatical relations of the referents involved. (LaPolla & Poa, 2006: 277)

LaPolla specified the different characteristics of Chinese and English through the discussion of word order, especially the analysis of the differences between the two languages in terms of “finite”, “subject”, and clause structure. In talking about Chinese clause structure, he argues that

. . . to characterize the pattern found as “SVO” (or Chinese as an “SVO” language) would be incorrect, as it is not the case that what is determining the word order pattern is one referent being “S” and one referent being “O” (with their grammatical statuses determined by their position or their position determined by their grammatical statuses). In fact given the pragmatic principle for determining word order in Chinese, we would expect to find actors more frequently before the verb and patients more frequently after the verb, as cross-linguistically actors are more often topical, while patients are more often focal. It is the pragmatic nature of the actor as topic that results in the NP referring to the NP referring to the actor often appearing in clause-

initial position, and the pragmatic nature of the patient as focal that results in the NP referring to the patient often appearing in post-verbal position . . . When we describe Chinese then, we should say that Chinese clauses are often (though not obligatorily) verb medial, as NPs representing topical and non-focal referents appear before the verb and NPs representing focal and non-topical referents appear after the verb, with the position of any NPs appearing in the clause (none are obligatory) before or after the verb being based on their nature as topical or as part of the focus respectively. (LaPolla & Poa, 2006: 280-281).

The above argument is in line with LaPolla's earlier studies, that (1) there is no grammaticalized subject and therefore no subject-predicate structure in Chinese (LaPolla 1993), (2) there are few elements that are obligatorily thematic; (3) the word order is determined by a principle of information structure: "Topical or non-topical-focal occur pre-verbally and focal or non-topical NPs occur post-verbally" (LaPolla, 1995:310). As he says, it would be problematic to assume the principles determining clause structure are the same across all languages. Therefore, we have to be aware of the principles involved in the structures of each of the languages and of the differences between them when doing cross-linguistic comparisons.

LaPolla has identified the key elements reflecting the differences between Chinese and English (see LaPolla, 1993, 1995, 2003; LaPolla & Poa, 2002; LaPolla & Poa 2006). The analysis of Chinese features illustrates the particular characteristics of Chinese, providing us with knowledge to further our Chinese language and linguistic studies.

The implications of the theory

In second language acquisition research, there are a lot of arguments amongst scholars in relation to learning processes and acquisition. The theory of Language as Constraints on Interpretation may help us understand these issues better, such as in the area of “Error Analysis”, “Negative Transfer”, “Contrastive Analysis” and the related “strategies” and “processes”.

One of the arguments is about the issue of language transfer, that is, the attempt of the language learners to apply rules and forms of the first language when using the second language. In the 1970’s and 1980’s many scholars believed that language transfer is the main cause of errors among language learners. This point of view was challenged in the mid 80’s by a group of scholars who advocated the use of Error Analysis in explaining the cause of learners’ errors. They found that though the first language played an important role in learners’ errors, most errors made by language learners are actually due to faulty inferencing.

Though Error Analysis provided a new approach to the study of the role of language transfer among second language learners, there are still a lot of questions yet to be answered, for example, the concept of making an error due to over-simplification. Indeed, the terms ‘simplification’ and ‘over-generalization’ are quite problematic. Some may argue that if a learner hasn’t learned the language yet, how can he/she simplify it? How do we identify “overgeneralization” as a linguistic issue since it is also a mental process which would always work well together with many other “processes”?

As Ringbom (1987:71) puts it: “Error analysis is not sufficient on its own, but it may yield a better understanding of what is going on in the learner’s mind, especially if it is combined with other types of investigation, such as frequency counts, contrastive analysis, studies of inferencing procedures and reaction time tests.”

LaPolla’s theory of Language as Constraints on Interpretation may shed some light on these unanswered questions. As LaPolla (2003:127) points out: “Learning another language means learning to think in a different way, or to construe the world in a different way.” Because our native language “obligatorily constrains the interpretation of some functional domain,” so when we learn a new language, we also tend to constrain the interpretation of that same domain in the new language. And this is how language errors occur. For example, LaPolla noticed that Southern Min Chinese has a complementizer *kɔŋ⁵¹* (= ‘to say’) which helps to constrain the interpretation of complements. When the Southern Min speakers in Taiwan started to speak Mandarin, which does not have such a complementizer, they felt the need for such a complementizer and so they created one using the Mandarin word *ʃuɔ⁵⁵* (= ‘to say’). This, according to LaPolla, is due to their habit of constraining the interpretation in this way in their own language (LaPolla, 2003:127).

Another phenomenon that LaPolla noticed is that English obligatorily constrains the inference of the time of an action relative to the time of speaker by using tense marking, while Chinese does not. “In a similar way,” LaPolla (2003: 127) observes, “due to their habit of marking tense in every finite

clause, English speakers learning Chinese will overuse the perfective aspect marker in Chinese, essentially using it in any situation they would normally use a past tense in English.” This, according to LaPolla, “is because they feel the need to constrain the interpretation of the utterance by marking it as past tense.”

“Our language use,” LaPolla concludes, “is a set of habits we form, and these habits are very hard to change.” These habits include “habits of language and even thought.” When we learn our first language, “we learn to categorize certain sounds together as allophones of a single phoneme, and to distinguish among other sounds our language treats as distinct phonemes.” And so, when learning a new language, it is very difficult to break this habit and make distinctions we are not used to (LaPolla, 2003: 128).

In view of the above arguments, we may sum up the contributions of LaPolla’s theory to language teaching as follows:

- 1) It has provided us with new approach to understanding the nature of language and communication;
- 2) It serves as a valuable tool in the analysis of data for teaching Chinese as a second language, which may include areas such as “Error Analysis”, “Negative Transfer” and “Contrastive Analysis” and so on;
- 3) It points out the fact that language use is a set of habits formed by following the language conventions of a society and the cognitive structures that they represent, and so learning a second language involves learning the

conventions of the society and the cognitive structures that those conventions represent. A successful second language learner not only needs to learn the words, pronunciation, lexical structures and grammar of the target language, but also the culture in which the target language developed, that is, the habits and conventions of the target language speakers.

4) Last but not least, in using this theory, we may review some of the linguistic studies conducted under the banner of psycho-linguistics and sociolinguistics related to Chinese, or related to research on Chinese word order, phrase structure, and the placement of particular elements.

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