

my book/books

In (2), “wo-de shu” can denote “a certain book of mine”, “several books of mine” or “all the books of mine”, as shown in (2b) and (2c). Hence it follows that Gen-NP has not only [+specific] property but also [+general] property. Now consider (1b) and (1c). For example,

(3) a. Gedicht Goethes = Goethes Gedicht German

poem Goethe-GEN Goethe-GEN poem

Goethe’s poem

b. Gianni mio Italian

Gianni my

my Gianni

(4) Johannis sorfältige Beschreibung Marias

Johann-GEN accurate description Maria-GEN

Johann’s accurate description of Maria

According to (3), German post-nominal genitives is identical to pre-nominal genitives, but both of them have no [+specific] property. It is true of Italian genitives. (4) shows that German genitives which precede and follow the head noun, does not have [+specific] property. (2), (3) and (4) cannot denote [+specific] or [+numeral] property unless they adopt (1d-f), as shown in (5) and (6).

(5) a. wo-de na wuben shu

my that five-CLASS book

the five books of mine

b. the five books of mine

(6) a. die fünf Gedichte Goethes

the five poems Goethe’s

the five poems by Goethe/ the five poems of Goethe

b. die fünf Gedichte von Goethe

the five poems of Goethe

c. die sorfältige Beschreibung Marias

the accurate description Maria’s

the accurate description of Maria

It follows that only (1a) and (1e) occur in Chinese, (1a), (1b), (1c), (1d) and (1f) occur in German, and (1a), (1b) and (1f) occur in English. (1a-c) have [+specific] or [+general] property, (1d) has [+specific] property, and (1e-f) have [+specific] and [+numeral] property.

To sum up, Gen-NP, NP-Gen and Gen-NP-Gen can have [+specific] or [+general] property while Gen-D-NCL-NP and D-NCL-NP-Gen can have [+specific] or [+numeral] property.

2.2 The basic forms of genitive constructions

According to isomorphism, the reference difference between genitive constructions is determined by their different internal structures. This section discusses the internal structure of different genitive constructions and attempts to summarize their basic forms.

This paper adopts DP Hypothesis as its analysis framework of genitive constructions. According to Abney (1987), the structure of NP is DP. In view of reference property, genitive constructions fall into two categories, i.e. [+specific] and [-specific]. But in view of linear order, genitive constructions fall into two types, i.e. [+pre] and [-pre]. Hence the internal structure of genitive constructions should be analyzed as (7).

(7) $[_{DP} \text{GenP}[_{D'} \text{GenP}[_{NP}[_{DP} \text{Spec}[_{D'} D[_{NP} \text{Spec}[_{N'} \text{GenP} N]]]]]]]$

According to (7), GenP is a component of DP. In general, pre-nominal genitives occupy the position [Spec DP] or the position [D D'] while post-nominal genitives occupy the position [D N'] of the inner DP, which can move to the position [Spec NP]. Based on this we will analyze the internal structure of various types of genitive constructions below. Look at Gen-NP first. This construction has [+specific] and [+general] property. In theory it can be represented as (8). However, as shown in (8a), only Chinese genitives can occupy the position [Spec DP] while English and German genitives can occupy the position [D D']², as shown in (8b).

(8) a. $[_{DP} \text{GenP}[_{D'} N]]$

$[_{DP} \text{wo-de}[_{D'} \text{shu}]]$

b. $[_{DP} \text{Spec}[_{D'} \text{GenP} N]]$

² English genitive and German genitive cannot occupy the position [Spec DP] because they cannot precede the determiner. On the contrary, if the determiner occurs overtly, it occupies the position [D D'] which gives to post-nominal genitive. This shows that English genitive and German genitive occupy the same syntactic position, but the latter’s [+specific] property is stronger than that of the former, which forces it to be post-nominally positioned.

[_{DP} Spec [_D his book]]

[_{DP} Spec [_D Goethes Werke]]

Now look at NP-Gen. This construction has [+specific] and [+general] property. In theory it can be represented as (9). As shown in (9), it occurs only in German and Hebrew. The genitive occupies the position [D N']. In LF, the head noun moves from [N N'] to [Spec NP] by crossing over the genitive noun which occupies the specifier position. There is no definite article in front of the head.

(9) [_{DP} Spec [_D D [_{NP} N_i [_{N'} GenP t_i]]]]

a. [_{DP} Spec [_D D [_{NP} Werke_i [_{N'} Goethes t_i]]]] German

works Goethe-GEN

Goethe's works

b. [_{DP} Spec [_D D [_{NP} ikar_i [_{N'} parat t_i]]]]³ Hebrew

cow farmer

the farmer's cow

As for Gen-NP-Gen and D-NP-Gen, the former has [+specific] and [+general] property, and it occurs in German only, as shown in (10). The latter has only [+specific] property, which occurs in German, Italian, and English, as shown in (11).

(10) [_{DP} Spec [_D GenP [_{NP} Spec [_{N'} GenP]]]]

[_{DP} Spec [_D Johans [_{NP} Beschreibung [_{N'} Marias]]]]

Johann's description Maria's

Johann's description of Maria

(11) [_{DP} Spec [_D D [_{NP} Spec [_{N'} GenP]]]]

a. [_{DP} Spec [_D die [_{NP} Beschreibung [_{N'} Marias]]]]

the description Maria's

the description of Maria

b. [_{DP} Spec [_D il [_{NP} Gianni [_{N'} mio]]]]

the Gianni my

my Gianni

c. [_{DP} Spec [_D die [_{NP} Bücher [_{N'} von meinem Bruder]]]]

books of my brother

my brother's books

d. [_{DP} Spec [_D that [_{NP} friend [_{N'} of mine]]]]

As far as Gen-D-NCL-NP and D-NCL-NP-Gen are concerned, both of them are DP structures. The former's internal structure is shown in (12) and the latter can be regarded as the result of genitives moving rightward or adjoining to D-NCL-NP, the internal structure of which is shown in (13).

(12) The internal structure of Gen-D-NCL-NP

[_{DP} Gen [_D D [_{NumP} NCL [_{NP} N]]]]

(13) The internal structure of D-NCL-NP-Gen

[_{DP} Spec [_D D [_{NumP} NCL [_{GenP} NP_i [_{Gen'} Gen t_i]]]]]]

If we compare (8)-(13), we will find that genitives can be regarded as [_{DP} GenP [_D D XP]] or [_{DP} XP [_D D GenP]] (XP=NumP or NP) and the result of its further operation with other constituents. Hence, we argue that [_{DP} GenP [_D D XP]] and [_{DP} XP [_D D GenP]] are the two basic forms of genitive constructions, with pre-nominal genitive constructions occupying the [Spec DP] position and post-nominal genitive constructions in [Comp D'].

In brief, the linear position of genitives is related to its reference property. Chinese genitives precede the head noun whether they denote [+specific] or [+general] property. English and German genitives precede the head noun when they denote [+general] property. If they denote the [+specific] property, they follow the head noun. Italian and Hungarian genitives⁴ precede the head noun when they denote [+specific] property. But they follow the head noun when they denote the [+general] property. In other words, Chinese genitives lie in the

³ Ritter (1991) argues that S must c-command O asymmetrically and that the word order of NSO's surface structure is generated via movement, i.e., NP crosses over its possessive to move from N to O, and possessive occupies the specifier position. Head noun cannot be modified by the definite article preceding the NP but can be modified by the possessive following the NP. Therefore, the underlying structure of "parat ikar" should be as follows:

(i) [_{DP} Spec 0 [_D D e_i [_{NP} ikar (Subj) [_{N'} N parat (Obj)]]]]

N must move to the D position in order for D to be recognized and to assign genitive case to subject.

⁴ In Hungarian the definite article and genitive noun can co-occur to the left of the head noun. And the definite article can be followed by determiners denoting quantity, designation and quantification. (Szabolcsi, 1994; Longobardi, 2000)

position [Spec DP], and Spec carries the strong [+AGR] feature. Therefore, whether D occurs overtly or covertly, genitives precede the head noun. English and German genitives lie in the position [D D']. If D carries the strong [+AGR] feature or occurs overtly, genitives follow the head noun. If, however, D carries the weak [+AGR] feature or occurs covertly, genitives precede the head noun. Italian and Hungarian genitives lie in the position [D N']. If D carries the strong [+AGR] feature [+AGR] or occurs overtly, genitives precede the head noun. If D carries the weak [+AGR] feature or occur covertly, genitives follow the head noun.

2.3 The difference between the two basic forms of genitive constructions

This section discusses the difference between the genitive constructions which lie in the positions [Spec DP] and [Comp D']. Pre-nominal genitives lie in the position [Spec DP]. Chinese genitives belong to this class. Chinese genitives are in the position [Spec DP] and they are higher than the two functional heads DP and NCL in terms of hierarchical structure. In contrast to Chinese genitives, English, German and Italian genitives are in the position [D D'], which are lower than DP and NCL. It is noteworthy that Chinese DP can be higher than GenP if it is licensed by the preposition, which is similar to English and German genitives. To be exact, Chinese GenP follows DP, which can be seen as a component of DP.

(14) [DP GenP_{D'} D_[NP_{DP} Spec_{D'} D NP]]]

a. [DP GenP_{D'} D_[NP_{DP} youguan_{D'} Zhangsan-de baodao]]]

concern Zhangsan-GEN report

the report about Zhangsan

b. [DP GenP_{D'} napian_[NP_{DP} youguan_{D'} Zhangsan-de baodao]]]

that-CLASS concern Zhangsan-GEN report

that report about Zhangsan

c. [DP wo-de_{D'} napian_[NP_{DP} youguan_{D'} Zhangsan-de baodao]]]

my that-CLASS concern Zhangsan-GEN report

that report of mine about Zhangsan

The analysis of preposition licensing can account for Chinese genitives as well as English and German post-nominal genitive with prepositions. However, it fails to account for the post-nominal genitives without prepositions in German, Italian, Norwegian and Icelandic. In fact, the structure of the post-nominal genitive without prepositions in German, Italian, Norwegian and Icelandic should be as follows:

(15) [DP Spec_{D'} D_{[NP_{DP} NP_i [D' GenP t_i]]]]]}

a. [DP Spec_{D'} die_{[NP_{DP} Beschreibung_i [D' Marias t_i]]]]]}

b. [DP Spec_{D'} die_{[NP_{DP} Beschreibung_i [D' des Fotos t_i]]]]]}

c. [DP Spec_{D'} il_{[NP_{DP} Gianni_i [D' mio t_i]]]]]}

The precedence of Italian genitive “mio” must be licensed by the overt constituent D, as shown in (16) and (17). The head noun must move to the position [Spec DP] to generate a grammatical construction.

(16) [DP NP_i [D' Gen t_i]]

(17) *[DP Spec_{D'} D_[NP_{GenP} Spec_{D'} Gen NP]]]]]

Hence, we argue that Chinese genitives are in the position [Spec DP] while English, German and Italian pre-nominal genitives are in the position [D D'] and their post-nominal genitives are in the position [Comp D'], which is different from common views. It is generally believed that English genitives are in the position [Spec DP], as shown in (18)-(20). (Ouhalla, 2001, pp. 201-206)

(18) [DP Spec_{D'} D(Agr)_[NP Spec_{N'} N' N]]]

[DP John's_{D'} D(Agr)_[NP Spec_{N'} unfounded allegations]]]

(19) [DP Spec_{D'} D_{[NP [N' N DP]]]]]}

a. [DP Mary's_{D'} D(Agr)_{[NP [N' translation of the book]]]]]}

b. *[DP Mary's_{D'} the_[NP translation of the book]]]]]

(20) [DP Spec_{D'} D(Agr) VP]]

[DP John's_{D'} D(Agr) keeping a rottweiler]]

This analysis model can account for the grammaticality of (18) and the ungrammaticality of (19), but they cannot account for the syntactic difference between Chinese genitives and English pre-nominal genitives, nor can it account for why the constructions Gen-D-NP and Gen-D-NCL-NP can occur in Chinese while the constructions D-NP-Gen and D-NCL-NP-Gen can occur only in English.

It is argued that the genitive marker “'s” should occupy the D position (Hornstein, Nunes & Grohmann 2005:195), as shown in (21).

(21) [DP Spec_i [D' D_{[NP t_i [N' N DP]]]]]}

[DP John_i [D' 's_{[NP t_i [N' discussion of the paper]]]]]}

According to (21) John is generated in the position [Spec NP] and then moves to the position [Spec DP]. However, this analysis mechanism may bring a series of serious consequences. If “’s” can occupy the D position, the sentence “Whose book did you read?” should be analyzed as follows:

- (22) a. *_[DP] who_[D] ’s book]]
 b. *~~who~~ did +Q [you read [~~who~~ [’s book]]]]
 c. * who did you read’s book?
 d. *whose did you read book?

The problem with (22a-c) cannot be feature checking. The strong *wh*-feature of Q is appropriately checked. In fact, (22a-c) violates the morphological requirements on the possessive suffix, which must attach to the genitive element. In other words, the genitive marker cannot function as the head of DP, as a result of which it cannot project as GenP on its own. The problem with (22d) is that there is no licit syntactic derivation for it, because whose (=who’s) is not a syntactic constituent, and hence it cannot undergo movement. In order to avoid the above problems, Hornstein et al (2005:305-307) propose that “Whose book did you read?” should be analyzed as follows:

- (23) [[who[’s book]]ⁱ did+Q[you read[who[’s book]]ⁱ]]

In (23), the whole object DP is moved to [Spec CP]. Therefore, it is the only one that can satisfy all the relevant requirements. Firstly, the strong *wh*-feature of Q can be appropriately checked. The whole object DP moves to the position [Spec CP] in order to satisfy all the relevant requirement, i.e., Q’s strong feature is properly checked. Secondly, the possessive suffix can be morphologically licensed. Thirdly, movement is operating with a syntactic object. Fourthly, the phrase “whose book”, is a minimal syntactic object, which can allow all of these requirements to be satisfied, in accordance with economy guidelines. However, this analysis mechanism cannot account for the grammaticality of (24).

- (24) a. Cuiam_i amat Cicero [t_i puellam]? Latin
 whose loves Cicero girl
 “Whose girl does Cicero love?”
 b. Čijeg_i si video [t_i oca]? Serbo-Croatian
 whose are seen father
 “Whose father did you see?”

In order to account for these phenomena, Hornstein et al. (2005, pp. 305-307) propose that empty determiner genitive suffix can be separated from the genitive phrase as long as the *wh*-feature of the question specifier is checked. In this case English genitive constructions and Latin and Serbo-Croatian genitive constructions are treated in different theoretical framework, which alleviates the explanatory power of the theory. Furthermore, this analysis lacks mental reality, for it is not identical to language facts. In contrast, our analysis can provide a reasonable account of the above differences. Moreover, it can operate in a unified theoretical framework, which overcomes the defects of the above theoretical explanation, and which has the significance of universal grammar.

In view of linguistic universalism, English genitive marker “’s”, Chinese genitive marker “de” and German genitive marker “s” have the same syntactic function and they all belong the class of functional categories. According to “The Conditions on Functional Categories as Syntactic Heads”, a functional category, as syntactic heads, must satisfy the following conditions: 1) it can determine the syntactic features of the phrase in which it is, i.e. [±N] or [±V]; 2) it can determine the categories of its complement; 3) it can determine the agreement between gender, number and case of the constituents within the phrase; 4) it has syntactic-semantic sufficiency⁵. However, English genitive marker “’s”, Chinese genitive marker “de”, and German genitive marker “s” cannot function as syntactic heads, for they cannot determine the features of gender, number, and case. Nor can they be separated from the verb or noun which it adjoins to, as a result of which they lack syntactic self-sufficiency. (Yang, 2008) According to head theory, DP has self-sufficiency, i.e., it can function as subject or object on its own, and its form and meaning are complete. Compare (25) and (26).

- (25) Fangfang-de meili xianeryijian
 Fangfang-GEN beauty obvious
 Fangfang’s beauty is obvious.
 a. [_{DP} Fangfang-de_[D] D meili]]xianeryijian.
 b. *_[DP]Fangfang_[D] de meili]]xianeryijian

- (26) Fangfang’s beauty is obvious.
 a. [_{DP} Spec_[D] Fangfang’s beauty]] is obvious.
 b. *_[DP] Fangfang_[D] ’s beauty]] is obvious.

- (27) Fangfangs Schönheit ist völlig klar.
 a. [_{DP} Spec_[D] Fangfangs Schönheit]] ist völlig klar.
 b. *_[DP] Fangfang_[D] s Schönheit]] ist völlig klar.

⁵ Functional Category Self-sufficiency Hypothesis

A functional category cannot be a syntactic head unless its maximal projection has syntactic self-sufficiency and semantic intactness.

The above examples testify that “de”, like “’s” and “s”, has no self-sufficiency. It cannot function as subject or object on its own after being segmented. On the contrary, “de”, “’s” and “s” have syntactic self-sufficiency if they cliticize to the preceding noun or pronoun, for this treatment satisfies not only the requirement of syntax but also the requirement of semantics. The above examples also testify that there exists correspondence between syntactic head and semantic head, for there is symmetrical projection between syntactic system and conceptual-semantic system, and syntactic system always reflects the requirement of conceptual-semantic system as much as possible. Syntactic head is identical to semantic head, for only in this way can exact information can be conveyed for the purpose of communication.

3. The derivation of genitive constructions

Whether in prenominal genitive languages or post-nominal genitive languages, there exists a certain license between functional heads D and Gen. This license is, in fact, the agreement between the reference property of D and the agreement feature of Gen. As far as D is concerned, this feature is uninterpretable, and hence it needs to be checked. To be checked needs to match the feature of Gen. In prenominal genitive languages the feature is weak. Hence it can be checked against matching. Movement is unnecessary. In post-nominal genitive languages this feature is strong. Hence it must move to be checked. It follows that the difference between different genitive constructions lies in the different ways of checking. Prenominal genitive is base-generated whereas post-nominal genitive is generated by means of head noun movement.

(28) prenominal genitive

[_{DP} GenP1[_{D'} GenP2[_{NP} Spec[_{N'} GenP3 NP]]]]

- a. [_{DP} GenP[_{D'} D[_{NP} Spec[_{N'} DP NP]]]] (Chinese)
 b. [_{DP} Spec[_{D'} GenP[_{NP} Spec[_{N'} DP NP]]]] (English and German)
 c. [_{DP} Spec[_{D'} D[_{NP} Spec[_{N'} GenP NP]]]] (Italian and Hungarian)

(29) post-nominal genitive

[_{DP} Spec[_{D'} D [_{NP}[_{GenP} NP₁ [_{Gen'} Gen t_i]]]]] (English, German, Italian, Hungarian, Norwegian and Icelandic)

In the light of (28) prenominal genitive includes three sub-types, i.e. [GenP1 DP], [GenP2 D'] and [GenP3 N']. All of them are base-generated. In the light of (29) the underlying structure of post-nominal genitive is identical to that of prenominal genitive. Since head noun moves, an empty position occurs in the underlying structure, which gives rise to post-nominal genitive. It is noteworthy that head noun movement is constrained by locality, and hence it can only move to the position [Spec GenP].

We will discuss Chinese genitive first. Chinese is a typical prenominal genitive language. Under any circumstances, Chinese genitive can only precede D and occupy the position [Spec DP].

(30) a. [_{DP} wo-de[_{D'} napian[_{NP} Spec[_{N'} baodao]]]]

I-GEN that-CLASS report
 that report of mine

b. [_{DP} wo-de[_{D'} napian[_{NP} Spec[_{N'} youguan Zhangsan-de baodao]]]]

I-GEN that-CLASS concern Zhangsan-GEN report
 that report of mine about Zhangsan

c. [_{DP} wo-de[_{D'} na[_{NumP} sanpian[_{NP} Spec[_{N'} youguan Zhangsan-de baodao]]]]

I-GEN that three-CLASS concern Zhangsan-GEN report
 the three reports of mine about Zhangsan

d.*[_{DP} wo-de[_{D'} napian[_{NP} Zhangsan-de_i [_{N'} t_i baodao]]]]

I-GEN that-CLASS Zhangsan-GEN report

e.*[_{DP} wo-de[_{D'} na[_{NumP} sanpian[_{NP} Zhangsan-de_i [_{N'} t_i baodao]]]]

I-GEN that three-CLASS Zhangsan-GEN report

f.*[_{DP} GenP[_{D'} napian[_{NP} Spec[_{N'} Zhangsan-de baodao]]]]

that-CLASS Zhangsan-GEN report

(30d-f) are ungrammatical because genitive cannot occupy the positions [Spec NP] or [D D'], and the demonstrative cannot precede genitive and occupy the position [Spec DP]. There can be only one head noun in front of the possessive. If two or more than possessives occur, the second possessive can only function as the object of the preposition to modify the head noun. In other words, Chinese prohibits double genitive. Hence the possessives following the first possessive must be licensed by the preposition.

Different from Chinese genitive, English prenominal genitive and German prenominal genitive do not occupy the position [Spec DP]. In fact, they occupy the position [D D'], but they do not denote the feature [+specific]. Hence, if genitive constructions contain demonstratives, definite article, numeral classifiers, and adjectives, genitive must follow these constituents, because only demonstratives and definite article can denote the feature [+specific] and only numeral classifiers can denote the feature [+num].

(31) a. [_{DP} Spec[_{D'} that[_{NP} [_{N'} report of mine]]]]

b. [_{DP} Spec[_{D'} the[_{NP} [_{N'} report [of mine]][about John]]]]

It needs to be pointed out that since genitivization operation is actually a process of establishing determination, it needs to be semantically licensed regardless of head noun movement or base-generation. In view of logical semantics, this semantic connection is embodied by the inter-set of the head set and the genitive set. If the head is base-generated, the connection can generally be established. If the head moves, it depends upon whether it is semantically connected with the possessive. If there is no semantic connection between the head and the possessive, GenP cannot be projected.

(39) a. the prince of Denmark with a nasty temper

b. [_{DP} Spec [_D the [_{NP} prince [_{GenP} of Denmark] [_{PP} with a nasty temper]]]

(40) a. *the prince with a nasty temper of Denmark

b. * [_{DP} Spec [_D the [_{NP} prince [_{PP} with a nasty temper] [_{GenP} of Denmark]]]

(39) shows that post-nominal genitive lies in the complement position. It is higher than the adjunct linearly, which is in accordance with Principles of Phrase-Structure Relations⁶. Hence it is grammatical. If post-nominal genitive lies in the adjunct position, the structure is ungrammatical, as shown in (40). In other words, no other syntactic constituent can intervene between genitive and the head noun. Only in this way can the semantic connection be established between them to give rise to GenP.

Furthermore, in the framework of the Minimalist Program, genitivization operation is actually a feature assignment operation to establish agreement relation between the probe and the target. Some features of the lexical items involving in syntactical derivation have been determined before derivation while others need to be assigned in syntactic derivation. If the lexical items in the phase are transferred without having been assigned, uninterpretable features will lead to derivation crash. (Chomsky, 2006, p. 13) The assignment and non-assignment of grammatical features correspond to the interpretability and uninterpretability of grammatical features respectively. Features which have not been assigned need to be assigned in the derivation of narrow syntax. (Chomsky, 2004, p. 116) As far as Φ -features are concerned, the Φ -features of nouns and pronouns are interpretable, but their case features are uninterpretable, which need to be assigned in syntactic derivation in order to establish the agreement relation between the probe and the target. In this case, the lexical items containing the probe and the target must be active.

How are the possessive noun and the head noun in genitive constructions assigned? We argue that genitive constructions are headed by D to form DP, of which GenP is part. D assigns GenP in [Spec DP] and [D D'] respectively. GenP carries inherent case features, and D assigns structural case features to it. D assigns [+NOM] feature to GenP in [Spec DP] and [+ACC] feature to GenP in [D D']. If GenP gets [+NOM] feature, the head noun will get [+ACC] feature. If GenP gets [+ACC] feature, the head noun will get [+NOM] feature. The feature of the head noun NP is assigned by GenP. Since there exists licensing relation between D and GenP, if D is an overt constituent, GenP will lie in [Spec DP] or [D D'] and carry [+specific] property. If D is a covert constituent, GenP will lie in [Spec DP] or [D D'] and carry [-specific] property. Therefore, in genitive constructions, D assigns structural case to the possessive noun via Spec-Head. Since both D and Gen are affixal, D will attract Gen to move to D. In brief, if the Spec or D of DP gets structural case and inherent case, pre-nominal genitive constructions will be generated. If the Comp of DP gets structural and inherent case, post-nominal genitive constructions will be generated.

4. Conclusion

The present study is mainly concerned with the internal structure of syntactic derivation of genitive constructions. It is argued that structurally the two basic forms of genitive constructions are [_{DP} GenP [_D D XP]] and [_{DP} XP [_D D GenP]] (XP=NumP or NP), with pre-nominal genitive constructions occupying the [Spec DP] position and post-nominal genitive constructions in [Comp D']. Between the genitive constructions and the functional head D, there is a feature checking relation, aiming to check some uninterpretable agreement features of the functional head. This relation is realized by different means in different languages. In languages such as English, German, Italian, Norwegian, Icelandic and Hebrew, it is realized via the overt movement of the genitive construction to the specifier position of the functional head, while in Chinese genitive construction, it is realized simply by feature matching. Thus, the syntactic derivation of the English genitive constructions is only one step further than that of Chinese genitive constructions. Based on this argument, the author proposes an analysis for the derivation of natural language genitive constructions, and uses it to account for the derivation of genitive constructions in relevant languages prior to the movement of the head nouns.

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⁶ Principles of Phrase-structure Relations

a. Complements are sisters to the head X.

b. Modifiers are adjuncts to X'.

c. Specifiers are daughters to XP. (Hornstein, Nunes & Grohmann, 2005, p. 186)

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