

Syntactic Comparison Between the English and Chinese Interrogative Sentences

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Abstract

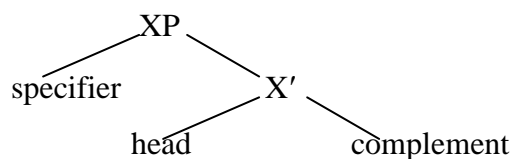
This paper is primarily focused on the analysis and comparison of the syntactic properties in the configuration of interrogative sentences between Chinese and English. The interrogative construction can be approached within the framework of the Minimalist Program with reference to the yes/no question and wh-question and the study can validate the principle universality and parametrical differentiation from the perspective of feature-checking in the two languages. The parameters of strength or weakness in the C-node in interrogative configuration contribute to checking off the features overtly or covertly and hence account for the distinction of the interrogative in the two languages.

Key Words: interrogative sentence; Minimalist Program; feature-checking

1. Introduction

The theoretical framework of the Minimalist Program advocated by Chomsky (1993) advances the move from the specific grammatical rules to describe the particular syntactic constructions to the general rules that interact to explain syntactic phenomena concerning principles and parameters of language. The TG grammar is valued to eliminate redundancy and achieve minimalism in the course of development and the latest version of minimalist inquiry can contribute to the interpretability of different features in language. The English and Chinese interrogative sentences differ widely in the order of the constituents, in that the auxiliary verbs, the copula and the *wh*-phrase are located at the beginning of an English sentence, while the sentential order of the latter is invariable. Chomsky (cited in Ouhalla, 1999) has explained the theory in terms of the transformational rule of *Wh*-movement, whereas it cannot fully account for the complex structure in the movement of a *wh*-phrase to *Comp*. Moreover, it is not liable to cover the distinctive feature of the *wh*-in-situ in Chinese, and the revision to range from more languages in MP is applicable to the validation of the invariability.

MP postulates only two levels of representation, the necessary interface levels LF and PF, which takes language to consist of the lexicon and a computational system and the computational system selects items from the lexicon and constructs derivations in terms of Spell-Out, which must satisfy the interface conditions at LF and PF. Moreover, assuming the ultimate representation reached at PF meets the interface conditions of PF, the derivation is termed to converge at PF. On the other hand, it does not meet the interface conditions of PF, the derivation is said to crash at PF, and this process is called feature-checking. Likewise, the ultimate representation reached at LF may converge or crash due to the interface conditions and the segments which are uninterpretable can be excluded at PF interface before they reach they are checked at the LF interface, which can be approached by X-bar theory. X-bar theoretic relations define spec-head, head-complement and head-head relations are applying among the interface conditions (Ouhalla, 1999, p.405; p.415). The structural representation of every category includes a phrasal level, i.e. XP or the maximal projection (of X) in X-bar terminology, and the sentence is generated by merging between phrases, and the different positions also project different syntactic features, which can be illustrated as:



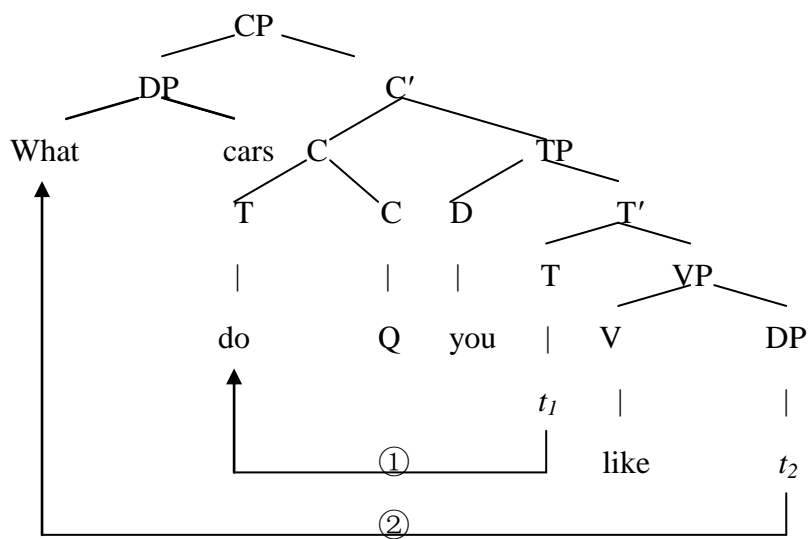
With reference to MP, the change of syntactic order in English simple *wh*-questions reflects the raising and movement for feature checking by obligatorily moving the *wh*-phrase to *Spec,CP* and the non-movement of Chinese interrogative sentences can also be interpreted by virtue of the theory.

2. The Features of English Interrogative Sentences

2.1 *Wh*-Questions

English and Chinese interrogative sentences differ as to where the *wh*-phrase is placed in simple *wh*-questions. English obligatorily moves the *wh*-phrase to *Spec,CP* in overt syntax, whereas Chinese apparently never moves the *wh*-phrase to *Spec,CP* in overt syntax, as has been discussed in the work of Huang (1982). In English the *wh*-phrase can be raised to the initial position and leaves the trace in the original position, which is governed by the head and restricted by the *wh*-phrase.

(1) What cars do you like?

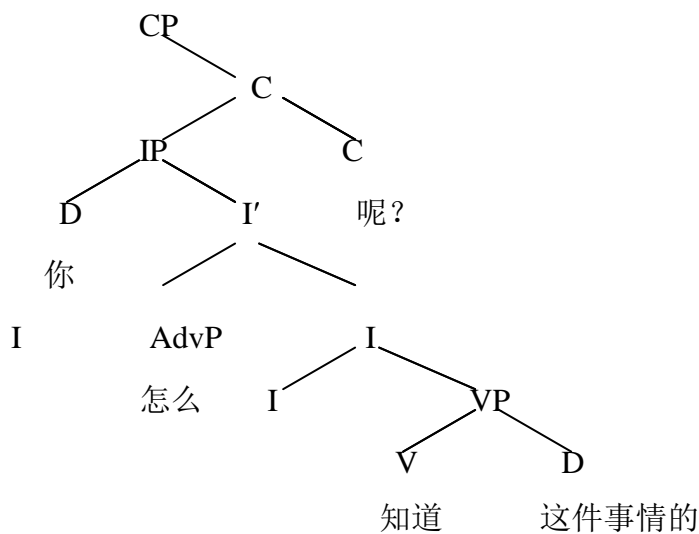


你喜欢什么车呢?

From (1) we can see that there are two different kinds of movement operation indicated by arrows: ① the auxiliary verb *do* is moved from T to adjoin to the C position occupied by the question affix Q and hence an instance head-movement; ② involves the operator movement for the DP *what cars* containing the interrogative operator *what* as the object of the verb *like*. Besides, the node C' and DP c-command and *what cars* is moved to the specifier position within CP from complement position within VP, so the traces t_1 and t_2 arise from the inverted components. Different from the yes/no interrogative where the position of DP is null, the position of DP in wh-interrogative is occupied, which suggests that the existence of determiner phrase is a parameter that engenders the differences between the languages. CP consists of not only the feature [+Q] under C but also the feature of determiner and their raising serve the checking of features for their legitimate existence. The Q-feature is strong in English interrogative sentence, so it must be eliminated by means of either Merge or Move through either substitution or adjunction.

In English the [+Q] specifier in a [+Q]-CP must be satisfied at the SS, while in Chinese counterparts they lack overt wh-movement, and the condition is satisfied at LF. Chinese has the question morpheme like “吗” or “呢” at the end of the interrogative under C to the right of IP in a head-final structure of CP: [CP [IP] C]. The prominent property of Chinese appears to illustrate a general correlation between wh-in-situ and the Q-morpheme. Languages that have wh-in-situ in simple wh-questions tend also to have the Q-morpheme (Cheng, cited in Ouhalla, 1999). The Q-morpheme is situated in C, and DP cannot encode the Q-morpheme due to its weak strength. However, the characteristic Q-morphemes can indicate tense and mood. Huang (1982) suggests that wh-elements in situ obligatorily undergo a raising process at LF. “什么” as the wh-element is not moved while “呢” corresponds to the [+Q] feature in C. Since in both English and Chinese, wh-elements in situ are subject to covert raising process, the generalizations concerning these elements can be stated and accounted for in the LF component. In other words, the existence of a covert raising process applying to wh-elements in situ permits a unified cross-linguistic account of these elements in the LF component.

(2)你怎么知道这件事情呢?

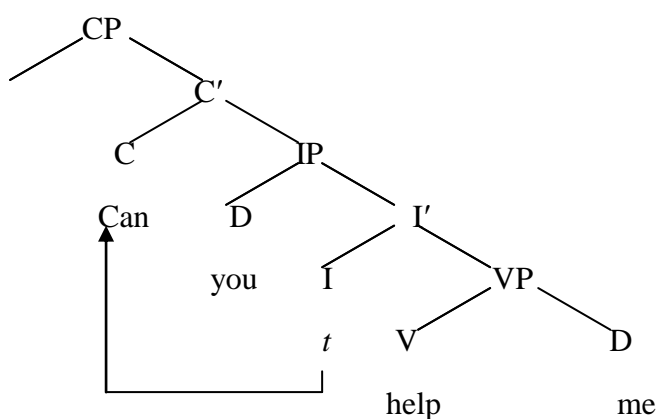


On the other hand, the previous two examples both ended with the final particle “呢” to indicate force and mood, but it is omissible in many cases. In the absence of the overt question auxiliary the suprasegmental feature function to meet the condition of feature-checking, which in another respect suggests that C does not have strong feature in China and thus the retaining of the declarative structure, while the English wh-interrogative must operate in accordance with the [T] feature and the wh-phrase in a strong correlation between each other. Moreover, the absence of the final particle can be extended to yes/no questions for the omission of it is swapped with the rising tone while it not commonly adopted in light of the ideal speaker’s language competence.

2.2 Yes/No Questions

The raising of the grammatical constituents arises from checking of features in order to derive the legitimate grammatical structure. In light of the recursive property of human language, the yes-no interrogative generates the movement of head raising (Song, cited in Li, 2003). The auxiliary verbs and copula verb *be* must be raised to be situated in C from I when the interrogative is derived from the declarative and it can be illustrated by (3):

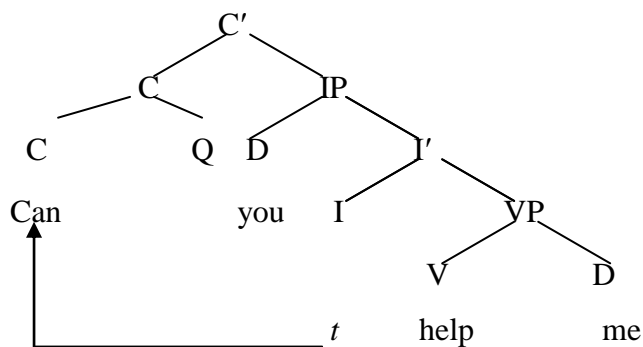
(3) Can you help me?



你能帮我一下吗?

The stark contrast between the different structures in terms of the yes/no questions demonstrates the typological difference between the languages. Chomsky assumes that movement of the grammatical constituents is motivated, and we have to delve into the motivation that triggers the movement. Chomsky (1995, p.144) adopts a metaphor that the position of C is the head of a magnet and it is an abstract Q-affix, so it must be bound with other lexical items or morphemes so that it can satisfy the condition in feature-checking. The expressions of [+Q] feature like the auxiliary verbs are thus moved to the position of C. Lasnik (1995) supplements the hypothesis of Chomsky and asserts that the grammatical constituents move to check the features carried by other constituents which are closely related with themselves, so the movement arise for the sake of self-serving. According to the assumption, *can* is moved to C to meet the premise that Q-affix should be bound with the appropriate element and the sentence can be interpreted as follows:

(4) CP



The strong or weak strength of the node can apply to the lexical changes with the tense and number in the movement. In that case it still involves a raising process in that the main verb incorporates the morpheme *-ed* to indicate the past tense in declarative sentences, but when they are dislocated the bound morpheme *-ed* cannot stand alone and thus it has to be replaced by the **past form** of the auxiliary verb which subsequently moved into the node of C from I. On the other hand, if the main verb is the third person singular, the marker *-s/-es* and the *does* are co-indexed, so in the interrogative the main verb carries no morpheme to indicate the number but shift it to the proper form of the auxiliary verb. Likewise, the plural form of the main verb has zero morpheme to mark the simple present tense, with which the auxiliary verb *do* projects.

(5) Did he help you?

Does he help you?

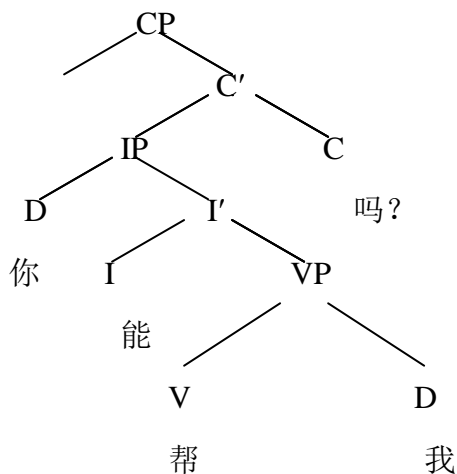
Do they help you?

Since the morphemes like *-ed* or *-s/-es* are shifted to the corresponding forms of the auxiliary verb *do* and moved into the position of C, leaving the trace, which accords to the principle of movement as last resort, namely that a category moves for the sole purpose of satisfying its own requirement, not hoses of another category (Chomsky, cited in Ouhalla, 1999). Radford (2000) advocates that the hypothesis of the derivation may be the only medium to meet the grammatical requirements, and the economy principle of TG grammar can be upheld for the maximal of redundancy with respect to elements and operation.

From the contrast between the structures, we can catch a glimpse of the motivation in the LF. First and foremost, it can be revealed that the yes/no interrogative in Chinese is often marked by the overt question

auxiliary as have been mentioned in last section. Since the C-node is of strong feature which brings about the movement, it can be inferred that the C-node is of weak feature and thus the avoidance of movement. Second, it can be hypothesized that the auxiliary verbs in English interrogative sentences have relatively bountiful corresponding forms in the paradigm with reference to tense and number, the strong feature can assign it to the head position of C from I. As to the extent to which the feature of the auxiliary verbs can exert, it depends upon the morphological changes of the verbs of different languages. It seems to be justified to explain the movement of English yes/no interrogative sentences and the retaining of sentence order of the Chinese declarative sentences. However, it cannot fully account for the function of the overt question auxiliary in the interrogative, which is somewhat the equivalent of the auxiliary verbs in the English interrogative derived from the declarative sentences. Accordingly, the hypothesis can be further revised and illustrated by (6):

(6) Can you help me ?



The Chinese overt question auxiliary are analogous to the English auxiliary verbs in terms of their [+Q] feature and their occupying of the C-node. However, the process of generation is dissimilar. First, the auxiliary verbs like do and can move from the position of I to C for feature-checking, which should exactly correspond with the features in tense and number of the main verb, and the movement is involved in dismantling and merging of the markers. In contrast, the overt question auxiliary or final particles do not seem to project concrete features into other categories. To be specific, it only marks the mood in the form of interrogative, and it cannot bear all the syntactic components of T. T-markers as affixial particles “着” and “过”, only signal the existence of TP in Chinese as a syntactic category while T in Chinese is “impoverished” compared with the “rich” inflections of English. Therefore, instead of prompting the upscale movement of an auxiliary verb bearing all the features of T, the entire TP is pied-piped and up hoisted to C, resulting the mood affixial particles like “吗”“呢”“呀”“啦” to the sentence final position. Moreover, the I-node has been occupied by “能” without dissociable features to be transferred into another position, while in English interrogative sentences, C selects T, which gets fulfilled by auxiliary verbs. Meanwhile, the verb “帮” itself is unable to indicate the changes of time and number, so the parameters in the lexicon selection suggest that MP can better interpret the different features with the economy of principles.

According to Fu (2006), given that sentence final affixial particles determine clausal types, they are C markers and prompt the upscale movement of TP for the selection feature of C. However, there are many interrogative sentences which do not bear sentence final particles, and their intonation will define the clausal

types as an affixal particle will do. Li (2003) also asserts that the overt question auxiliary is much more like the conjunctive of subordinate clauses *whether* and *if*, as also indicate the force and mood of the subordinate clause.

3. Conclusion

The comparison of the syntactic features between Chinese and English interrogatives can be approached by means of MP. The feature-checking theory can in a sense account for the differences by the analysis of the derivation process and the explication of the motivated movement can clarify the parameters leading to the typological differences. The syntactic options are available for a language in terms of its interrogative sentence configuration is subject to parameter-setting. The analysis can be advanced with respect to the comparison between the clause complex embedded with the interrogative in English and Chinese to enhance the minimalist program.

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