

Grammatical metaphor and its difficulties in application

WANG Xue-feng

(Foreign Language Department, Taiyuan Normal University, Taiyuan 030012, China)

Abstract: Grammatical metaphor is the term used by Halliday to refer to meaning transference in grammar. Instead of the congruent realization of a norm, the metaphorical representation has become the norm in many instances. Metaphorical modes of expression are characteristic of all adult discourses (Halliday, 1994). The shift from congruent to metaphorical modes of expression is also the characteristic of written English. For foreign language learners, getting to know the features of the target language and using them in their own expressions are important. This paper examines the features of grammatical metaphor in written English and then discusses the difficulties and problems of the application of these features in teaching writing to college English learners. This paper also provides some research findings and pedagogical implications for developing awareness of grammatical metaphor in writing of Chinese college learners of English.

Key words: grammatical metaphor; writing; difficulties and problems; pedagogical implications

1. Introduction

Since Halliday for the first time advanced the grammatical feature of “grammatical metaphor” in 1985, there have been a great many of researches on grammatical metaphor in linguistic areas in China. The studies are mostly on the characteristics of grammatical metaphor; types, functions and the representation of metaphorical forms; metaphor in spoken and written language; the nominalization and identification of English grammatical metaphor and discourse analysis; grammatical metaphor and stylistic features of English science writing; cognitive effects and semantic analysis of grammatical metaphor; and nominalization in English and its discourse function. All these studies are on the descriptive analysis of English and Chinese languages rather than on the teaching of English and/or Chinese (HU, 1990; HU & FANG, 1997; HUANG, 2002; HUANG & WANG, 2002; LU & WEI, 1992; 1996; REN, 1995; REN, Guthrie & Fong, 2001; YU, LI & PENG, 1998; ZHU, 1993; 2001). Grammatical metaphor as non-congruent ways of encoding language is the characteristic of all adult discourse, written English and science writing. As foreign language learners, having awareness of the grammatical features of the target language and learning how to use them to develop their spoken and written communication are more important than just analyzing or describing the language phenomenon. Therefore, this paper not only examines the main features of grammatical metaphor, but also discusses the weaknesses and problems found in teaching grammatical metaphor to develop writing of Chinese tertiary students, and it also examines some pedagogical implications for teaching writing to Chinese college learners of English.

2. Grammatical metaphor

Languages have their most natural ways of encoding the meanings which they express. This is called

WANG Xue-feng (1963-), female, Ph.D., associate professor of Foreign Language Department, Taiyuan Normal University; research fields: systematic functional linguistics, English education.

congruent way, and the non-congruent ways of encoding language are referred to as grammatical metaphor (Halliday, 1994; 1998; Halliday & Matthiessen, 1999; Matthiessen, 1995; Ravelli, 1998). Grammatical metaphor is a substitution of one grammatical class, or one grammatical structure, by another, for example, “his departure instead of he departed” (Halliday & Martin, 1993, p. 79). Halliday used the term grammatical metaphor to refer to the meaning transference from congruent to metaphorical in grammar. Congruent forms reflect the typical ways that people construe experience. In congruent forms, verbs represent actions or processes, nouns represent participants and adverbs or prepositional phrases represent circumstances and conjunctions express the relations between one process and another. However, with the development of language, people often find that the original relation has changed. People often use verbs into nouns, adjectives into nouns and turn sentences into noun phrases, these changes are called grammatical metaphors. For example,

Example 1: (1) a. After the announcement, people *applauded*.

b. *Applause* followed the announcement.

(2) a. She *spoke* about five points.

b. Her *speech* covered five points.

Regarding the above 4 sentences, (1)b and (2)b are metaphorical forms, because in the 2 sentences, the processes “applauded” and “spoke” are substituted by nominal types of participants of “Applause” and “speech”.

According to Halliday, there are 2 main types of grammatical metaphor in the clause: metaphors of mood (including modality) and metaphors of transitivity. In terms of model of semantic functions, these are interpersonal metaphor and ideational metaphor.

2.1 Interpersonal metaphors

Functional linguistics held that interpersonal metaphors are one of the devices to realize interpersonal meaning. Interpersonal metaphor involves non-congruent ways of informal spoken language which concerns with establishing and maintaining relations with other people enacting interaction correlated with a tendency to draw on the resources of interpersonal metaphor involved. Interpersonal metaphor includes metaphor of modality and metaphor of mood.

2.1.1 Metaphors of modality

The modality feature can be construed as a proposition. A projecting clause is involved if modality is expressed metaphorically, which usually has a word or proposition to indicate belief, likelihood, certainty or other features connecting with modality. Interpersonal metaphor of modality encourages people to use the grammar metaphorically. People can say “I think”, when they mean probably; or “I believe”, when they mean almost certainly; or “don’t you think”, when they mean definitely. The author may have the following possibilities if people express the likelihood of LI Ping having gone to Beijing already (see Example 2):

Example 2: (1) LI Ping *must have gone* to Beijing.

(2) LI Ping will *certainly have gone* to Beijing by now.

(3) *I think* LI Ping has already gone to Beijing.

(4) It is very *likely* that LI Ping has already gone to Beijing.

(5) Everyone *believed* that LI Ping had already gone to Beijing.

(6) It is *clear* that LI Ping has already gone to Beijing.

As it can be seen from clauses (1) and (2), the same meaning of likelihood is realized by a modal verb “must” in clause (1) or a modal adverb “certainly” in clause (2). Halliday called these expressions metaphors of modality which occur within the clause structure itself. While in (3), (4), (5) and (6), the modal meaning of certainty in

different degrees are decided by the verbs like “think” in clause (3) and “believe” in clause (5), or particular types of adjectives “likely” in clause (4) and “clear” in clause (6) in the projecting clauses. Halliday (1994, p. 354) called such expressions interpersonal metaphors of modality, because the modal meaning is realized outside the clause (in contrast with the standard encoding by means of modal verbs or adverbs, which lie within the clause structure). In this case, the clauses (3) and (5) show that the metaphors are based on a borrowing. The verbs “think” in clause (3) and “believe” in clause (5) can be borrowed to express a modal meaning. In English writing, interpersonal metaphor is a tactful language device to realize the intention of the writer and to have a great insight into the theme of the text.

2.1.2 Metaphors of mood

The other main type of interpersonal metaphor is the metaphors of mood. According to Halliday (1994, p. 363), mood expresses the speech functions of statement, question, offer and command. The choice between these different mood types enables people to give information by means of statements, using the declarative mood; to ask information by means of questions, using the interrogative mood; to put forward something to be considered and accepted or refused by means of offers, using the interrogative mood; or to ask for something to take place by means of commands, using imperative mood. For example (see Example 3):

- Example 3: (1) The car is in the garage.
(2) Where did you park the car?
(3) Show me the car!

Clauses (1) and (2) in Example 3 illustrate the expressions of statement and question and they are fairly straightforward, but with regard to command in clause (3), a large variety of expressions can be used to express the same command (see Example 4):

- Example 4: (1) Tell me where you parked the car, please.
(2) Could you tell me where you parked the car, please?
(3) I would advise you to tell me where you parked the car.
(4) You are kindly requested to tell me where you parked the car.
(5) It is recommended that you tell me where you parked the car.
(6) It is advisable to tell me where you parked the car.

According to Halliday (1994, p. 363), the various expressions in Example 4 are under the heading of the notion of interpersonal metaphor of mood, because they are considered as metaphorical and deviated from the standard, most straightforward realization of a command by means of the imperative mood. Interpersonal metaphor is mostly associated with mood which expresses the speech function.

2.2 Ideational metaphors (Metaphors of transitivity)

Ideational metaphor is an incongruent representation of the experiential meaning. It is mainly represented by the transitivity system. In the English transitivity system, there are 6 main types of process: material, mental, relational, behavioral, verbal and existential processes, and these can be found in the grammatical categories. A process consists of 3 components: (1) the process itself; (2) participants in the process; and (3) circumstances associated with the process. The transformations can be between the processes or a shifting of participants and circumstances and this is what Halliday revealed grammatical metaphor. Metaphors of transitivity are the ways of making people’s speech or writing not too flat or too artificial and contrived; therefore, getting to know the metaphors of transitivity is necessary for foreign language learners. Metaphors of transitivity are italicized in the following example (see Example 5):

Example 5: (1) a. Mary saw something wonderful (Halliday, 1985 , p. 322).

b. Mary *came upon* a wonderful sight.

c. A wonderful sight *met* Mary’s eyes.

(2) a. John put the nail into the plank *with a hammer*. (Circumstance: manner)

b. *The hammer* put the nail into the plank. (Participant)

c. John *hammered* the nail into the plank. (Material process)

Clauses (1)b and (1)c are interpreted as metaphorical variants of (1)a. In (1)b, the mental process “saw” has been represented as a material process “came upon” and the perception has been turned into a “participant” “a sight”. In clause (1)c, the process has been split up into Actor “a sight”, material process “met” and goal “eyes”; and “Mary” represented simply as the possessor of the eyes.

In clause (2)a, the circumstance of manner is represented by “with a hammer”. In clauses (2)b and (2)c, “hammer” represents the participant and material process.

In the Example 6, clause (1)a is the congruent form which encodes meaning naturally; while in clause (1)b, the meaning is transferred from the congruent form to the experiential metaphorical form of mental process. And these are illustrated in the Table 1 and Table 2.

Example 6: (1) a. Great changes took place in Guangzhou in 1980. (Congruent form)

b. *1980 saw the great changes* in Guangzhou. (Metaphorical form)

Table 1 Congruent form

Great changes	Took place	In Guangzhou	In 1980	Congruent
Participant: Goal	Process: Material	Circumstance: Place	Circumstance: Time	Function
Nominal group	Verbal group	Prepositional phrase	Prepositional phrase	Class

Table 2 Experiential metaphorical form of mental process

1980	saw	great changes	in Guangzhou	Metaphorical
Participant: Senser	Process: Mental	Participant: Phenomenon	Circumstance: Place	Function
Nominal group	Verbal group	Nominal group	Prepositional phrase	Class

The clause (1)b in Example 6 illustrates metaphors of transitivity which are incongruent representation of the experiential meanings. As it can be seen from the analysis in Example 5, mental process can be represented as material process and the process can also be split up into actor, material process and goal. The circumstance can be represented by both the participant and material process.

2.3 Nominalization: The main resource of grammatical metaphor

Nominalization has been known as the single most powerful resource for creating grammatical metaphor (Halliday & Matthiessen, 2004). Nominalization which helps create a style of writing with density, complexity and abstractness, is a special feature of English academic and formal writing. Nominalization is the use of a nominal form to express a process meaning (Thompson, 1996, p. 167). Nominalization is a process whereby a verb or an adjective is transformed into a nominal group. In English, some verbs and adjectives can be used directly as nouns, for example, “record” and “musical” (as in Broadway musical), while others require some form of morphological transformation requiring a suffix, for example, “nominalization” from “nominalize”, “information” from “inform”, “investigation” from “investigate”, “difficulty” from “difficult”, “hardness” from “hard”, and so on. When a verb is nominalized, it becomes concept rather than an action. For example (see

Example 7):

- Example 7: (1) The city government *has decided* to widen the road through this neighbourhood. This has upset the local residents.
- (2) The city government's *decision* to widen the main road though this neighbourhood has upset the local residents.

The 2 clauses in Example 7 show that clause (1) contains 2 clauses. With the nominalization “decision” in clause (2), the 2 clauses join together to become a single clause which packs in several complex abstract ideas and this is the characteristic of academic writing.

When a verb or an adjective is transformed into a noun, with or without morphological transformation, the word can now act as the head of a noun phrase. The following are some examples (see Example 8):

- Example 8: (1) a. The driver *drove* the bus too fast down the hill, so the *brakes failed*. (Congruent form)
- b. *The driver's over rapid downhill driving* of the bus caused *brake failure*. (Metaphorical form)
- (2) a. We *walked for charity*. We raised money for the Children's Foundation. (C)
- b. *The charity walk* raised money for the Children's Foundation. (M)
- (3) a. If you *invest* in rail facility, this implies a long-term commitment. (C)
- b. *Investment* in rail facilities implies a long-term commitment. (M)

The clauses (1)b, (2)b and (3)b in Example 8 show that nominalization makes actions and processes into concepts, and builds long noun phrases to produce a lexically dense style which is one of the characteristics of academic and scientific writing. Nominalization reduces the number of clauses to make more information be compressed into each nominal (noun) group which enables an academic writer to concisely refer to recurring abstract ideas, a single sentence to pack in several complex abstract ideas. The following example (see Example 9) demonstrates of the characteristics of nominalization:

- Example 9: The daily loss of thousands of dollars worth of valuable stock ultimately affects us all through an increase in prices.

It has been suggested that nominalization probably “evolved first in scientific and technical registers” and then gradually spread to other areas of adult discourse and become a mark of prestige and power (Halliday & Matthiessen, 2004). Grammatical metaphor is a resource that language uses to condense information by expressing concepts in an incongruent form which is very valued in scientific and academic registers as a way of expressing “objectification” and “abstraction”. And grammatical metaphor has been of particular importance in the evolution of scientific writing, especially in the form of nominalized processes.

3. Findings from the teaching of grammatical metaphor

Regarding the above examination of the grammatical features of grammatical metaphor in written English, teaching is conducted to develop students' awareness of grammatical metaphor to improve their English writing. The teaching involves 90 students. They are 2nd-year students in the English Department of the Taiyuan Teachers College, Shanxi Province, China. The teaching lasts 16 hours and the lessons consisted of 6 units: Unit 1: Brief Introduction of SFL (Systemic Functional Linguistics) and grammatical metaphor; Unit 2: Ideational Metaphor: Metaphors of Transitivity; Unit 3: Experiential Metaphorical Form of Mental Process; Unit 4: Interpersonal Metaphor of Modality; Unit 5: Interpersonal Metaphor of Mood; and Unit 6: Nominalization.

3.1 Findings from students' feedback

In response to the teaching objectives of developing students' grammatical metaphor awareness to improve their English writing, getting reflection and feedback from the students is essential for the teacher. From the teaching, students could understand the particular importance of grammatical metaphor in the evolution of scientific writing. And grammatical metaphor is a resource language used to condense information by expressing concepts in an incongruent form to "objectification" and "abstraction" in the form of nominalized processes. And they could understand that English had rich expressions for the same thing and nominalization was the most powerful resource for creating grammatical metaphor. According to students' responses, their difficulties were in the terms of grammatical metaphor, such as ideational metaphor, metaphor of transitivity, interpersonal metaphor, interpersonal metaphor of modality and mood, because they had confusion between the terms of grammatical metaphor and the terms in traditional grammar, such as participants, processes or circumstances. In addition, they also had application problems.

3.2 Findings from students' exercises

The students' exercises are one of the main tools to gauge their understanding of the grammatical features. The effectiveness of these features in improving writing skills; the problems and difficulties in using these features; and also the reasons why the students can or cannot use the features properly. The exercises are generally consisted of recognition task, translation task and nominalization task.

3.2.1 Recognition task

In this exercise, the students' identification of the congruent or metaphorical forms is examined. There are 6 items in this exercise. Each item is analyzed separately and the ratio of students who provided the correct answer is calculated. The statistical analysis is illustrated by the table (see Table 3).

Table 3 The statistics analysis results of the congruent and metaphorical forms

Item	Student number (90)	Ratio (%)
Item 1 (Congruent form)	84	93.3
Item 2 (Metaphorical form)	90	100
Item 3 (Interpersonal grammatical metaphor)	78	86.7
Item 4 (Congruent form)	81	90
Item 5 (Interpersonal grammatical metaphor)	87	96.7
Item 6 (Congruent form)	90	100

Table 3 illustrates the statistical analysis results of the students' understanding of congruent and metaphorical forms. Identifying congruent or metaphorical forms is the basis of grammatical metaphor application. As can be seen from the Table 3, 93% students correctly identified the congruent form in Item 1. It is great to see that 100% of the students correctly identified the metaphorical form in Item 2 which is very typical metaphorical sentence. "A wonderful sight" is the actor, "met" is the material process and the "eyes" is the goal. Items 3 and 5 are interpersonal grammatical metaphors. However, Item 3 is an interpersonal metaphor of modality and Item 5 is interpersonal metaphor of mood. The students' understanding of Item 3 (86%) is not as good as Item 5 (96.7%). Items 4 and 6 are both congruent forms. The students did an excellent job in Item 6 (100%). Compared with Item 6, the students performed slightly worse in Item 4 (96.7%).

3.2.2 Translation task

To develop the students' writing skills by raising their awareness of the use of grammatical features they have

learnt is more important than merely teaching the knowledge without requiring the students to use it. The following nominalization and grammatical metaphor exercise focuses on the specific identification of the grammatical features and structure application. The students were required to translate 3 Chinese sentences into English by using nominalization or grammatical metaphor where necessary. Here the assessment mainly focuses on the use of nominalization or grammatical metaphor in translating the clauses, and at the same time, the clauses must be understandable. The analysis results are illustrated by the table (see Table 4).

Example 10: (1) 乘公共汽车或开私车的不断普及可能导致了骑自行车和步行的下降。

The increasing popularity of taking a bus or car, likely caused the decrease in cycling and walking.

(2) 数据表明，尽管越来越多的妇女加入到了有酬劳动的行列，然而这却并未导致男人致力于更多的家务劳动。

The data suggest that the increased *presence of women* in the paid work force has not yet led to an increased role for men at home.

(3) 中华人民共和国是 1949 年成立的。

Nineteen forty-nine saw the *founding of the People's Republic of China*.

Table 4 Sentence translation using nominalization and grammatical metaphor

Item	Number of nominalizations or grammatical metaphors used in an item	Ratio (%)
Item 1 (...popularity of decrease)	42	46.7
Item 2 (Presence of women)	63	70
Item 3 (saw the founding of...)	75	83.3
Student number	90	

Table 4 illustrates the results of the students' sentence translation using nominalization and grammatical metaphor. As can be seen from the Table 4 of Item 1, the percentages of the students who used the nominalized forms of "popularity of and decrease" are 46.7%. In Item 2, 70% of the students could use the nominalized form of "presence of women". In Item 3, 83.3% of the students used "saw the founding of..." in their sentence translation. According to the statistical analysis results, there is still room for improvement with regard to the application of grammatical metaphor or nominalization in sentence translation and sentence translation can be used to develop the students' comprehensive ability in the application of nominalization and grammatical metaphor.

3.3 Findings from the teaching of grammatical metaphor

According to the data analysis of the students' grammatical metaphor exercises in the study, brief findings are given below.

(1) Most students could identify the congruent and metaphorical forms in a clause. However, some of them still mixed up the 2 forms, because both the metaphorical and congruent forms are so frequently used in daily life and these metaphorical representations have become the norms. For example, "I think he is right" is an interpersonal metaphor. The students had difficulties in identifying the problem as it is generally recognized as a metaphorical form. Though interpersonal metaphor concerns mostly spoken English, it is necessary to emphasize in

teaching, because knowing the features of spoken English helps understand the characteristics of written English.

(2) The identification and structure application of nominalization and grammatical metaphor were specific. When the students were required to translate 3 Chinese sentences into English applying nominalization or grammatical metaphor where necessary, according to the statistical analysis results, their application of grammatical metaphor and nominalization in the sentence translation was unsatisfactory. The reasons are summarized as follows: (1) In translation, it was hard for the students to find the main active verbs in the clause, (2) Students encountered difficulty with nominalized forms of the verbs, (3) Translation requires good language ability, and (4) The students were weak in application of the features.

4. The pedagogical implications

From the teaching of grammatical metaphor and the analysis of the students' exercises, the following pedagogical implications can be derived for developing awareness of grammatical metaphor in the English writing of Chinese tertiary students.

(1) Developing students' awareness of the characteristics of written English, academic writing and scientific writing is important and necessary. Teaching nominalization and grammatical metaphor is necessary for developing the English writing skills of Chinese tertiary students;

(2) Translation has a role in teaching grammatical metaphor. Translation requires students to possess high language ability;

(3) Nominalization is the resource of grammatical metaphor. When teaching grammatical metaphor, it is important to help students understand the conceptual relationship between these 2 features;

(4) Metaphor of transitivity makes writing more vivid and contrived; however, the terms of grammatical metaphor are abstract. Helping students know about them are necessary. For example, (1) Processes (actions, events, mental processes and relations) are expressed by verbs; (2) Participants (people, animal, concrete and abstract objects that take part in processes) are expressed by nouns; (3) Circumstances (time, place, manner, cause, condition) are expressed by adverbs and by prepositional phrases; and (4) Relations between one process and another are expressed by conjunctions.

5. Conclusion

Grammatical concepts of SFL not only help students explore and understand how the wonderful language works, but also tell them why certain grammatical concepts are used. They give a way of discussing the language and the way they are used to help improve students' writing.

It can be concluded that teaching SFL grammatical features to develop the writing skills of Chinese students learning English is both effective and necessary. After teaching, they write lexically denser clauses, distinguish spoken and written English and know how to pack in more meaning and information in clauses. They have tried to express themselves in various ways after learning nominalization and grammatical metaphor though problems and difficulties can be seen from the students' exercise of SFL grammatical features. These reveal that there is much more for English teachers should do to develop the English writing skills of Chinese students. Studies of the objective aspects are not enough to give a full picture of SFL teaching in developing the English writing skills of Chinese students. Therefore, teachers should give well-selected examples to students to illustrate the analysis of different types of grammatical metaphors and encourage them to use them in their daily English writing.

References:

- Butt, D., Fahey, R., Spinks, S. & Yallop, C.. 1997. *Using functional grammar: An explorer's guide*. Sydney: National Centre for English Language Teaching and Research: Macquarie University.
- Chafe, W. & Danielewicz, J.. 1987. Properties of spoken and written language. In: Horowitz, R. & Samules, S. J. (Eds.). *Comprehending oral and written language*. San Diego, CA: Academic Press Inc, 83-113.
- Halliday, M. A. K.. 1985. *An introduction to functional grammar*. London: Edward Arnold.
- Halliday, M. A. K.. 1994. *An introduction to functional grammar (2nd ed.)*. London: Arnold.
- Halliday, M. A. K.. 1998. Linguistics as metaphor. In: Simon-Vandenberg, A. M., Davidse, K. & Noel, D. (Eds.). *Reconnecting language: Morphology and syntax in functional perspective*. Amsterdam: Benjamins.
- Halliday, M. A. K. & Martin, J. R.. 1993. *Writing science: Literacy and discursive power*. London: Falmer Press.
- Halliday, M. A. K. & Matthiessen, C.. 2004. *An introduction to functional grammar (3rd ed.)*. London: Arnold.
- Halliday, M. A. K. & Matthiessen, C. M. I. M.. 1999. *Construing experience through meaning: A language-based approach to cognition*. London: Cassell.
- HU, Z. L. (Ed.). 1990. *Yuyan xitong he gongneng (Language system and function)*. Beijing: Peking University Press. (in Chinese)
- HU, Z. L. & FANG, Y.. 1997. *Gongneng yuyanxue zai zhongguo de jinzhan (Advances in Functional Linguistics in China)*. Beijing: Tsinghua University Press. (in Chinese)
- HUANG, G. W. (Ed.). 2002. *Yupian, yuyan gongneng, yuyan jiaoxue (Discourse, language functions and language teaching)*. Guangzhou: Zhongshan University Press. (in Chinese)
- HUANG, G. W. & WANG, Z. Y. (Eds.). 2002. *Discourse and language functions*. Beijing: Foreign Language Teaching and Research Press.
- LU, S. C. & WEI, J.. 1992. *Waiguo yuyan yanjiu lunwen suoyin:1949-1989 (An index to the articles on foreign language studies: 1949-1989)*. Shanghai: Shanghai Foreign Language Education Press. (in Chinese)
- LU, S. C. & WEI, J. 1996. *Waiguo yuyan yanjiu lunwen suoyin:1990-1994 (An index to the articles on foreign language studies: 1990-1994)*. Shanghai: Shanghai Foreign Language Education Press. (in Chinese)
- Matthiessen, C. M. I. M.. 1995. *Lexicographical cartography: English systems*. Tokyo: International Language Science Publishers.
- Ravelli, L. J. (Ed.). 1988. *Grammatical metaphor: A initial analysis*. London: Pinter.
- REN, S. Z.. 1995. *Yuyan, xitong, jiegou (Language, system, structure)*. Hangzhou: Hangzhou University Press. (in Chinese)
- REN, S. Z., Guthrie, W. & Fong, W. I. R.. 2001. *Grammar and discourse: Proceedings of the international conference on discourse analysis*. Macau: Publication Centre, University of Macau.
- Thompson, G. 1996. *Introducing functional grammar*. London: Arnold.
- YU, W. S., LI, H. & PENG, X. W.. 1998. *Yuyan de gongneng (The functions of languages)*. Chongqing: Chongqing University Press. (in Chinese)
- ZHU, Y. S.. 1993. *Yuyan, yupian, yujing (Language, text, context)*. Beijing: Tsinghua University Press. (in Chinese)
- ZHU, Y. S.. 2001. *Shiji zhijiao lun gongneng (On language functions)*. Shanghai: Shanghai Foreign Language Education Press. (in Chinese)

(Edited by Chris and Suky)