Circumstantialization of projection: Functional syntax of Angle in English and Chinese

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HIGHLIGHTS

- The article attempts to probe into projecting Circumstance from an English-Chinese typological perspective.
- The article proposed a term figure-circumstance to address the peculiar syntactic behavior of Angle.
- An examination of Angles through the dimension of explicit and implicit orientation.
- A detailed account of phenomenon, according to me, in English.
- Some tentative explanation is made on the typological features that motivate the explicit orientation of Chinese Angles.

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ABSTRACT

Circumstance, in the grammar of Systemic Functional Linguistics, is the component associated with the process in transitivity system in the experiential strand of meaning. The most common types of circumstance such as location (including time and space), manner, extent, cause, contingency, accompaniment and role have been well investigated under different theoretical frameworks. However, the grammar of the projecting circumstance (phrases that represent sources of speech) has not gained adequate attention in the previous studies on English, not to mention Chinese. This study is an attempt to conduct a functional syntax analysis (the Sydney model) on one type of circumstance—Angle—in English and Chinese. Some major findings of the analysis are: (i) Angle should, arguably, be treated as figure circumstance due to its peculiar syntactic feature. (ii) It is useful to adopt a two dimensional classification of Angle to observe the levels of projection (source versus viewpoint) and the modes of projection (explicit versus implicit). The implicit mode of Angle in English expands the meaning potential of projection so that the conventional meaning is altered. (iii) English Angle can be explicit and implicit whereas Chinese Angle is predominantly explicit except in the projection of writing. (iv) The according-to prepositions in Chinese are richer than English and can be used as subordinating conjunctions. (v) The fuzziness of grammatical categories may be the typological feature motivating the explicit orientation of Angles in Chinese.

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1. Introduction

Circumstance, under the framework of Systemic Functional Grammar (hereafter SFG), is one of the three components in transitivity system which realizes the experiential line of meaning [13,15]. The three components are:

(i) A process unfolding through time
(ii) The participants involved in the process
(iii) Circumstances associated with the process.

For example, in a clause like I get hungry on the beach, the core element is the process get hungry and there is one participant — realized by the first person pronoun I. The circumstance on the beach, as it were, is the peripheral element that orbits freely around the process. That is known as a ‘nuclear’ model of transitivity in SFG [11,22]. Of present interest is projecting Circumstance, which could be best illustrated through the following examples:
Projecting Circumstance, as ([26]:335) puts it, represents a semiotic Angle on a process (Angle as in 1b) or some aspect of the content of a projection (Matter as in 1a). Angle and Matter are functionally related to projection clause complex (corresponding roughly to speech representation in traditional grammar) as in 1c. The three examples above also suggest that Projection is a trans-grammatical semantic domain, which means that Projection could be realized by different grammatical units such as clause complex, prepositional phrases, adverbs, etc. It should be stressed that, in SFG, the same grammatical unit may expound different (meta) functions that correspond to varied clusters of systems. For example, the traditional notion of ‘subject’ is labeled as Participant in transitivity system and as Theme in thematic structure if they happen to be realized by the same item. Circumstance is an experiential label which can be mapped onto Adjunct, a component in the Mood structure in the interpersonal line of meaning. But in SFG, Adjunct is at the same time a multifunctional concept which also refers to grammatical items beyond the scope of Circumstance (see further discussion below).

In some classic reference grammars, circumstantial elements are discussed with the notion of adverbial or adjunct, which covers a much wider scope [31]; Biber et al., 1999 [17,28]; Greenbaum 1969). Therefore, a review on the previous studies on circumstances will have to exclude numerous items of adjuncts and adverbial in the traditional sense. For instance, interpersonal adjuncts such as probably and reportedly and textual/conjunctive adjuncts such as however and on the other hand will not be discussed here. Adverbial clauses (in the sense of [18,31]) are analyzed as enhancing dependent clauses in clause complexes in SFG.

The most common types of Circumstance such as location (including time and space), manner, extent, cause, contingency, and responsibility for the clause as exchange. (iii) Thirdly, looked at from below, they are typically expressed not as nominal groups but as either adverbial groups or prepositional phrases below, they are typically expressed not as nominal groups but as either adverbial groups or prepositional phrases – mostly the latter, since adverbial groups are largely confined to one type, those of Manner.

Adject: An Adjunct is an element that has not got the potential of being Subject; that is, it cannot be elevated to the interpersonal status of modal responsibility. This means that arguments cannot be constructed around those elements that serve as Adjuncts in experiential terms, they cannot be constructed around circumstances, but they can be constructed around participants, either actually, as Subject, or potentially, as Complement.

At the first glance, Circumstance and Adjunct seem to be two functional labels for the same component in a clause. However, the key distinction lies in the interrelation between the components within one line of functional structure: that is, Circumstance is defined with reference to Process whereas Adjunct to Subject. Furthermore, some adjuncts could not be accounted for experientially because there are plenty of adjuncts having no bearing on Process. Therefore, Adjunct is further divided into modal Adjunct, conjunctive Adjunct and circumstantial Adjunct; only the last type construes Circumstance in experiential meaning. Modal Adjunct refers to items that work within the Mood structure (mood Adjunct) such as never, yet or realize evaluative meaning (comment Adjunct) such as fortunately and allegedly while conjunctive Adjunct pertains to textual components such as however. It is important to note that, according to [15]; items like reportedly are considered as comment Adjunct whereas according to is aligned to Circumstance of Angle. It leads to two questions: (i) how is Angle related to Adjunct? In other words, does Angle have an experiential or interpersonal interpretation? (ii) How is Angle syntactically different from other types of Circumstance?

A close examination of the definition of Circumstance suggests that Angle is not really a Circumstance in the strict sense. Semantically, the meaning of Angle is not associated with the Process of the clause but rather extends over the whole ‘figure’ (the experiential term for a clause, see Ref. [13]. Analyze example (1b) again.

(1a) Government sources say about the new peace plan that it will be discussed on Monday. (Matter)

(b) According to government sources, the new peace plan will be discussed on Monday. (Angle)

(c) Government sources say that the new peace plan will be discussed on Monday. (clause complex) ([26]: 336)

The analysis above shows that Circumstance can be mapped on Adjunct as in last year, but Adjunct does not necessarily correspond to Circumstance as in to my aunt. To clear things out ([15]:311, 154–155), definitions of the two concepts are quoted below:

Circumstance: (i) As far as meaning is concerned, we used the expression ‘circumstances associated with’ or ‘attendant on the process’, referring to examples such as the location of an event in time or space, its manner, or its cause; and these notions of ‘when, where, how and why’ the thing happens provided the traditional explanation, by linking circumstances to the four WH forms that were adverbs rather than nouns. (ii) This ties in with the second perspective, that from the clause itself: whereas participants function in the mood grammar as Subject or Complement, circumstances map onto Adjuncts; in other words, they have not got the potential of becoming Subjects, of taking over the modal responsibility for the clause as exchange. (iii) Thirdly, looked at from below, they are typically expressed not as nominal groups but as either adverbial groups or prepositional phrases – mostly the latter, since adverbial groups are largely confined to one type, those of Manner.

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(3) According to government sources, the new peace plan will be discussed on Monday.

The item according to government sources is by no means merely related to the Process be discussed but rather to the clause as a whole including the Participant the new peace plan and the Circumstance on Monday. In other words, in contrast with the Circumstance on Monday which is associated the Process, according to government sources, I suggest, should be defined as a figure-associated Circumstance.

There is syntactic evidence to prove that Angle differs from other types of Circumstance in nature. Following Greenbaum's

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1 Corpus-based methodology plays a central role in SFL as well; see Ref. [33] for works that discuss the connection in detail.
notion of Enhanced Theme Construction may help to test whether Experiential Enhanced Theme Construction (see also [6]). The term that realizes experiential meaning that is enhanced as Theme. 

Halliday cannot be focused in the cleft-construction (predicated theme in subjunct and disjunct from adjunct is that the former two types in independency and semantic scope. One feature that distinguishes function. [7]; for instance, considers this type of cleft sentence as an Halliday's term. The notion of Enhanced Theme Construction may help to test whether Angle is an experiential element or not (cf [23]:127). Observe the following cases:

(4)(a) Hilda helped Tony because of his injury.
(b) It was because of his injury that Hilda helped Tony. [adjunct]
(c) Hilda reportedly helped Tony.
(d) It is reportedly that Hilda helped Tony. [disjunct]

This phenomenon could be better explained in terms of meta-function. [7]; for instance, considers this type of cleft sentence as an Experiential Enhanced Theme Construction (see also [6]). The term reflects the function of the construction: it is always an element that realizes experiential meaning that is enhanced as Theme. Therefore, a functional account could be: the adjunct reportedly cannot be focused or enhanced because it is an interpersonal item and plays no part in the experiential figure Hilda helped Tony. The notion of Enhanced Theme Construction may help to test whether Angle is an experiential element or not (cf [23]:127). Observe the following cases:

(5)(a) According to the National Weather Service, temperatures will be above normal with little or no precipitation. (COCA)
(b) ? It is according to the National Weather Service that temperatures will be above normal with little or no precipitation.
(c) That was the rumor zipping across the Internet, as reported by the webzine Salon.com. (COCA)
(d) ? It is as reported by the webzine Salon.com that that was the rumor zipping across the Internet.

It is not clear whether sentence (5b) and (5d) are grammatical. But the frequency of the usage is extremely low because I found no instances of 'it is Angle that' in both COCA and BNC corpora. And if it seems Chinese Angle cannot be put into focusing constructions. There seems to be no parallel of Experiential Enhanced Theme Construction in Chinese; but a similar function can be achieved through the use of the relational Process Interpersonal structure of Mood and experiential structure of transitivity. 

| interpersonal experiential | The teapot | The duke | had | given | To my aunt | Last year |
|---------------------------|-----------|----------|-----|-------|------------|----------|
| Complement Participant (goal) | Subject Participant (actor) | Finite Predicator | Adjunct Participant (recipient) | Adjunct Circumstance (location) |

Halliday approach to adverbial usage [31], adopt a three-way distinction of adjunct, subjunct and disjunct in terms of syntactic independency and semantic scope. One feature that distinguishes subjunct and disjunct from adjunct is that the former two types cannot be focused in the cleft-construction (predicated theme in Halliday's term). Compare the cases below:

(4)(a) Hilda helped Tony because of his injury.
(b) It was because of his injury that Hilda helped Tony. [adjunct]
(c) Hilda reportedly helped Tony.
(d) It is reportedly that Hilda helped Tony. [disjunct]

When the miánbāo 'bread' is focused, shì 'be' needs to follow the subordinating marker de, which is also often used as possessive marker as in wǒ de 'my'. When the Actor wǒ 'I' is enhanced, there is no need for the use of de. But when the Circumstance zuòtiān 'yesterday' is enhanced, the construction becomes 'shì + Circumstance + Process + (de)' as shown in 6d. Following this pattern, a focused Angle may occur like (7b), which is highly awkward.

(7)(a) jù guójia qìxiāngqì bāodào, mìngtiān huì xiàyǔ

According to nation weather service report, tomorrow will rain-heavily.

(b) shì jù guójia qìxiāngqì bāodào, mìngtiān huì xià(de) yǔ

It is according to nation weather service that it will rain-heavily tomorrow.

There is no instance of focused Angle found in Chinese BCC corpus, which confirms the unacceptability of example (7b) above. Other evidence comes from Biber et al. (1999) who apparently reject considering Angle as a circumstantial element. They distinguish three types of adverbials, namely, circumstantial adverbial, stance adverbial and linking adverbial, corresponding roughly to circumstantial, interpersonal and conjunctive Adjuncts in SFL. In Biber's model, what is known in SFL as Angle is recognized as epistemic stance adverbials, either expressing the source of knowledge or viewpoint and perspective (p. 855). Thus their approach views all the items of Angle as interpersonal components.

The interpersonal view on Angle is not without problems. It should be noticed that Manner and Angle can both be construed with according to. An interpersonal view on Angle would make it difficult to analyze some borderline cases in which according to can be subject to both Manner and Angle reading. Examine the following examples from COCA corpus:

(8)(a) The 'Garden of Friendship' was designed according to southern Chinese tradition by Sydney’s sister city, Guangzhou in China.
(b) Perdue told the owners, according to a script prepared for him: “I personally am deeply invested in the bid.”

(c) One man from Ashland told me that according to his father, the man who had killed Tom was his old friend Gerald Monahan.

(d) I think that’s the direction, according to every source around town.

In example (8a), according to is associated with material Process design so it is unequivocally subject to manner reading. However, in examples (8b) and (8c), according to may accept both manner and Angle readings because it is associated with the verbal Process tell. The manner reading points to how the Sayers (Perdue, One man) tell something. The Angle reading concerns the source of information. In example (8d), the Angle reading is stronger but the manner reading is still available in that according to seems to be related to the mental Process think. In that sense, the clause that’s the direction is not necessarily the information that comes from every source around town but rather a conclusion made by the speaker based on whatever is said by the sources. In such cases, according to can be focused without any awkwardness as in:

(9) It is according to a script prepared for him that Perdue told the owners; “I personally am deeply invested in the bid.”

Given these borderline cases, the use of according to seems to form a continuum, from a pure manner reading, a manner reading associated with telling, to pure Angle reading. The pure Angle reading, it appears, has got rid of the manner reading, serving as a projecting item on its own like a reporting clause X say. In light of this parallel, the unacceptability of example (5b) can now be explained in terms of the ungrammaticality of focused reporting clauses. Compare the following examples:

(10)(a) According to the National Weather Service, temperatures will be above normal with little or no precipitation.

(b) National Weather Service says temperatures will be above normal with little or no precipitation.

(c) It is according to the National Weather Service that temperatures will be above normal with little or no precipitation.

(d) It is the National Weather Service says that temperatures will be above normal with little or no precipitation.

As the words in bold show, Angle corresponds to the entire projecting part of the clause complex ([26]: 336) and therefore cannot be focused as shown in example (10d). But it does not mean that examples (10a) and (10b) share the same meaning. In example (10a), we only know that the National Weather Service says something. The speaker takes up the responsibility for conveying what it says. Example (10b) construed a verbal event, in which the speaker takes a much weaker commitment to what the National Weather Service says. It is only in this light that we say Angle is circumstantiation of a reporting clause—it is a reporting clause that looks as if it were a Circumstance. Semantically, Angle construes only the projecting part of projection without the projected part because the speaker becomes the ‘messenger’ to forward the information. As regards to interpersonal meaning, there is no problem in aligning Angle to interpersonal Adjunct since it has no potential to become a Subject and metaphorically indicates the validity of information (e.g. the official source is credible). To sum up, when we analyze Angle as a Circumstance, it is better considered as figure Circumstance or pseudo-Circumstance due to its peculiar projecting nature.

3. Functional syntax of Angle in English

As suggested in the previous section, if one defines Circumstance on semantic rather than formal grounds, there are reasons for treating Angle as figure Circumstance. But there is no problem to say Angle is circumstantialization of Projection, or more specifically, of the reporting part of a projection sequence. Therefore, the syntax of Angle could not be fully appreciated without taking projection into account. This is a major step forward in the more recent editions of IFG, in which ([14]:276; [15]:328) identify two types of Angle based on levels of projection ([15]:509):

Angle is related either to (i) the Sayer of a verbal clause, with the sense of ‘as … says’ or (ii) to the Senser of a mental clause, with the sense of ‘as … thinks’.

Type (i) is called Source because it is used to denote the source of information in the use of according to X. Type (ii), on the other hand, is called Viewpoint since it is “used to represent the information given by the clause from somebody's viewpoint” as in the use of to X. The labels are quite straightforward and consistent with the system of projection modelled in the environment of clause complex (see Ref. [14] chapter 7). To put it more concisely, the Source projects a location (what people say) as the source of information while Viewpoint projects an idea (what people think).

In the environment of clause complex, another dimension to define projection is taxis: hypothetic reports versus paratactic quotes. It is called modes of projection ([15]:509), which correspond roughly to the traditional notions of indirect and direct speech. In the environment of Circumstance, I propose two modes of Angle: explicit versus implicit. Explicit mode refers to the Angle with the reporting process clearly marked on lexicogrammatical grounds such as in the words of whereas implicit mode involves the Angle with the process unmarked as in according to. As will be soon apparent, implicit mode of projection is a particular feature of Angle in English compared with Chinese. Levels and modes intersect to define four kinds of Angle (Table 3.1).

The expressions such as as stated by and as far as I am concerned are, strictly speaking, dependent clauses rather than prepositional phrases. However, the clauses are non-typical cases of hypothetic enhancement. They are the borderline cases between hypothetic enhancement and Circumstance. These ‘both this and that’ situations have long been noticed in SFL literature (e.g. Ref. [25]). For example, process types, as [15]:216 suggest, are modelled as a semiotic space with continuous regions “shading into one another and these border areas represent the fact that the process types are fuzzy categories.” Of particular relevance here is their interpretation of hypothetic enhancement of space ([15]: 482):

abstract place shading into matter

|| As far as it can, || the Zoo tries to be self-supporting, || and you will notice the names of companies and individuals on many of the cages [who sponsor the animals]. |||

Here they use the word ‘shading’ again to indicate that the item as far as it can is, on the functional ground, a borderline case between enhancement of place and circumstance of matter. With the same approach, the dependent clauses above are considered as

3 As the anonymous reviewer points out, functional labels are both semantic and formal. The current thesis adopts a more semantically-oriented interpretation on the circumstantial elements such as Angle.
'enhancement shading into Angle' for the following reasons: (i) their structural patterns are relatively stable; (ii) projecting elements are construed in these patterns; (iii) the main clause, in this particular type of complex, can be interpreted as the projected part of the dependent clauses. The next section will elaborate on one such pattern.

3.1. Explicit mode of Angle

In the explicit mode, the meaning of verbal/mental process is marked by projecting nouns or verbs so Source and Viewpoint could be clearly distinguished. There are some formulaic expressions (complex prepositions in Ref. [15] term) such as in the words of in Source and in one’s opinion in Viewpoint. There are also some productive expressions such as ‘as Process by Participant’, which generates numerous items as shown in the COCA corpus below:

As already mentioned above, the pattern ‘as Process by Participant’ is an enhancing dependent clause that functions as Angle. More specifically, it is a case of ‘manner shading into Angle’. Thus it can be regarded as a way of circumstantiating a reporting clause ‘Participant + Process’. For example, as claimed by X corresponds to X claim. A close analysis of the items, however, suggests that the correspondence is not that simple. Some of the items are actually used as Manner rather than Angle, for instance:

(11)(a) This is an illegal use of force as ordered by the government of Abhisit Vejjajiva. (COCA)

# The government of Abhisit Vejjajiva ordered that this is an illegal use of force.

(b) I fully disclosed all of my financial information, as requested by House rules (COCA)

# House rules requested that I fully disclosed all of my financial information.

The two examples show that the verbal process with speech function of command is more frequently used as Manner to indicate an event that results from it. But the projected command can still be inferred from the event. These verbs include mandate, order, request, recommend, prescribe, dictate, etc. The second feature is that some verbs that cannot be used in the environment of clause complex are employed into the construction. The most evident cases are quote and cite:

(12)(a) Nothing in the General Accounting Office Auditing Standards, as quoted by Mayor Brown, indicates that all three auditing functions can’t be done by the same agency.

(b)* Mayor Brown quoted that nothing in the General Accounting Office Auditing Standards indicates that all three auditing functions can’t be done by the same agency.

As quoted by X indicates that the information is forwarded by X from somewhere else and often introduces an utterance with quotation marks. The corresponding reporting clause would be something like X quotes an unknown source and say. It should be noted that almost all of the items in Table 3.2 constitute a Source except as understood by, which seems to refer to a Viewpoint. Finally, this construction can also be altered to serve as a conjunctive Adjunct when the source points to the discourse internally as in as illustrated above. It becomes an interpersonal Adjunct if the source refers to the generic mass to indicate the obviousness of an idea as in as is known to all.

3.2. Implicit mode of Angle

In the implicit mode of Angle, the meaning of projecting process is not marked as in according to. It is difficult to tell whether an implicit Angle is a Source or a Viewpoint merely on formal grounds. However, there is conventional meaning attached to various items. For example, according to X is conventionally a Source while to X refers to a Viewpoint [15]. The source reading of according to gives rise to an interesting syntactical issue: the first person restriction. See the examples below from Ref. [31]:

(13)(a) To me/ to you/ to him/ in my opinion, this is quite unexpected.

(b) According to him/ you/ me, this is quite unexpected.

It is argued that according to X is used chiefly for a third person whereas the constructions like to X have no such tendency [31]: 712. Some linguists working under the model of universal-generative grammar try to explain this tendency in the deep structure (a theoretical assumption that the surface structure is generated from deep structure with some universal rules). (229):235, for instance, points out that the first person restriction on according to derives from a performative clause (known as declarative clause in SFL) in the deep structure which does not show up in the surface structure. His argument is based on the evidence below:

(14)(a) According to Satchel Paige/you/*me, food prices will skyrocket.

(b) Satchel Paige claimed that according to *him/you/me food prices would skyrocket.

The unacceptability of according to me in example (14a) turns out to be acceptable in example (14b), in which him becomes awkward. It follows that the pronoun restriction is imposed by the subject in the reporting clause as suggested in example (14b); so
Table 3.2
Some of the most frequent ‘as Process by Participant’ items in COCA (question marks refer to some problematic items).

| No. | Item                         | Frequency | No. | Item                         | Frequency |
|-----|------------------------------|-----------|-----|------------------------------|-----------|
| 1   | as indicated by               | 557       | 25  | as documented by             | 48        |
| 2   | as described by               | 430       | 24  | as presented by              | 46        |
| 3   | as suggested by               | 416       | 25  | as discussed by              | 45        |
| 4   | as reported by                | 394       | 26  | as advocated by              | 42        |
| 5   | as noted by                   | 265       | 27  | as quoted by                 | 41        |
| 6   | as illustrated by             | 187       | 28  | as cited by                  | 40        |
| 7   | ?as recommended by            | 147       | 29  | ?as prescribed by            | 40        |
| 8   | as proposed by                | 134       | 30  | ?as requested by             | 40        |
| 9   | as stated by                  | 114       | 31  | as argued by                 | 37        |
| 10  | as predicted by               | 102       | 32  | as depicted by               | 37        |
| 11  | as expressed by               | 86        | 33  | ?as dictated by              | 36        |
| 12  | as outlined by                | 82        | 34  | as estimated by              | 35        |
| 13  | as interpreted by             | 80        | 36  | as portrayed by              | 32        |
| 14  | as told by                    | 77        | 37  | as specified by              | 32        |
| 15  | as revealed by                | 75        | 38  | as understood by             | 31        |
| 16  | as assessed by                | 71        | 39  | as written by                | 31        |
| 17  | ?as mandated by               | 68        | 40  | as implied by                | 30        |
| 18  | as envisioned by              | 66        | 41  | as ordered by                | 29        |
| 19  | as explained by               | 63        | 42  | as summarized by             | 28        |
| 20  | as articulated by             | 55        | 43  | as claimed by                | 24        |
| 21  | as established by             | 54        | 44  |                             |           |

there should be an implicit reporting clause (performative clause in Ross’s term) in the deep structure that makes according to me unacceptable in example (14a). The implicit projecting clause in the deep structure takes the form of something like I tell you, which has been deleted before coming to the surface structure. This is his well-known Performative Hypothesis:

All declarative sentences occurring in contexts where first person pronouns can appear derive from deep structures containing one and only one superordinate performative clause whose main verb is a verb of saying.

I think Ross is right in pointing out the syntactic restriction of according to is pertinent to the implied reporting clause. But from the perspective of SFL, the projecting clause I tell you is implied from the interpersonal strand of meaning. Declarative clauses are a choice of Mood structure that realizes the speech function of offer. What’s more, interpersonal components, when enabling some personal opinion, indeed can be viewed as a metaphorical realization of a reporting clause [15]. But these interpersonal meanings only contribute to the low frequency of the use of according to me rather than generating a syntactic rule. A cursory look into the COCA corpus shows that according to me is not entirely ungrammatical in declaratives:

(15)(a) According to me, I’m moral. Plus, according to me, I’m normal, which is not at all abnormal when you think about it, because everybody’s default view is the view from inside their own skin. (COCA FIC)

(b) According to ABC, there’s an untapped demand for a sitcom starring Jim Belushi as a doltish, guy’s guy married to Courtney Thorne-Smith, a beautiful woman not particularly known for her comic stylings. According to me, they’re wrong. (COCA NEWS)

Although these cases are infrequent (only 27 instances are found in COCA), they do demonstrate that there is no grammatical rule that constrains the use of according to me in declarative clauses. The unacceptability of according to me should be explained from above—from semantic discord. In fact, the framework proposed in this paper provides a more neat and concise explanation for these phenomena.

As illustrated above, the use of according to forms a scale from Manner to Angle without very clear-cut boundaries. In the middle of the scale, according to construes Angle as Manner of telling. This is probably the reason why according to is associated with Source tactility. And there comes the semantic discord: to say ‘I offer a piece of information according to what I say’ adds no new information about the source of information. However, the implicit mode of according to renders possibility of turning the implied verbal process into a mental one given certain context. See the examples below:

(16) (a) According to me, I’m moral. (COCA FIC)

Source reading: *According to what I say, I’m moral.

Viewpoint reading: According to what I think / I think, I’m moral.

(b) Colton is the cutest boy in fifth grade. Well, according to me.

Source reading: *Colton is the cutest boy in fifth grade. Well, according to what I say.

Viewpoint reading: Colton is the cutest boy in fifth grade. Well, I think.

(c) Who was, according to you, being revived? And who was doing this?

Source reading: *Who was, according to what you say, being revived? And who was doing this?

Viewpoint reading: Who, do you think, was being revived? And who was doing this?

Examples 16a and 16b demonstrate that according to me behaves just like I think in that it often goes with appraisal items of judge and appreciation in the sense of [24]. Interestingly, in example 16c, the viewpoint reading is triggered by a question, meaning I am seeking for the answer from what you think. The cases above reveal the fact that interpersonal meaning provides a context for viewpoint reading of according to. However, all these unconventional uses are not possible if it were not an implicit mode of Angle. For example, an explicit item like in the words of would never occur as a Viewpoint (e.g. 7in the words of mine). Moreover, the implicitness of according to could be turned into an explicit mode as shown in the example below:

(17) According to the opinion of a mental health nursing student, the best nurses are those who look at and listen to patients, who are available and friendly, and offer the necessary security for patients to speak about their aspirations. (COCA)

In example (17), the Angle could have been implicit as according to a mental health nursing student, but the implicit mode has been converted into explicit by adding a mental noun opinion. Another similar construction is according to what Participant Process’, which can be used as a Viewpoint as in according to what I believe/ know. When the projecting process is marked this way in according to, the meaning potential could be extended from the conventional source reading. But is it a feature that is particular to the preposition according to? My observation on the naturally-occurring language reveals that it is not. An interesting case in point is that the conventional viewpoint reading of as for can also be turned into a source Angle as shown in the instance that I found in COCA corpus below:

(18) Fifty-one percent of 803 teens ages 13–17 nationwide don’t have someone they admire and want to be like, the Gallup poll
shows. # And that fact just boggles the mind of Alex Bass, 14, Raleigh, N.C. “They can’t identify anyone who influenced them? If they honestly can’t, that is pathetic. Having a role model enables you to set goals, gives you a source of inspiration.” # As for him, “My dad is the most significant male in my life. He grew up poor, the youngest of eight on a farm, and he went on to get a college degree.”

In this case, as for him is used to introduce a quoted utterance, in which the personal pronoun and tense can only be subject to source reading. This is also strong evidence for the agnate relationship between Angle and projection sequence.

To sum up, I have proposed a two dimensional categorization of Angle: the level of projection divides Angle into Source and Viewpoint whereas the mode of projection cuts it into explicit and implicit Angle. The latter dimension is distinguishable whether or not an Angle marks the projecting process on formal grounds. This dimension turns out to be useful in understanding why the meaning potential of some Angle items can be extended in English.

4. Functional syntax of Angle in Chinese

In Chinese, Angle can be construed in a way that is comparable to English as shown below (see the underlined part):

(19) jù zhongguó hàodào,  
   according-to China-Daily  report  
zhòngguó hén duó guānyuán dōu zài xiāngshòu jiàqi  
China many official all at enjoy holiday  
‘According to China Daily, many officials are having vacations in China.’

However, the lexicogrammatical strategy is a bit different as we can see an additional element shuò ‘report’ in Angle, which is not seen in the English translation. Before discussing this difference, some typological features of circumstance in Chinese should be clarified. First, most of the prepositions evolved from verbs in Chinese. Thus the boundary between a preposition and a verb is often blurred [34,35], which is more in line with Halliday’s notion of preposition as minor process ([12]:213) ([21]:13). has summarized a few most frequently used prepositions:

| Preposition | Meaning                                      | Example                                      |
|-------------|----------------------------------------------|----------------------------------------------|
| zài         | as preposition                               | (21)(a) tā zài jiā chīfàn, he at home eat    |
|             |                                              | ‘He eats at home.’                            |
| zhú         | as conjunction                               | (b) wǒ zài tā chīfàn de shǐhòu zǒu           |
|             |                                              | l at he eat SUB when leave                   |
|             |                                              | ‘I left when he was eating.’                 |

This particular feature diminishes the syntactic difference between Angle and reporting clause in Chinese. For example, one may argue that a reporting clause tā shuō ‘he say’ could be viewed as an Angle jù tā shuō ‘according to he say’ with the absence of preposition jù ‘according to’. However, jù tā shuō should be viewed as a dependent clause (shading into Angle) while tā shuō is a reporting clause. The strongest evidence is that the former loses the aspectual function:

(22)(a) tā shuō le,  
   he say ASP  
‘He has said that …’
| (b) jù     | tā shuō le                                   | according-to he say ASP                      |
|            |                                              |                                              |

Finally, the syntactic placement of circumstance in Chinese observes the principle of time sequence (PTS as suggested by Ref. [32]). That is, the placement of circumstance is iconic with what happens in the physical world. The most evident example is:

(23)(a) tā zuòtiān dào Méiguó lái  
   he yesterday to America come  
‘He left for the United States yesterday’
| (b) tā     | zuòtiān lái dào Méiguó                        | he yesterday come to America               |
|            |                                              | ‘He arrived in the United States yesterday ’ |

The contrastive pair shows that when the to-phrase dào Méiguó precedes the Process lái, it indicates a destination in the plan; when it occurs after the Process, the destination is a result. Chinese Angle however is predominantly found in initial place. Now I will examine the syntactic features of Chinese Angle in greater detail.

4.1. The explicitness of projecting process

The most noteworthy feature is that, in contrast with English, almost all Angle items in Chinese are explicit; the projecting process is marked in Angle in one way or another (some exceptions will be discussed below). Note that, compared with English, Chinese Angle favors dependent clauses (hypotactic enhancement)
more than prepositional phrases. See Table 4.2 below in which I will mark the process with ‘*:’.

The following examples show the obligatory presence of projecting process marker in Chinese Angle:

(24)(a) jù guójì-qixiàngjū yùce, mìngtiān hui xiàdàyu
according-to nation-whether-service predict, tomorrow will rain-heavily

(b) jù guójì-qixiàngjū, mìngtiān hui xiàdàyu
according-to nation-whether-service, tomorrow will rain-heavily

Example (24b) is unacceptable, or at least very awkward, when the projecting noun/verb yùce (predict/prediction) is absent. In other words, reporting process marker is the obligatory element in the construal of Chinese Angle. Hence, the explicit mode of Angle is preferred in Chinese. The consequence is that the level of an Angle is clearly defined by the verbal/mental elements in most cases in Chinese. Just like English, the reporting process can be marked by a noun or a verb. But sometimes, the word class is indeterminate. Consider the examples below which are all acceptable in Chinese:

(25)(a) jù xīnhuāshè (de) bāodào (noun) according-to Xinhua News Agency (SUB) report
(b) jù xīnhuāshè bāodào (noun) chéng(verb) according-to Xinhua News Agency report say
(c) jù xiàoxì(noun)/ bāodào (?)/chéng (verb)/shuò(verb) according-to information/report /say /say

Bāodào is a word that can be used both as a verb and a noun. Thus the word class of bādào has to be decided based on the specific grammatical environment. In (25a), bādào can be considered as a noun. In (25b), chéng is a verb by its dictionary meaning and because it follows bādào. In (25c), however, there is no hint as to the property of bādào because jù can be followed by a projecting noun (xīnuxì) or a verb (chéng and shuò). These items show that Chinese seems to adopt a meaning-oriented restriction on the syntax of Angle: the meaning of projecting process should be marked regardless of its word class.

4.2 Syntactic conformity with reporting clause

The second feature of Chinese Angle is that it is predominantly found in the initial position of a clause, which is in conformity with the initial placement of reporting clause in reports (indirect speech). It is different from English Angle, which is as frequent in initial as in end position ([19]: 117). The agnate relationship between Angle (the dependent clause type, in particular) and reporting clause is more obvious in the instances found in BCC corpus below (the projected part is omitted):

(26)(a) bèn shè jízhē bāodào: ...
this news-agency journalist report

“Our journalist reports: …”
(b) jù jízhē bādào: ...
according-to journalist report

“According to our journalist, …”
(c) jù jízhē bādào shuò, “…”
according-to journalist report say

“According to our journalist, …”

Example (26a) is a prototypical projection sequence with a Sayer bèn shè jízhē (this news-agency journalist) and a Process bādào ‘report’. Example (26b) seems to share the structure with (26a) except that the preposition jù is added. In example (26c), a new element shuò ‘say’ is added after the Process bādào ‘report’, which has been recognized as a semi-complementizer (known as structural binder in SFG) like that in English (e.g. Ref. [5]). This is the most significant evidence for the syntactic conformity between Angle and reporting clause. What’s more, examples (26b) and (26c) introduce the projected utterance with colons and quotation marks, which are formal traits of a quote in clause complex as in example (26a). These phenomena suggest the most distinct typological feature of Chinese Angle: the prepositions such as jù and yì can be used as subordinating conjunctions in dependent clauses (cf. according to in English, which can only be used in prepositional phrases).

4.3 Deployment of according-to prepositions

The third feature is about how the according-to prepositions are deployed at two levels of projection (Source and Viewpoint). As mentioned earlier, most of the prepositions in Chinese are a result of grammaticalization of verbs. Prepositions used in Angle are no exception. Of particular interest here is two near-synonymous prepositions yì ‘according-to’ and jù ‘according-to’. The two prepositions can be combined to make a two-character word yìjù ‘according-to’ that carries a similar sense as the translation already suggests. I will also examine génjù ‘according-to’, another two-morphone word that can be used as a preposition in Circumstance. The four items thus will be discussed under the cover term according-to prepositions. I have examined 1000 instances of the four items in bāokān ‘newspaper and magazine’ section in BCC corpus. The result is shown below:

The BCC corpus fails to automatically screen out all the verb and noun use of the items, which have been treated as instances of ‘not available (N/A)” in Table 4.3. 27.2% of yì’s are not used as prepositions and it is the only preposition that can be employed as a location marker (similar to near or by in English). The reason for the high frequency of N/A for yì is that it can be used as a verb meaning follow or obey and it often occurs as part of a name. When used as prepositions, most of yì’s are used as Manner (49.2%) and a small amount as Source (4.7%). If we only calculate the instances of projecting types, the preference of yì for Viewpoint is obvious (74.5%).

Jù, on the other hand, is predominantly employed to construe Source (85.8%) in news texts. In ancient Chinese, jù is a verb that
means occupy. However, in modern Chinese, jù cannot be used as a one-character verb but only functions as a morpheme in compound words such as zhǎnjù ‘occupy’. In other words, jù has lost almost all of its sense of action. Compared with yì, jù has gone further along the grammaticalization path, becoming a ‘pure’ preposition.

4.3.1. The implicit mode in writing

The experiential structure of Chinese according-to Angle is: ‘minor Process + participant as Modifier + projecting Head’ (the case of dependent clauses is not analyzed to keep the discussion simple). Different from English according-to Angle, the projecting process marker (the Head) in Chinese is not allowed to be implicit. Compare the two cases below:

(27)(a) According to the announcement from the government
(b) According to the government
(c) jù zhèngfǔ (de) gōngbù according-to-government (SUB) announce
(d) jù zhèngfǔ according-to-government
(e) jù gōngbù according-to-announce

In English, the process can either be implicit (27b) or be marked by the projecting noun announcement (27a). In Chinese, the process marker gōngbù ‘announce’ is obligatory. It appears that the Modifier zhèngfǔ ‘government’ only functions as a peripheral element in the structure because the whole expression can be reduced to ‘minor Process + projecting Head’ as in (27e). I will return to this point below. However, my data show that there is one situation in which the implicit mode of Angle is allowed. Consider the example below (the projected part is omitted):

(28) yī héntóngfǎ dì39 tiáo (guiding); “...”
according-to-contract-law number-39 (stipulation)
“According to contract law article 39, ...”

In (28), the process marker guiding (stipulation) is optional (this pattern is also possible with jù). The reason for this syntactic variance, I believe, is that the source of information is not really a conscious speaker but a law. Therefore, Chinese grammar of source seems to reflect the conceptual difference between writing and speech. Conceptually, information in written material is static; it is not really projected but read and learned by the readers. On the other hand, information of speech is more dynamic and is usually projected in verbal events. This is reflected in the grammar of source in Chinese: when the source of information is writing (such as a regulation or a document), the process marker can be left implicit. The most typical items of writing projection found in my data include (Table 4.4).

The process of writing projection is often marked by xiǎnshì ‘show’ or jiēshào ‘introduce’ if the sayer is a document, and marked by guīdīng ‘stipulate’ if the Sayer is some kind of law. Note that in Chinese, jīngshén ‘spirit’ sometimes refers to a policy or guideline issued by top-ranking officials or authoritative entities. It should be admitted that these items could be conveyed via speech. However, they are more often documented in written form and thus are distinctive from speech.

4.3.2. The use of lǎi in viewpoint

There is another element lǎi ‘come’ that more often occurs in Viewpoint than in Source in Chinese. Take yì- Angle as an example, the projecting process in yì-Viewpoint is most frequently marked by kàn ‘see’, accounting for 51.4% of all viewpoint items in my corpus. The process kàn often occurs with lǎi ‘come’. For example:

(29)(a) yī wǒ kàn (lǎi), qǐn bùhù diū tài duo
according-to l see (come) money NEG lose too many
“...In my opinion, there is not much money lost.”

Lǎi has been documented to be a highly grammaticalized verb that indicates the tendency or result of an action as in shuō lǎi huì chǎng (literally, say come words long) meaning something like if I say it, it will become a long story. Thus the projected part seems to be the result of the projecting verb. Some linguists tend to treat kǎnlǎi as a modal adjunct that expresses the speaker’s attitude towards the proposition (e.g. Ref. [19]). It is in line with the interpersonal function of Viewpoint. However, it is also possible to put lǎi before the verb as in yì wǒ lài kàn ‘according-to l come say’. Consider the following cases where lǎi occurs before a verbal process.

(30)(a) yí wǒ shuò
according-to l say
(b) yí wǒ lài shuò
according-to l come say
(c) yí wǒ fēnxi
according-to l analyze
(d) yí wǒ lài fēnxi

Table 4.3

| Items | Source | Viewpoint | Manner | Location | N/A |
|-------|--------|-----------|--------|----------|-----|
| Yí    | 47     | 138       | 492    | 53       | 272 |
| Jù    | 858    | 137       | 4      | 0        | 1   |
| yìjù  | 87     | 2         | 852    | 0        | 59  |
| gěnjù | 233    | 1         | 744    | 0        | 23  |
The items above are all categorized as dependent clauses functioning as Angles in the current framework. When the process is marked by *shuo*, the occurrence of *lái* before or after it is infrequent but still acceptable. The reason for the acceptability is that *shuo* in this case is a metaphorical use that construes a mental process just like say in what do you say? in English (also comparable to according to me). When the process is marked by an indicating verb *fěnxī* ‘analyse’, the use of *lái* is terribly awkward (no instance is found in BCC). Now observe the case (30e), in which the occurrence of *lái* is acceptable. But a close examination of the phrase suggests that it should be regarded as a dependent clause with *yí zhègē jiàodū lái* ‘according to this Angle come’ as the Manner of the Process *fěnxī* ‘analyse’. In other words, example (30e) accepts the use of *lái* because it is not Angle. This is only a very preliminary observation. Space precludes further discussion on its relevance to the notions of phase, internal manner and internal process.

4.3.3. Evaluative meaning in viewpoint

When the projecting process is marked by a projecting Head, the most interesting meaning potential in Chinese language is that the Head can be modified by evaluative items to signal the speaker’s modesty and humbleness. It can either devaluate the intelligence of the speaker as in *yí wǒ qíān guān jiān* ‘according to my stupid/clumsy view’, or stress the limit of idea as in *yí wǒ zhìbù kāiqiào de nàndài xiāng lái* (BCC). But according-to me this NEG smart head think come

“(literally) According to my stupid brain, ...”

Example 31 is different from the items above in that it is realized in the form of a dependent clause, in which the evaluative meaning is targeted on the senser’s brain (nàndài). Notice that, for interpersonal purpose of humbleness, the Participant often points to the speaker himself. If it points to other sources of idea, positive appreciation is often invoked. Here is a case found in BCC (the projected part has been omitted):

(31) dàn yī wǒ zhè bù kāiqiào de nàndài xiāng lái (BCC)

But according-to me this NEG smart head think come

“(literally) According to my stupid brain, ...”

Table 4.4

| Items of writing projection |
|-----------------------------|
| zhǐlào ‘document’          |
| guǎng ‘stipulation’        |
| jīngshén ‘spirit’          |
| fài ‘decer’                |
| gònggào ‘announcement’    |
| xuéyì ‘vowing’ agreement’ |
| jīlù ‘discipline’          |
| lǐlù ‘theory’              |

Through the elaboration of *fā ‘he’* as an pāngquánzhè ‘onlooker’, a sense of objectivity of the viewpoint is invoked.

4.3.4. From Angle to comment adjunct

As mentioned above, it is possible to make the human noun implicit, leaving only the preposition and projecting process marker in Angle. In this case, the Angle behaves just like a comment Adjunct. Indeed, this is how Chinese grammar manages to produce comment Adjunct without an affix system like the adverb marker —ly in English. However, this productive power is only confined to the preposition *jū*. See the following items:

*jūshuò jūchēng jū bādào júxí jū guī jū yǔcē* allegedly allegedly reportedly reportedly it is estimated that it is predicted that

*jū* has become the morpheme to produce comment Adjuncts that denote hearsay presumption in the sense of ([15]:681). The other three according-to prepositions have much weaker productive power as shown below:

*yíshuò *yíchēng *yíjūshuò *yíjūchēng *gēnjūshuò gēnjūbādào

According to my observation, *yí* and *yǐ* cannot be used to produce comment Adjunct whereas *gēn* can occur with two-character words but not one-character word probably due to phonological preference in Chinese. Now the question is why *jū* rather than any other according-to prepositions has been selected to form comment Adjunct in Chinese? The reason becomes apparent if we recall the deployment of according-to prepositions demonstrated above. *Jū* is predominantly used as Source, which means, among the four prepositions, it is most frequently related to the validity of information. Thus, it is understandable that a preposition that occurs most frequently with source projection has been chosen to formulate comment Adjuncts that evaluate the validity of information. Plus, *jū* is the only item among the according-to prepositions that has lost all its verb sense and come to function as a pure preposition in modern Chinese. In other words, the diminishing of experiential meaning sets *jū* as the best candidate for construing interpersonal meaning.

5. Typological generalization

This section will generalize three typological features that motivate the explicit orientation of the Chinese Angles in comparison with English.

First, the most distinctive typological difference between English and Chinese is that the reification or nominalization in Chinese usually does not manifest any morphological change. The consequence is that any word, regardless of its most typical word class, may occur after a preposition. For example:

(33) nǐ jiǔ nénggōu yǒng chuáicè lái xiāngxiāngchù tài guānniàn lái (BCC)

you just can use guess come imagine his mindset come

‘You can imagine his mindset with some guessing.’

The verb chuáicè ‘guess’ in example (33) above is placed directly after the preposition yǒng ‘with’ without any morphological changes. This peculiar feature empowers the Chinese speakers to
mark the projecting process in Angles more 'conveniently' as in jù tā jièshào 'according-to his introduction'. If an English speaker wishes to specify a projecting process with according to, he may either nominalize the process into a symbol source as in according to one prediction, or rankshift the whole clause to a what noun as in according to what he told me. In this sense, Chinese grammar is 'in a better position' to construe a piece of information as coming from the action of the speaker.

Another motivation might be that the projecting process marker would help eliminate the verb sense of the preposition. As already mentioned above, almost all prepositions in Chinese have evolved from verbs. This principle applies to all the according-to prepositions mentioned above. Some of the prepositions are still featured with the verbal usage in modern Chinese. For example, if the projecting process kàn is taken out of yí wǒ kàn 'in my opinion', yí wǒ becomes a material clause meaning 'obey me'. But the relevance between 'obey me' and 'follow my advice' is clear. Consider the example below:

(34) dàoyōu. yí wǒ. nǐ hǎoshèng huíqù friend obey me. you careful go-back
‘Listen to me, friend. You should really go back.’

The only exception is yú ‘to/at’, which was a widely used preposition in early ancient Chinese. It was used to construe an implicit mode of Viewpoint in ancient Chinese such as yú wǒ ‘to me’. This usage can sometimes be found in modern Chinese literary writing. There is no need to mark the projecting process probably because yú has no verbal usage. But now the most common expression is dui ... láishù ‘to me’, another case of dependent clause that functions as Angle.6 A diachronic view on all the according-to prepositions in ancient Chinese may reveal this motivation. I will have to leave it as future research.

The third motivation is that Chinese Angle more often manifests in the form of enhancing dependent clauses. The according-to prepositions, in this case, come to function as subordinating conjunctions in clause complexes. However, these dependent clauses syntactically behave just like prepositional phrases. Experientially, they can be modelled as ‘hypotactic enhancement shading into Angle’. Then it is understandable that the projecting Process should be the essential element in the dependent projecting clauses (recall the nuclear model of transitivity structure mentioned in the beginning).

The three features above can be generalized to a vital typological feature of Chinese — fuzziness of Chinese grammatical categories. The first feature is about the ambiguity between verb and noun while the second and third features are about the close relatedness of preposition, subordinating conjunction, and verb. The latter is captured with the term ‘coverb’ by ([12]: chapter 9) and ‘minor process’ by ([12]:213). It is also referred to as ‘prepositional verb’ by Ref. [10]. But they only notice the relevance between preposition and verb. It is also important to note that some of the ‘prepositional verbs’ can also be used as structural binders in clause complex.

6. Conclusion

This paper sets out by asking how Angle is different from other types of Circumstance. Some syntactic peculiarities suggest that Angle should better be treated as figure Circumstance or pseudo-Circumstance. Then a close examination of the internal structure of Angle in English and Chinese has been conducted with SF approach. In addition to Source-Viewpoint dichotomy, I propose an explicit-implicit distinction as regards to modes of Angle to observe whether the meaning of projecting process is marked on formal grounds. The two dimensions prove to be useful in describing the syntactic difference between English and Chinese Angle. The major findings of this paper are: (i) the implicit mode of Angle in English expands the meaning potential of Projection so that according to me, for example, can be used in declarative clauses to signal a Viewpoint. (ii) English Angle can be explicit or implicit whereas Chinese Angle is predominantly explicit except in the projection of writing. (iii) There are a number of near-synonymous prepositions in Chinese that correspond to according to in English. However, my corpus shows that those prepositions are deployed at different levels of projection, for instance, yí for Viewpoint and jā for Source. What’s more, these prepositions are often used as subordinating conjunctions in enhancing dependent clauses that shade into Angle. (iv) The fuzziness of grammatical categories may be the typological feature motivating the explicit orientation of Angle in Chinese.

Competing interest

The author declares that he has no competing interest.

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References

[1] J.R. Austin, S. Engelberg, G. Rauh (Eds.), Adverbials: the Interplay between Meaning, Context, and Syntactic Structure, vol. 70. John Benjamins Publishing, 2004.
[2] Ball and Tucker, On the preferential Co-occurrence of processes and circumstantial adjuncts: some corpus evidence, in: J. Foley (Ed.), Language, Education and Discourse: Functional Approaches, A&C Black, 2004, pp. 305–324.
[3] G. Cinque, Adverbs and Functional Heads:a Cross Linguistic Perspective, Oxford University Press, New York, Oxford, 1999.
[4] M. Fang, Bei jinghua-li ‘shuo’ de yufahua — cong yanzhuo dongci dao congju biaoji (Grammaticalization of shuo (say) in Beijing Mandarin: from lexical verb to subordinator), Zhongguo Fangyan Xuebao [Journal of Chinese Dialects] 1 (2006) 107–121.
[5] R.P. Fawcett, G.W. Huang, A Functional Analysis of the Enhanced Theme Construction in English, Interface, Journal of Applied Linguistics, 1995.
[6] R.P. Fawcett, The Many Types of "theme" in English: Their Semantic Systems and Functional Syntax, 2003. http://www.wagsoft.com/Systematics/Archive/Fawcett-ThemePaper.pdf.
[7] T. Givón, Syntax. A Functional-typological Introduction, Vol. I. John Benjamins, Amsterdam, 1990.
[8] H. Hasselgård, Adjunct Adverbials in English, Cambridge University Press, 2010.
[9] M.A.K. Halliday, Grammatical categories in modern chinese, in: Transactions of the Philosophical Society, 1956, pp. 177–224.
[10] M.A.K. Halliday, Modes of meaning and modes of expression: types of grammatical structure, and their determination by different semantic functions, Funct. Context Linguistic Anal. (1979) 57–75.
[11] M.A.K. Halliday, An Introduction to Functional Grammar, second ed., Arnold, London, 1994.
[12] M.A.K. Halliday, C.M.I.M. Matthiessen, Construing Experience through Meaning: a Language-based Approach to Cognition, Continuum, London and New York, 1999.
[13] M.A.K. Halliday, C.M.I.M. Matthiessen, An Introduction to Functional Grammar, third ed., Arnold, London, 2004.
[14] M.A.K. Halliday, C.M.I.M. Matthiessen, Halliday's Introduction to Functional Grammar, fourth ed., Routledge, 2014.
[15] G. Huang, R.P. Fawcett, A functional approach to two ‘focussing’ constructions in English and Chinese, Lang. Sci. 18 (1) (1996) 179–194.
[16] R. Huddleston, G.K. Pullum, The Cambridge Grammar of English. Language, Cambridge University Press, Cambridge, 2002.
[17] K. Lahousse, M. Borremans, The Distribution of Functional Types of Clefts in
Adverbial Clauses, Linguistics, 2014.

[19] Z.J. Li, Shuo “xianglai” “kanlai” “shuolai” de xuhua he zhuguanhua (the grammaticalization and subjectivisation of “xianglai” “kanlai” and “shuolai”), hanyu shixue bao [Journal of Chinese Language History] (2007) 146–155.

[20] C.N. Li, S.A. Thompson, Mandarin Chinese: a functional reference grammar. California, University of California Press, 1989.

[21] S.X. Lv, Xian Dai Hanyu Babai Ci (Eight hundred words in modern Chinese), Commercial Press, Shanghai, 1980.

[22] J.R. Martin, Types of structure: deconstructing notions of constituency in clause and text, in: E.H. Hovy, D.R. Scott (Eds.), Computational and Conversational Discourse: Burning Issues—an Interdisciplinary Account, Springer, 1996.

[23] J.R. Martin, C.M. Matthiessen, C. Painter, J.J. Webster, Deploying Functional Grammar, The Commercial Press, 2010.

[24] J.R. Martin, P.R.R. White, The Language of Evaluation: Appraisal in English, Foreign Language Teaching and Research Press, Palgrave Macmillan, Beijing, 2008.

[25] J.R. Martin, C.M.I.M. Matthiessen, Systemic typology and topology, in: Literacy in Social Processes: Papers from the Inaugural Australian Systemic Functional Linguistics Conference, Deakin University, 1990, pp. 345–383.

[26] C.M.I.M. Matthiessen, Lexicogrammatical Cartography: English Systems, International Language Sciences Publishers, Tokyo, 1995.

[27] C.M. Matthiessen, The system of TRANSITIVITY: an exploratory study of text-based profiles, Funct. Lang. 6 (1) (1999) 1–51.

[28] J. Sinclair, et al., Collins Cobuild English Grammar, HarperCollins, London, 1990.

[29] J.R. Ross, On Declarative Sentences. Readings in English Transformational Grammar, 1970, pp. 222–272.

[30] R. Quirk, S. Greenbaum, C. Leech, J. Svartvik, A Comprehensive Grammar of the English Language, Longman, London and New York, 1985.

[31] H.Y. Tai, Temporal sequence and Chinese word order, in: J. Haiman (Ed.), Iconicity in Syntax: Proceedings of a Symposium on Iconicity in Syntax, Stanford, June 24-6, 1983, vol. 6, John Benjamins Publishing, 1985, pp. 49–72.

[32] C. Thompson, S. Hunston, System and Corpus: Exploring Connections, Equinox Publishing, 2006.

[33] H.Y. Tai, Temporal sequence and Chinese word order, in: J. Haiman (Ed.), Iconicity in Syntax: Proceedings of a Symposium on Iconicity in Syntax, Stanford, June 24-6, 1983, vol. 6, John Benjamins Publishing, 1985, pp. 49–72.

[34] J.R. Martin, C.M. Matthiessen, Systemic typology and topology, in: Literacy in Social Processes: Papers from the Inaugural Australian Systemic Functional Linguistics Conference, Deakin University, 1990, pp. 345–383.

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