THE DOUBLE NOMINATIVE CONSTRUCTION IN MANDARIN CHINESE*

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1. INTRODUCTION

To many foreigners learning Chinese one of the most puzzling aspects of the language is the so-called double nominative construction. However, this construction, to the extent that we can determine, has been with the language since the time of antiquity and, more importantly, it is still highly productive. Moreover, in the course of its long history, it has given rise to hundreds of frozen or semi-frozen compounds which are still widely in use today. Therefore, the study of this construction is essential to our understanding of how the language works.

2. PREVIOUS ANALYSES OF THE CONSTRUCTION

Quite a number of linguists in the past have discussed the construction but many of them only in passing, noting this peculiarity without going into it. Of those who have dealt with it in some length, the following three, namely, Chao (1968), Tang (1972, 1977) and Teng (1974), are the most representative. Roughly speaking, Chao's analysis represents the American Structuralist approach, while Tang's analysis is done in the framework of the case grammar and Teng's in the spirit of the generative-transformational grammar. Because of space limitation only Teng's analysis will be critically reviewed in the following. Interested readers please refer to Tsao (1979, 1980) for criticism of the first two approaches to the construction.

2.1. Teng's Analysis: A Generative-transformational Approach

Teng (1974) makes several claims concerning the double nominative construction in Chinese. Let us examine some of his claims one by one.

- 1. Teng argues that predicates can consist of an entire sentence; i.e., VP can be rewritten as S. Thus, a sentence containing a double nominative structure such as (1) will have an underlying structure such as (2) in his analysis.
- (1) ta dudz e.⁽¹⁾ he stomach hungry

(1) The following abbreviations are used to indicate some frequently occurring function words:

Asp: aspect markers

Part: particles

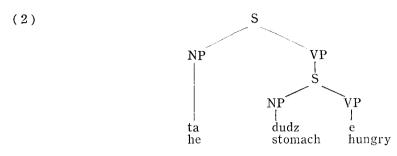
Poss: possessive marker

Class: classifiers for nouns

Rel: relative clause marker

^{*} This is a shorter version of the paper presented at the XIV International Conference on Sino-Tibetan Languages and Linguistics, Gainsville, Florida, U.S. A., Oct. 30, -Nov. 1, 1981.

'(Literally), he (topic), (his) stomach is hungry.'
'He is hungry.'



The same approach is posited by Wang (1956) and Chao (1968). My general comment about this approach is that it fails to distinguish between topic and subject. The discourse nature of the first nominative can be brought out very clearly if (1) is followed by a possible discourse continuation as in (3):

(3) ta dudz you jau-bu-dau dungsvi chr, swo-yi e. he stomach hungry also couldn't find things eat so tang dzai chwang-shang shwei-jyau. lie in bed-top sleep 'He (topic), (his) stomach (was) hungry, (and) (he) couldn't find anything to eat, so (he) lay in bed sleeping.'(2)

If we define topic as theme, as it is usually understood, (for a fuller discussion of the criteria for establishing topic in Chinese, see Tsao, 1978, 1979), then the topic of these sentences is ta 'he' because it is the thing that each of the sentences is about. The subject of the first sentence is dudz 'stomach' and those of the second and the third, ta 'he', which are deleted through a process termed by me as topic-NP deletion. Such an analysis not only jibes well with the general understanding that topic is what a sentence (or sentences) is (or are) about; it also accords well with the general agreement that subject, as a grammatical term, is always selectionally related to the verb (See E. L. Keenan, 1974, 1976a; Li and Thompson, 1976 for comments).

There are more specific arguments against this claim of Teng's. Teng (op. cit,) argues that Chinese adverbs in general occur directly in front of verbs in the surface and yet, in double nominative sentences, they occur in two positions as shown in (4a) and (4b):

(4) a. ta dudz you e Ie. he stomach again hungry Asp

⁽²⁾ In order to reflect the organization of the original Chinese sentences, many English translations of the examples are deliberately literal. Also elements that are required in English but are absent in the Chinese sentences are indicated by enclosing them in parentheses.

b. ta you dudz e le.he again stomach hungry Asp'He is hungry again.'

He then points out that if we regard *dudz e* 'stomach hungry' as a sentential predicate, then the rule of adverb-placing in Chinese can be simply stated as: Adverbs can occur before predicates. That this argument is very weak can be seen from the following two observations: First, not all adverbs can occur in the two positions just mentioned even with the same sentence. Thus, the most common adverb of degree *hen* 'very' can occur only in one position:

- (5) a. ta dudz hen e.

 he stomach very hungry

 'He is very hungry.'
 - *b. ta hen dudz e.

Since no semantic incompatability is involved in (5), the fact that it is ungrammatical indicates that adverbs are far from a homogeneous class, and that the rule of adverb-placement cannot be simply stated (see Tsao, 1976 for discussion).

More seriously, not all the doube nominative constructions exhibit these two possibilities with regard to the position of some adverbs such as you 'again' and ye 'also', as pointed out by T. C. Tang and Marie-Claude Paris cited by Li and Thompson (1976:487, footnote 9). Thus, in a sentence containing a double nominative construction like (6), only one position is allowed for you 'again.'

- (6) a. jei-ke shu, yedz you hwang le.
 this-Class tree leaves again yellow Asp
 'This tree (topic), (its) leaves have turned yellow again.'
 *b. jeike shu, you yedz hwang le.
 - this-Class tree again leaves yellow Asp

Thus, the basic assumption of Teng is wrong. We have no strong evidence that what is posited by Teng as the 'sentential predicate' is actually a constituent dominated by a VP node.

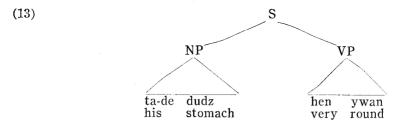
- 2. Teng also claims that since in (4) the adverb you 'again' can occur in two positions while in (7) and (8) it cannot occur between two nominatives, (7) and (8) should not be analyzed as containing a double nominative construction.
- (7) *ta you shou teng le. he again hand hurt Asp 'His hand hurts again.'
- (8) *ta ye dudz ywan. he also belly round 'His belly is also round!'

I have already pointed out that whether you or ye can be placed at two different positions or not is not a valid test in distinghishing double nominative constructions from non-double-nominative constructions. From this observation alone I am convinced that Teng is wrong again in this claim. My conviction, however, is further strengthened by the following two examples:

- (9) ta shou teng de hen, jen syang chyu kan yisheng. he hand hurt Part very really want go see doctor 'He (topic), (his) hand hurt badly; (he) really wanted to see a doctor.'
- (10) ta dudz hen ywan, twei you dwan, jen nan-kan.

 he stomach very round legs also short really ugly

 'He (topic), (his) stomach is very round, and (his) legs are short; (he) is really ugly.'
- (9) and (10) demonstrate clearly that given proper context, shou 'hand' in shou teng 'hand hurt' and dudz 'stomach' in dudz ywan 'stomach round' can occur as the second nominative in a double nominative construction.
- 3. Teng claims that (1) will be derived from an underlying structure like (2). (11) below also has the same underlying structure, the possessive marker -de being transformationally derived by a late rule called the 'pseudogenitive.'
- (11) ta-de dudz e.
 he-Poss stomach hungry
 'His stomach is hungry.'
- (12), on the other hand, will have (13) as its underlying structure.
- (12) ta-de dudz hen ywan. he-Poss stomach very round 'His stomach is round.'



He gives the following evidence. First, he points out that a possessive sentence behaves differently from a pseudo-possessive sentence in conjunction reduction, as shown by (14) and (15) respectively.

(14) a. ta jye-le Jang San-de shu; wo jye-le Li Sz-de. he borrow-Asp Jang San's book I borrow-Asp Li Sz's 'He borrowed Jang San's book; I borrowed Li Sz's.'

*b. ta jye-le Jang San-de shu; wo jye-le Li Sz.

- (15) a. ta sywe-le yi-nyan-de Jungwen; wo sywe-le lyang-nyan.

 he study-Asp one-year's Chinese I study-Asp two-years

 'He studied Chinese for one year; I studied for two years.'
 - *b. ta sywe-le yi-nyan-de Jungwen; wo sywe-le lyang-nyan-de.

This shows, according to Teng, that conjunction reduction follows the specification of the real possessive, but precedes the introduction of pseudo-possessive marker. The argument here is quite straightforward and convincing. However, it becomes very doubtful when Teng goes on to argue that this difference provides syntactic evidence for distinguishing the real possessive -de in (12) from the pseudo-possessive -de in (11). After all, the real possessive construction in (14) and the pseudo-possessive construction in (15) are semantically different. For one thing, the possessor in the former case is an animate noun while that in the latter is an inanimate one. But in the case of (11) and (12), the possessor in both cases refers to the same entity and so does the possessed. So if there should be any syntactic difference between (11) and (12), it could not be due to any semantic difference regarding the relation between the two nominatives. However, suspending our semantic objection for a while, let's examine whether (11) and (12) do behave in parallel with (14) and (15) in conjunction reduction. Teng gives the following examples and grammatical judgment:

- (16) a. Jang San-de dudz hen e; Li Sz ye shr.

 Jang San-Poss stomach very hungry Li Sz also is

 'Jang San's Stomach is very hungry; so is Li Sz.'
 - *b. wo-de dudz hen e; ni-de ne? my stomach very hungry yours Part 'I am hungry; are you?'
 - c. Jang San-de dudz hen ywan; Li Sz-de ye shr. Jang San's stomach very round Li Sz's also is 'Jang San's stomach is very round; so is Li Sz's.'
 - *d. Jang San-de dudz hen ywan; Li Sz ye shr.

 Jang San's stomach very round Li Sz also is

 'Jang San's stomach is very round; so is Li Sz.' (different meaning)

He goes on to explain that, at the stage of deleting identical elements, *de* in (a) is absent. This is supported by the ungrammaticality of (b), in which *de* appears. Since the genuine possessive marker is specified in the underlying structure, it must have been introduced by the stage of conjunction deletion and is not deletable, as indicated by the unacceptable (d).

This argument is extremely weak, as the grammaticality judgment on which the argument is based is far from firm. Speakers disagree with each other as to the grammaticality of the four sentences involved here.³ That one should not base one's argument on such controversial sentences is self-evident. Besides, by positing (2) as the underlying structure of (1), Teng is ruling out the possibility that ta-de dudz 'his stomach' may become a topic when it is in construction with e 'hungry'. Actually, such a possibility does exist. Witness the following example:

(17) ta-de dudz yi e jyou teng, yiding you sheme maubing.
his stomach once hungry then ache must have some trouble
'(literally) His stomach (topic) as soon as (it) (is) hungry, (it) aches; (it)
must have some trouble.'

'As soon as his stomach is empty, it aches; there must be something wrong with it.'

Likewise, to posit an underlying structure such as (13) for (12) fails to account for sentences such as (10), in which the possessor is the topic instead of the whole possessive construction.

3. THE PROPOSED ANALYSIS OF THE DOUBLE NOMINATIVE CONSTRUCTION

By now an outline should be emerging from our previous discussion of the construction. We have presented arguments to show that the first nominative in the construction is actually a topic while the second is the subject of the particular sentence in which it occurs. Thus, a sentence like (18) will have an analysis like (19).

- (18) ta taitai hen pyaulyang. he wife very pretty 'He (topic), (his) wife is very pretty.'
- (19) ta, taitai hen pyaulyang.
 TOPIC SUBJECT VP

That the first nominative is actually a topic can be clearly seen if a possible discourse continuation is added to it as in (20).

(20) ta taitai hen pyaulyang, ernyu you tsung-ming, jenshr hau-fuchi. he wife very pretty children also clever really lucky 'He (topic), (his) wife (is) very pretty; (his) children (are) also clever; (he) is really lucky.'

(3) The thirty-one native speakers that I have asked gave the following judgments: (16) a. G: 19 b. G: 18 c. G: 23 d. G: 13

U: 12 U: 13 U: 8 U: 18

As the results do not show any discernible pattern, I will not comment on them here. Suffice it to point out that even if we go by the rule of majority, most native speakers' grammaticality judements in (b) still do not agree with Teng's.

(20) is what I call a topic chain which consists of three sentences sharing the common topic ta 'he', for clearly it is what all the three sentences are about, while in the first sentence taitai 'wife' is clearly the subject of pyaulyang 'pretty' as is determined by the selectional restriction. The same analysis can be applied to the second sentence, in which the topic ta 'he' is deleted by a process known as TOPIC-NP DELETION while ernyu 'children' is the subject of the verb tsungming 'clever.' In the third sentence, ta 'he' serves the double function of topic and subject, but is here deleted by TOPIC-NP DELETION.

Let us now proceed to examine the possible relation that the first nominative might have with the second nominative in the construction.

Relationships that are most frequently found are: that of the possessor and the possessed, as in (21) and (22); that of whole and part, as in (23) and (24); and that of class and member, as in (25).

- (21) jei-ge ren, tounau jyandan, sz-jr fada. this-Class person mind simple four-limbs well-developed 'This person (topic), (his) mind is simple; (his) body well-developed.'
- (22) Junggwo, di da, wu bwo, renkou dwo. China land big resources comprehensive population great 'China (topic), (its) land is big; (its) resources comprehensive; (its) population great.'
- (23) ta-de san-ge haidz (a), yi-ge dang lyushr, yi-ge his three-Class children (Part) one-Class serve-as lawyer one-Class hushr, haiyou yi-ge sywe jyanju. nurse still one-Class study architecture 'His three children (topic), one works as a lawyer; another is a nurse; (and) the third studies architecture.'
- (24) sanshrlyou ji (a), dzou wei shang ji. thirty-six alternatives (Part) running-away is best alternative '(Of) the thiry-six alternatives (topic), running-away is the best.'
- (25) yu (a), wei-yu syandzai dzwei gwei. fish (Part) tuna now most expensive 'Fish (topic), tuna is now the most expensive.'

These types of the double nominative construction often have paraphrases with some sort of possessive construction. Compare the (a) and (b) sentences in the following examples:

(26) a. jei-ge nyuhai yanjing hen da. this-Class girl eyes very big 'The girl (topic), (her) eyes are very big.'

- b. jei-ge nyuhai-de yanjing hen da.
 this-Class girl's eyes very big
 'The girl's eyes are very big.'
- (27) a. wu-ge pinggwo, lyang-ge hwai-le. five-Class apples two-Class spoil-Asp '(Of) the five apples (topic), two are spoiled.'
 - b. ?wu-ge pinggwo litou-de lyang-ge hwai-le, five-Class apples among-Poss two-Class spoil-Asp 'Two of the five apples are spoiled.'
- (28) a. pengyou, jyou-de hau.
 friends old-Rel good
 '(Of) friends (topic), old (ones) are good.'
 - b. pengyou dangjung-de jyou-de hau.
 friends among-Poss old-Rel good
 'The old friends of all friends are good.'

There are two important differences between the (a) and (b) sentences of each pair. First, the truth value of each sentence may be different. (26a) is about the girl, while (26b) is about the girl's eyes. The difference can be seen clearly when another comment is added, as in (29a) and (29b).

- (29) a. jei-ge nyuhai (a), yanjing hen da, hen pyaulyang. this-Class girl (Part) eyes very big very beautiful 'The girl (topic), (her) eyes are big; (she) is beautiful.
 - b. jei-ge nyuhai-de yanjing hen da, hen pyaulyang.
 this-Class girl's eyes very big very beautiful
 'The girl's eyes (topic), (they) (are) big; (they) (are) beautiful.'

Thus, in (a) the girl herself is beautiful, but in (b) only the girl's eyes are said to be beautiful. Nothing is said about the girl herself.

Second, if a pause particle is to be inserted, then it will be inserted at a different place in the (a) and (b) sentences of each pair. Since a pause is added at a major break of a sentence, the fact that (a) and (b) sentences accept pause particles at different places indicates that speakers perceive them differently.

These all constitute problems for linguists who try to derive one construction from the other. Furthermore, not all cases of topic that bear this kind of semantic relation to the clause subject have a paraphrase with some sort of possessive construction. As a result, any attempt to derive these topics from underlying sources with some sort of possessive construction is bound to fail.

All the examples that we have discussed so far are those that exhibit some relation between a topic and a subject. Cases are occasionally found that exhibit

such relations between a topic and a term other than subject. (4) Compare (30) with (25):

(30) yu (a), wo dzwei syihwan weiyu. fish (Part) I most like tuna 'Fish (topic), I like tuna best.'

Another less frequently found relationship is that of relevance, as in (31) and (32).

- (31) jei-jyan shr (a), wo-de jingyan tai dwo-le.
 this-Class matter (Part) my experience too much-Asp
 '(With regard to) this matter (topic), my experience is very rich; i.e., with regard to this matter I have had a great deal of experience.'
- (32) lyousywe-de shrching (a), jengfu dzau studying-abroad-Poss matter (Part) government long-ago gweiding-le banfa.
 stipulate-Asp regulation (of procedure)
 '(With regard to) the matter of studying abroad (topic), the government made regulations of procedure long ago.'

Thus in (31) the topic can be optionally preceded by gwanyu, jryu, or dweiyu 'about, concerning, with regard to, with reference to, etc.' and the sentence can also be paraphrased as (33):

(33) wo dweiyu jei-jyan shr de jingyan tai dwo-le.

I about this-Class matter Poss experience too much-Asp
'My experience about this matter is very rich.'

As the type of sentences exemplified by (30)-(32) is usually not regarded as "the double nominative construction," we will therefore not go into it here. Suffice it to point out that they present an even greater difficulty for any derivational theory of topic. There is however a subtype of type 3 topic which requires special mention. This subtype is exemplified by (34) and (35):

- (34) ju (a), Taipei dzwei hau. living (Part) Taipei most good 'Living (topic), Taipei is best.'
- (35) chr (a), dzjutsan dzwei pyanyi.
 eating (Part) buffet most inexpensive.'
 'Eating (topic), buffet is the most inexpensive.'

⁽⁴⁾ The word "term" is here employed in the sense used by relational grammarians, i.e., subject, direct object, indirect object are terms of a sentence; the rest are non-terms.

- (34) and (35) can be paraphrased as (36) and (37) respectively. (5)
- (36) ju-de difang (a), Taipei dzwei hau. live-Rel place (Part) Taipei most good '(Of all) places to live (topic), Taipei is the best.'
- (37) chr-de fangshr (a), dzjutsan dzwei pyanyi.
 cat-Rel ways (Part) buffet most inexpensive
 '(Of all) ways to eat (topic), buffet is the most inexpensive.'

This subtype is different from type 3 in that the class term involved (i.e., difang 'place' and fangshr 'way', is not even mentioned.

4. PRODUCTIVE DOUBLE NOMINATIVE CONSTRUCTIONS VERSUS VERBAL COMPOUNDS

4.1. Teng's View

In a later section of Teng's paper (op. cit.), he takes up the problem of what he calls 'sentence as predicate versus idioms.' I have already given my arguments against the postulation of the sentential predicate if predicate is used in its syntactic sense as Wang (1956), Chao (1968) and Teng are using it.

Teng cites Fraser (1970) in defining an idiom as 'a constituent or series of constituents for which the semantic interpretation is not a compositional function of the formatives of which it is composed.' He thus classifies all the double nominative expressions into two groups as follows (Teng, 1974: 463):

- Group A: dandz syau 'timid' (lit. 'guts [sic] small'), erdwo rwan 'gullible' ('ears soft'), syin du 'cruel' ('heart poisonous'), yan hung 'jealous' ('eyes red'), lyanpi hou 'brazen-faced' ('face-skin thick')
- Group B: dudz e 'hungry' ('stomach hungry'), pichi hwai 'bad-tempered' ('temper bad'), tou teng 'headache' ('head painful'), jisying hau 'good memory' ('memory good'), yau swan 'backache' ('waist sore')

Thus, in his analysis, items in Group A, when not taken in their literal sense, are idioms and those in Group B are sentential predicates. In addition to pointing out that sentential predicates rarely occur lexicalized, Teng gives the following semantic characterization of the two groups (op. cit.: 463):

⁽⁵⁾ Besides (36) and (37), (34) and (35) can also be paraphrased as (i) and (ii) respectively:

⁽i) ju (a), ju Taipei dzwei hau.

living (Part) living Taipei most good

(Speaking of) living (topic), living (in) Taipei is best.

 ⁽ii) chr. (a), chr dzjutsan dzwei pyanyi,
 eating (Part) eating buffet most inexpensive
 '(Speaking of) eating (topic), eating (at a) buffet is the most inexpensive.'
 Judging from this way of paraphrasing, the topic and the subject seem to bear the syntactic relation of a verb and its object.

Idioms generally characterize personality and temperament by means of physical description in the literal sense. A sentence predicate is characterized by the semantic property of referring to temperament and physical condition, and very rarely physical description...

Nothing beyond this vague semantic characterization of the two groups is given and no reliable syntactic test is provided for distinguishing between them.

4.2. The Proposed Analysis

I have already pointed out that what have been regarded by Teng as 'sentence predicates' are not a homogeneous group with regard to their relative position in relation to such adverbs as you 'again' and ye 'also' as shown in (6). I would, therefore, propose that all the double nominative expressions be reanalyzed as falling into three groups on the basis of their syntactic behavior with regard to the placement of such adverbs as you and ye.

- Group A: Productive Double Nominative Expressions Syntactic characteristic: $Nom_1 + Nom_2 + {ye \\ you} + V$ Examples:
- (38) a. jei-ke shu yedz ye hen da.
 this-Class tree leaves also very big
 'This tree (topic), (its) leaves are also very big.'
 b. *jei-ke shu ye yedz hen da.
- (39) a. ta dudz ye ywan de hen.

 he stomach also round Part very

 'He (topic), (his) stomach is also very round.'
 - b. *ta ye dudz ywan de hen.
- Group B. Semi-compounds(6)

Syntactic characteristic: either

$$\begin{aligned} & \text{Nom}_1 + \text{Nom}_2 + \left\{ \begin{matrix} \text{ye} \\ \text{you} \end{matrix} \right\} + V \\ \text{or} & \text{Nom}_1 + \left\{ \begin{matrix} \text{ye} \\ \text{you} \end{matrix} \right\} + \text{Nom}_2 + V \end{aligned}$$

Examples: *lyanpi hou* 'brazen-faced' (lit. 'face-skin thick'), *dandz syau* 'timid' (lit. 'gall-bladder small'), (1) erdwo rwan 'gullible'

⁽⁶⁾ As will be clear, Group B is on its way to becoming Group C. Since this is the group undergoing change, the membership in the class may differ slightly from speaker to speaker. This fact, however, is expected, and does not invalidate the test.

⁽⁷⁾ In general, it is true that cross-linguistic translation is a good place to start in finding out whether a certain expression is an idiom or not. That is, if a certain expression in Language A has a lexical counterpart in Language B, then it is an indication that the expression is an idiom. The test, however, is not always reliable. Take the expression dandz syau 'gall-bladder small' for instance. It has a lexical counterpart in English, namely, 'timid.' However, it has not quite lost its literal meaning in Chinese. To the Chinese mind, a timid person may actually have a smaller gall-bladder.

(lit. 'ears soft'), dudz da 'pregnant' (lit. 'belly big'), dudz e 'hungry' (lit. 'stomach hungry,') pichi hwai 'temper bad,' tou teng1 'head ache,' jisying hau 'memory good'

- (40) a. ta dudz you e le.

 he stomach again hungry Asp

 'He (topic), (his) stomach is hungry.'
 - b. ta you dudz e le.
- (41) a. ta dandz ye syau.

 he gall-bladder also small

 'He (topic), (his) gall-bladder is also small; i.e., he is also timid.'

 b. ta ye dandz syau.
- Group C: Frozen Compounds

Syntactic characteristic:
$$Nom_1 + {ye \choose you} + Nom_2 + V$$

Examples: yan hung 'jealous' (lit. 'eyes red'), syin du 'cruel' (lit. 'heart poisonous'), dan syau 'timid' (lit. 'gall-bladder small'), tou teng₂ 'be troubled by' (lit. 'head ache'), sying ji 'impatient' (lit. 'temperament quick')

- (42) a. ta ye yan hung. he also jealous 'He is also jealous.'
 - b. *ta yan ye hung.
- (43) a. ta ye hen dan syau.

 he also very timid

 'He is also very timid.'

b. *ta dan ye hen syau.

Several points need clarification with regard to this analysis.

First, some of the semi-compounds in Group B can be interpreted literally. When they are so interpreted they should be regarded as productive double nominative expressions. *Erdwo rwan* 'gullible' or 'ears soft' and *dudz da* 'pregnant' or 'belly big' are good examples.

Second, the frozen compounds in Group C are 'frozen' in two senses. First, all the elements in a frozen compound are closely united and cannot be separated. Second, they are modern relics of classical Chinese, as evidenced by their monosyllabic characteristic. Thus, instead of dan 'gall-bladder,' dandz is used in the modern Chinese and the modern counterpart of yan 'eye' is yanjing. For this reason, yan hung in Group C can only be interpreted as 'jealous' while its modern counterpart yanjing hung can only have a literal interpretation and is thus a productive double nominative expression.

Some readers have probably noticed that tou teng is listed under both Group B and Group C. This is justified not only because there is a semantic change involved, but also because they behave differently with respect to the placement of adverbs you and yc. Tou teng₁ 'head ache' patterns with Group B and tou teng₂ 'be troubled by' behaves like a frozen compound. Notice also that there is another interesting change of syntactic property. Teng 'ache' is an intransitive verb but when it joins tou 'head' to form a compound, the new compound is transitive. Compare (44) with (45).

- (44) wo tou teng de bu-de-lyau.

 I head ache Part extremely

 '(Lit.) I (topic), (my) head aches extremely.'

 'I have a severe headache.'
- (45) ta jeng dzai tou teng je-jyan shr.

 he right Asp be-troubled-by this-Class matter

 'He is being troubled by this matter right now; or, this matter is giving him a big headache right now.'

Third, unlike *you* 'again' and *ye* 'also,' *hen* 'very,' the most frequently found adverb of degree in Chinese, can only precede lexicalized verbs (including adjectives) on the surface. (8) Examine the following:

- (46) a. jei-ke shu yedz hen da. (Group A)
 this-Class tree leaves very big
 'This tree (topic), (its) leaves are very big.'
 b. *jei-ke shu hen yedz da.
- (47) a. ta dudz hen e. (Group B)
 he stomach very hungry
 'He (topic), (his) stomach is very empty.'
 b. *ta hen dudz e.
- (48) a. ta hen sying ji. (Group C)

 he very impatient

 'He is very impatient.'

 b. *ta sying hen ji.

This then is one more reliable way of separating frozen compounds from the other two groups. This is also an additional counter-argument against Teng's analysis that places what he calls 'sentence predicates' under a VP mode, as we witness that in (47) hen 'very' cannot be placed before dudz e 'stomach hungry.'

Fourth, by comparing these three groups, it is apparent that Group B is in

⁽⁸⁾ T.C. Tang (personal communication) has pointed out to me that hen 'very' is a degree adverb while you 'again' and ye 'also' are conjunctive adverbs and that conjunctive adverbs typically behave differently from other types of adverbs in Chinese.

more than one way the middle stage between Groups A and C. As linguists have just begun to study idioms and the process of idiomatization systematically (see Weinreich, 1969; Fraser, 1970; Chafe, 1970), we will not be able to draw much from previous literature. However, as far as I can determine, two important factors seem to be involved; namely, frequency of use and possibility of syntactic reanalysis. With regard to the first factor, Chao makes the following remark (Chao, 1968: 370):

Whether an S-P construction [subject-predicate construction in Chao's analysis, F.T.] is a compound often depends upon frequency of occurrence. Thus menling bu syang 'The doorbell does not ring.' is normally not a compound, and a modal adverb such as ye 'also' and you 'again' would come between the subject menling and the verbal expression bu syang. But when the S-P form is heard often enough, then it begins to acquire the status of a compound and so one hears: women ye menling bu syang le. '(As for) us, the doorbell doesn't ring, either.' (I have changed Chao's Romanization in order to be consistent with the system used in this study.)

John Lyons has gone a step further and offered a possible psychological explanation. He states (1977: 536):

As soon as any regularly constructed expression is employed on some particular occasion of utterance, it is available for use again by the same person or by others as a ready-made unit which can be incorporated in further utterances; and the more frequently it is used, the more likely it is to solidify as a fixed expression, which native speakers will presumably store in memory, rather than construct afresh on each occasion.

Impressionistic as they are, these remarks do have some intuitive appeal. As a detailed study of the process is certainly beyond the scope of the present study, I will only give a comparison to show how frequency of occurrence can play a role here. Previously, we have classified *dudz ywan* 'stomach round' as a part of a productive double nominative expression and *dudz e* 'belly hungry' as a semicompound. Even though we do not yet have any solid statistical data, most people that we have asked agree that *dudz e* 'stomach hungry' enjoys a higher frequency of occurrence than *dudz ywan* 'stomach round.' Therefore, other things being equal, the former is more likely to become a compound than the latter.

However, frequency alone cannot explain why some syntactic structures become compounds more easily than others. Syntactic reanalysis can also play an important role here. In other words, what we are claiming here is that at a certain stage of idiomatization and historical change syntactic structures undergoing change to become compounds must be juxtaposed and must be subject to two possible grammatical analyses which both lead to the same semantic interpretation (for a discussion of how syntactic reanlysis may be related to language

change, see Parker, 1976). Take the structure under discussion for instance. A construction such as (49) can be analyzed in two different ways, as in (50) and (51):

- (49) wo dudz teng.

 I stomach ache
- (50) wo dudz teng.
 TOPIC SUBJECT V
- (51) wo dudz-teng.
 TOPIC and SUB. VERB-COMPOUND

Notice that (50) is the analysis we have posited for Group A productive double nominative expressions and (51) for Group C frozen compounds. Both structures can, of course, lead to the same interpretation in Chinese. Notice also that while (50) is a frequently found Chinese structure type, (51) looks more like the S-V structure type in English. This observation confirms a point that I have argued elsewhere (Tsao, 1978, 1979, 1980); i.e., in Chinese topic and subject are essentially two grammatical notions, while in English both roles are played by what is understood as 'subject' in most cases.

At this stage, what we have just proposed may sound like mere speculation; however, we feel that these are areas that promise great advances in our understanding of idiomatization and syntactic change.

4.3. The Further Development of Some Idiomatized Verbal Compounds

Actually in the current usage of Mandarin Chinese there are several hundred verbal compounds that were originally derived from the productive double nominative construction. In terms of structure, they fall roughly into three groups. What we have discussed as frozen compounds fall into Group A. Some examples from Groups B and C are given below:

Group A: Nominative (+ Nominative) + V (+ Adjunct)

- a. kou chr ching-syi mouth teeth clear 'speak clearly'
- b. shou nau bing yung hand brain both use 'using both hands and head'
- c. kou rwo sywan-he mouth like water-fall 'eloquent'

- d. ren di sheng-shupeople place unfamiliar'not familiar with either the land or its people'
- e. ban shen bu swei half body not moveable 'paraplegic'
- f. chyan-tu sz jinfuture like silk'with a bright future'
- g. syin-di shan-lyang heart kind 'kind-hearted'
- h. jing li chung-pei strength vigor abundant 'abundant in strength and vigor'
- i. shen ching ru yanbody light as swallow'with a body as light as a swallow'
- j. lei sya ru yutears fall like rain'with tears falling like rain; or, cry profusely'

Group B: Nominative + $V + Nominative + V^{(9)}$

- a kou shr syin fei mouth yes heart no 'insincere'
- b. shan ming shwei syou mountain clear water beautiful 'scenic'
- c. myan hung er chr
 face red ear red
 'with both face and ears red with heat or anger'
- d. di gwang ren syi land big population scarce 'thinly populated'

⁽⁹⁾ To the extent that my analysis of this type of the frozen verbal compounds is correct, it is an additional strong confirmation of our contention that a topic often extends its domain over serveral sentences to form a topic chain. It is also an indication that those who have restricted their analyses of the double nominative construction to a single sentence have missed a very important fact about the Chinese language.

- e. tou hun nau jang head dizzy brain swollen 'muddle-headed, confused'
- f. ren jye di ling
 people outstanding land wonderful
 'being a breeding ground of outstanding people'
- g. wai ywan nei fang
 outside round inside square
 'tactful in his relation with others, but having principles within self'
- h. syin gwang ti panheart broad body fat'with a cheerful spirit and a fat body'
- i. chwang ming ji jing window clear desk clean '(of a room, etc.) yery clean'
- j. er tsung mu ming ear sharp eye keen 'clever, smart'

That these are really frozen compounds can be seen by applying the YOU-YE test, as shown in (52) and (53).

- (52) a. ta ye kou-chr-ching-syi. he also speak clearly 'He speaks clearly, too.'
 - ?b. ta kou-chr ye ching-syi.
 - *c. ta kou ye chr-ching-syi.
- (53) a. ta ye kou-shr-syin-fei. he also insincere 'He, too, is insincere.'
 - *b. ta kou ye shr, syin ye fei.
 - *c. ta ye kou-shr, ye syin-fei.

These verbal compounds are mostly stative verbs, i.e., predicative adjectives. Many of them, however, have developed further to become attributive adjectives as well, as shown in (54) and (55):

(54) jei-ge syau cheng shr-ge shan-ming-shwei-syou-de di-fang. this-Class small town is-Class scenic place 'This small town is a scenic place.'

(55) shau gen nei-jung kou-shr-syin-fei-de ren lai-wang.
don't with that-kind insincere people associate
'Don't associate yourself with that kind of insincere people.'

However, as in Chinese the same -de is used as an adjective suffix as well as an adverbial suffix, for an adjective to become an adverb is just one step removed. Therefore, it is small wonder that some of the verbal compounds have also acquired adverbial usage as shown in (56) and (57):

- (56) women dan-da-syin-syi-de shr-gwo-le San-sya.
 we boldly-but-carefully sail-past-Asp Three Gorges
 'We sailed past the Three Gorges of the Yangtsz River boldly but carefully.'
- (57) ta shen-ching-ru-yan-de tyau-chi-lai.
 he agilely jump-up
 'He jumped up agilely.'

So the path of development can be clearly depicted as (58):

(58) productive double nominative constructions—frozen verbal compounds (predicative adjectives)—attributive adjectives—adverbs

5. THE ORIGIN OF THE DOUBLE NOMINATIVE CONSTRUCTION

It seems that the construction has been in the language since the time of Archaic Chinese. Witness the following examples:

- (59) shr-yi sheng-ren wei er bu shr, gung cheng er bu therefore sages do-work but not store task accomplish but not jyu. (Laudz: *Dau-de Jing*, Chapter 74) dwell-on
 - 'Therefore, the sage does his work without setting any store by it, accomplishes his task without dwelling on it.'(10)
- (60) jr wo je wei wo syin you. (The Book of Songs, "Shu-li") know me person say I heart worried "Those who knew me said that I was worried."
- (61) Dzou Ji syou ba chr you-yu, shen-ti yi-li. (Jan-gwo-tse, "Chi-tse") Dzou Ji height eight feet and more body well-shaped 'Dzou Ji (his) height (was) more than eight feet tall, and (his) body (was) well-shaped.'

Therefore, historically it is almost impossible to determine when the construction first came into the language, but it is still interesting to speculate on the circumstances that gave rise to it.

⁽¹⁰⁾ This translation is taken from J. H. Wu's Laotsu's the TAO and Its Virtue, Saint John University Press, 1961.

In our discussion we will assume that the double nominative construction was originally derived from the non-double-nominative-construction and at the time of its introduction, it must be much more restricted in its use. Such assumptions are made on the ground that the latter construction is far more prevalent than the former universally. We'll also follow the same principle that we set up in our previous discussion of the historical derivation of frozen verbal compounds from productive double nominative constructions, i.e., at a certain stage of historical change, the syntactic structures undergoing change must be juxtaposed and must be subject to two possible grammatical analyses which lead to the same semantic interpretation. Given the assumptions and the principle, we can now go about reconstructing the origin of the construction. Our hypothesis is that the double nominative construction was originally derived from a possessive construction as in (62), and that the relation between the first two nominatives was restricted to that of the inalienable possession.

(62) a. wo-de wei tung.(11)

I-Poss. stomach ache
'My stomach aches.'

In time, with the possessive marker deleted, this type of sentences can be subject to two structural analyses which had the same interpretation as shown in (62b) and (62c).

- (62) b. wo (-de) wei tung.
 I-(Poss. Marker) stomach ache
 'My stomach ache.'
 - c. wo wei tung.
 I (topic) stomach ache
 '(Literally) I (topic), my stomach aches.'

'I have a stomach ache.'

Although English never gave rise to such a construction, it also occasionally exhibits alternative expressions involving a person as a whole and a part of the person. Compare the (a) and (b) sentences of the following examples:

- (63) a. The scene touched her.
 - b. The scene touched her heart.
- (64) a. He is a little touched.
 - b. He is a little touched in his head.

Thus, the (a) and (b) sentences in the above examples are usually regarded as synonymous, but in either case, the (a) sentence is predicated of the person as a

⁽¹¹⁾ As we don't know the exact forms that were used to indicate the possessive relation in pre-historic Chinese, these modern examples are given just to indicate the relationship between the first two nominatives.

whole while the (b) sentences are about a part of the person.

A recent paper by Huang (1980) entitled "On Substance Continuum in Chinese Concept of a Person — An Essay in Language and Metaphysics," discusses the Chinese concept of a person. He states:

Broadly speaking, a rough consensus among the Pre-chin philosophers on the metaphysics of a person is that a person is constituted of three basic substances: the physical body, the psychophysical *ch'i* [chi] and the psychospiritual *hsin* [syin]. (p. 2)

Since *syin* 'heart' is one of the basic constituents of a person, we would expect that, as far as psychological verbs are concerned, it would not make much difference whether these verbs are predicated of a man, his person, or his heart. This expectation is confirmed as can be seen by comparing the (a), (b), and (c) sentences in the following examples:⁽¹²⁾

- (65) a. ta hen gausying.
 he very happy
 - b. ta ren hen gausying. he person very happy
 - c. ta syinli hen gausying.

 he heart very happy

 'He is very happy.'
- (66) a. ta hen sheng-chi he very angry
 - b. ta ren hen sheng-chi.he person very angry
 - c. ta syinli hen sheng-chi. he heart very angry 'He is very angry.'
- (67) a. ta hen jin-jang. he very tense
 - b. ta ren hen jin-jang. he person very tense
 - c. ta syinli hen jin-jang.he heart very tense'He is very tense (psychologically).'

This renders some support to our hypothesis that the double nominative construction was originally derived from a construction involving a possessive NP as subject through the possessive marker deletion.

⁽¹²⁾ Some of these sentences are taken from Huang (1980).

There remains one important remark that we would like to make: regardless of whether our hypothesis of the origin of the construction is correct or not, the fact that it has been greatly generalized makes any theory invalid that proposes to derive the construction from an underlying possessive construction of some sort in the synchronic description of Chinese.

BIBLIOGRAPHY

- Barry, Roberta (1975) "Topic in Chinese: An Overlap of Meaning, Grammar, and Discourse Function," in *Papers from Parasession on Functionalism*, pp. 1-9, Chicago Linguistic Society, Chicago, Illinois.
- Chafe, Wallace (1970) Meaning and the Structure of Language, Chicago University
 Press.
- Chao, Y. R. (1968) A Grammar of Spoken Chinese, University of California Press, Berkeley and Los Angeles.
- Cheng, Robert L. (1967) "Universe-Scope Relations and Mandarin Noun Phrases," Project on Linguistic Analysis, Ohio State University, Series 2, No. 3, pp. 1-182.
- Fillmore, Charles J. (1968) "The Case for Case," in Emmon Bach and Robert T. Harms eds., *Universals in Linguistic Theory*, Holt, Rinehart, and Winston, New York.
- Fraser, Bruce (1970) "Idioms Within a Transformational Grammar," Foundation of Language 6, pp. 22-42.
- Gundel, Jeanette K. (1975) "Left Dislocation and the Role of Topic-Comment in Linguistics Theory," *Ohio State University Working Papers in Linguistics*, No. 18, pp. 72-131.
- Halliday, M. A. K. (1967) "Notes on Transitivity and Theme in English," *Journal of Linguistics* 3, 37-81, 199-244; 4, 179-216.
- Halliday, M. A. K. (1970) "Language Structure and Language Function," in John Lyons ed., New Horizons in Linguistics, Penguin Books, Harmonsworth, England.
- Huang, S. F. (1980) "On Substance Continuum in Chinese Concept of a Person—An Essay in Language and Metaphysics," paper presented on the first International Conference on Sinology, Taipei, Taiwan, R.O.C.
- Jang, Chi-chwen (1955a) "Gwoyu-de Da Syau Jutsz" (The Major and Minor Subject in Chinese), in Shu Chung, ed., Junggwo Yuwen Yanjyou Tsankau Dzlyau Sywanji (A Selected Collection of Papers on the Chinese Language), Jung Hwa Book Co., Peking.
- Jang, Chi-chwen (1955b) "Juyu he Weiyu-de Gwansyi" (The Relationship Between Subject and Predicate in Chinese), Yuwen Hwei Byan 9, 48-52.
- Keenan, Edward L. (1974) "The Functional Principle: Generalizing the Notion 'Subject of'," in *Papers from the Tenth Regional Meeting of the Chicago Linguistic Society*, pp. 269-83.
- Keenan, Edward L. (1976a) "Toward a Universal Definition of 'Subject'," in C. Li,

- ed., Subject and Topic, Academic Press, New York.
- Keenan, Edward L. (1976b) "Remarkable Subjects in Malagasy," in C. Li, ed., Subject and Topic, Academic Press, New York.
- Keenan, E. O. and B. Schieffelin (1976) "Topic as a Discourse Notion: A Study of Topic in the Conversation of Children and Adults," in C. Li, ed., Subject and Topic, Academic Press, New York.
- Kuno, Susumu (1972) "Functional Sentence Perspective: A Case Study from Japanese and English," *Linguistic Inquiry* 3, 269-320.
- Li, C., ed. (1976) Subject and Topic, Academic Press, New York.
- Li, Charles N. and Sandra A. Thompson (1974) "Chinese as Topic-prominent Language," unpublished paper presented at the Seventh International Conference on Sino-Tibetan Languages and Linguistics, Atlanta, Georgia.
- Li, Charles N. and Sandra A. Thompson (1976) "Subject and Topic: A New Typology of Language," in C. Li, ed., Subject and Topic, Academic Press, New York.
- Lyons, John (1977) Semantics Vol. 2, Cambridge University Press, Cambridge.
- Parker, Frank (1976) "Language Change and the Passive Voice," *Language* 52, pp. 449-460.
- Sibley, Jean E. (1980) Topicalization in Spontaneous Chinese Monologue: An Empirical Study, unpublished M. A. thesis, Hong Kong University.
- Tang, Ting-chi (1972) A Case Grammar of Spoken Chinese, Haigwo Book Co., Taipei,
- Tang, Ting-chi (1977) Studies in Transformational Grammar of Chinese, Vol. I: Movement Transformations (in Chinese), Student Book Co., Taipei.
- Teng, Shou-hsin (1974) "Double Nominatives in Chinese," Language 50, 455-73.
- Tsao, Feng-fu (1976) "Expectation' in Chinese: A Functional Analysis of Two Adverbs," in *Proceedings of the Second Annual Meeting of the Berkeley Linguistic Society*, pp. 360-74.
- Tsao, Feng-fu (1978) "Subject and Topic in Chinese," in R. Cheng, Y. C. Li and T. C. Tang, eds., Proceedings of Symposium on Chinese Linguistics, 1977 Linguistic Institute of the Linguistic Society of America, Student Book, Taipei.
- Tsao, Feng-fu (1979) A Functional Study of Topic in Chinese: The First Step Towards Discourse Analysis, Student Book, Taipei.
- Tsao, Feng-fu (1980) "Sentences in English and Chinese: An Exploration of Some Basic Syntactic Differences," in P. J. Li, G.Y. Chen, M.W. Tien and F. Tsao, eds., *Papers in Honor of Professor Lin Yu-K'eng on Her Seventieth Birthday*, Wen Shih Publishing Co., Taipei.
- Wang, Li (1956) "Juyu-de Dingyi ji Chi dzai Hanyu-jung-de Yingyung" (A Definition of Subject and Its Application in Chinese), Yuwen Hwei Byan 9, 169-180.
- Weinreich, Uriel (1669) "Problems in the Analysis of Idioms." in Jann Puhvel, ed., Substance and Structure of Language, University of California Press, Berkeley and Los Angeles.

中文的雙主語結構

曹逢甫

許多學中文的外國人都發现中文的雙主語結構很獨特。但是這種結構由來已久 ,且在現代中文中仍然威行。因此要徹底瞭解中文就非瞭解該結構不可。本文旨在 全面地研究該結構的語法現象並提出合理的分析,同時也就所得的資料及現有的語 法演變理論探討該結構產生的原因及經過,以及該結構與數百個動詞性複合詞的關 係。

本文共分五段。第一段引言之後接著是第二段對過去各家分析的客觀批判。在第三段中我們提出了我們的分析。大體上我們認為雙主語結構是「主題連鎖」中的一種特殊句型。這種分析進一步證實了筆者多年來的論點——「主題連鎖」是中文句子的基本架構。在第四段裏,我們仔細研究這種結構與動詞性複合詞如「山明水秀」,「手腦並用」等的關係。我們很清楚地可以看出動詞性複合詞是如何由這種結構演變而來。我們同時也指出這些動詞性複合詞後來進一步演變的途徑,也就是它們首先變為「述語形容詞」,再轉為「修飾性形容詞」,最後變為「副詞」。第五段深入討論該結構的歷史起源。在語法方面我們認為它是由於名詞所有格省略而引起的語法重新分析而來的。我們也提出了一個語法結構重新分析的語意限制——二種分析必須能得到非常接近的意義。根據這種分析所顯示出來的先民形而上觀與黃宣範教授最近一篇論文中所提出者不謀而合。