THE TOPIC-COMMENT AND DOUBLE SUBJECT CONSTRUCTIONS IN MANDARIN

CHINESE DISCOURSE

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1. Introduction

The main goal of this article is to examine the double subject construction in Mandarin Chinese discourse, a structure typologically characteristic of many languages in the East Asian region,[2] and argue that it expresses an inalienable relation in terms of the personal domain (cf. Bally, 1926 [1994]). It is proposed that there are two main subtypes of the double subject construction whose form and discourse features are the main topic of analysis, particularly with regard to intonational features. In addition to these two structures, it is also shown that inalienable possession can be expressed by the use of certain discourse strategies related to a reduced or truncated form of the double subject construction. For the purposes of the discourse analysis data belonging to the spoken narrative genre from the Chinese Pear/Guava Stories (see Appendix B) as well as conversational and written texts will be adduced as evidence.[2] Although this paper is not the first to suggest that the double subject construction expresses inalienability, it is nonetheless the first to attempt a systematic account of this phenomena in terms of discourse, semantic and intonational properties.

The double subject construction belongs to a spectrum of syntactic structures found in Mandarin Chinese and many other languages of the Asian region which have become generally labelled as the 'topic-comment' construction (cf. Chao 1968; Li - Thompson 1976, 1981). In fact, Li - Thompson (1976: 480) and Lin (1981: 30) suggest that double subject sentences are prototypical topic-comment sentences. Although the grammatical criteria proposed in many analyses are insufficient to uniquely define the topic-comment, it can be described in a general manner as a loosely formed structure of NP + S, characterized by the fact that there is no necessity for an argument relation to hold between the topic NP and the main verb of the comment (Chao 1968: 95-104; Li - Thompson 1976). Some analyses have also described the main function of the topic as

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providing the frame of reference for the comment (cf. Barry 1975, Gundel 1987). In the first example which follows, the topic noun phrase, *zhèī-gè fāng'àn* 这个方案 'this proposal', cannot be considered to be a core argument of the verb phrase in the predicate *méi yǒu yìjiàn* 没有意见 'to not have objections':

(1)   Topic-comment construction
        N   //   S (ENTENCE)
        这个   方案   //   我 和 他 都没
        # *zhèigè   fang'àn*   //   *wǒ hé tā dōu méi*
        this:CL proposal   //   1sg and 3sg all NEG
        有   意见
        yǒu   yìjiàn
         have   objection
        'As for this proposal, neither s/he nor I have any objections.'[3]

        Double subject sentences can also be superficially analysed as formed by a loose conjunction of NP + S. On closer examination, however, it is clear that they differ from the general form of the topic-comment presented in (1) in that the sentence acts as predicate to the initial NP as in (2) below rather than as a totally disjunct comment sentence. In other words, double subject sentences are characterised by a semantically related sentential predicate. (This is elaborated upon in section 4 below.)
        In Chinese linguistics, this type of topic-comment construction has been labelled *zhǔ-wèi wèiyǔ jù* 主谓谓语句 'sentences with a subject -predicate predicate' ; "double nominative" (Mullie 1932, 1933; Teng 1974; Tsao 1978, 1982) and "double subject" (Hashimoto 1971; Li - Thompson 1976, 1981: 92-95; Modini 1981), due to the feature of two NPs juxtaposed in sentence-initial position, where both have a subject-like role with respect to the verb in terms of semantics. For example, in (2) below, both *tā* 他 '3sg' and *yǎnjīng* 眼睛 'eye' could be regarded as the subjects of the verb *jìnshì* 近视 'short-sighted'. There is also general agreement among analyses that the predicate is typically stative or intransitive as in (2).[4]

(2)   Double subject construction
        NP1   NP2   VP
        WHOLE PART   STATIVE PREDICATE
        他   眼睛   近视
        # *tā   yǎnjīng   jìnshì*
        3sg   eye   short-sighted
        'S/he is short-sighted.'

        The semantic relationship between the two sentence-initial NPs has been described as one of inalienable possession with the first NP representing the whole and the second, the part.[5] There is, however, no overt marking of this semantic relation nor of any dependency relation between the two noun phrases, which conforms to the typological features of Chinese (see section 2 below) in contrast to Japanese double subject sentences (see Hosokawa 1994; Tsunoda 1994). The semantic function of this type of topic-comment construction is to characterize a person or the "whole" by means of a predication referring to the part (q.v. Chao 1968: 96; Teng 1974; Modini 1981: 13). With reference to this structure, Chao states that "the commonest subtype of an S-P predicate is one which describes the state or characteristic, less commonly an event, about the main subject. A personal subject may have an S-P predicate in which the subject represents a part of the body and the 'small' predicate some physiological or

psychological condition or property." Other analyses such as Tsao (1979, 1982) and Tsunoda (1994) have considered the contrastive and relating functions of the topic-comment structure for Mandarin and the double subject construction for Japanese respectively.

This paper is organized in the following way: A brief typological description of Mandarin Chinese is given in section 2, following on from the introduction in section 1. Section 3 provides an overview on the topic of inalienability in Mandarin Chinese grammar, contrasting nominal and clausal syntax in section 3.1 and discussing the syntactic and semantic characteristics of the double subject construction in section 3.2. In section 4, the main discourse analysis of inalienable possession in colloquial narratives is presented. Section 5 considers some further data in the form of conversational texts and written narratives, followed by the conclusion in section 6 which summarizes the findings for all the corpora.

In this paper, I adopt the generally held view in Chinese Linguistics that the possessor [or NP$_1$] can be pronominal as well as nominal for this construction type. Such a standpoint can be traced back as far as the earliest analyses treating the double subject construction such as Mullie (1932, 1933) or seen in more recent treatments such as Chao (1968), Teng (1974) and Li - Thompson (1976). As a consequence of this, in the main analysis in section 4, two main hypotheses are stated regarding the form of coding for inalienable possession in Mandarin: It is argued that double subject constructions of the kind exemplified by (3) are rare in colloquial narratives where the clause contains two fully lexical NPs designating the whole and the part in the same intonation unit (Chafe 1987).[6]

(3)   象   鼻子 长
        xiàng   bízǐ   cháng
        elephant   nose   long
        'Elephants have long noses.'
        OR: 'As for elephants - their trunks are long.'[7]

The Pear/Guava Stories data for Mandarin Chinese show that fully lexical possessor NPs, that is, NPs designating the whole, do not turn up in clause-initial slot directly preceding the possessed NP *within the same intonation unit*. In other words, in Mandarin Chinese, it is typical for the possessor not to be overtly lexically encoded in a pair of juxtaposed NPs when the possessed noun is a body part or related term but rather to be encoded as a pronominal form within the same intonation unit. The first hypothesis will be stated in the following terms:[8]

(i)   *The subtype of the Mandarin double subject construction with a pronominal possessor preceding a lexical possessum coincides with a single intonation unit and grammatical clause. It has the basic structure:*

        PRONOUN$_1$ - NOUN PHRASE$_2$ - VERB PHRASE (Stative).

There is a corollary to this first hypothesis:

(ii)   *The preferred strategy for coding an inalienable relation in a Mandarin double subject construction is not to mention the possessor in the same intonation unit unless in pronominal form.*

In contrast to this, the discourse data show that for double subject constructions with nominal possessors, there is an apparently disparate group of examples containing two lexical NPs which are sometimes separated by an intonation unit break, (indicated by //) sometimes by a rhetorical particle and at other times by a lexical filler such as an adverb or verb taking a sentential complement (represented by X in the hypothesis stated below). Nonetheless, the majority of examples belonging to this second subtype of the double subject construction share the feature of the lexical possessor NP falling in the preceding intonation unit, regardless of its grammatical role. This leads to postulation of the second main hypothesis:

(iii)   *The subtype of the double subject construction with a nominal possessor typically*
         contains two lexical NPs in the relation of inalienable possession occurring in consecutive intonation units that belong to the one clause. It has the basic structure:
         NOUN PHRASE$_1$ (X) // NOUN PHRASE$_2$ - VERB PHRASE $_{[Stative]}$

Note that as an alternative strategy to both the above structures, the possessor need not be encoded within the same clause as the possessum when it has already been established as a discourse entity. In this case, it may be viewed as omission of verbalization (Chafe 1987), that is, as undergoing the process known as zero anaphora. The data also show, significantly in this respect, that the body part term is always linked to a preceding "possessor" NP not more than two clauses distant, patterning then in the same way as the double subject construction with a nominal possessor which spans two intonation units. Hence, we can consider this particular instance of zero marking to be anaphoric. Examples of this type have been classified and labelled as a "reduced form of the double subject construction" in this analysis since their discourse and syntactic properties are remarkably similar to the subtype of the double subject construction with a nominal possessor and thus, we believe, worthy of inclusion for this reason.

The third claim argued for in section 4 concerns the characterization of the semantic domain encoded by the two NPs in the double subject construction in terms of the discourse data. The relation of inalienable possession between the two sentence-initial NPs is confirmed in this section by the data taken from colloquial narratives, where examples of the double subject construction prove to be restricted to those where N$_1$ refers to a person and N$_2$ to the semantic category of parts of the body and its physical condition as well as psychological states.[9] There was also one example referring to one's homeland *Zhōngguó*

中国 'China', which fits in with the semantic domain for inalienability as defined by Bally (1926) and thus, does not constitute an exception.

This contrasts to the treatment of inanimate nouns representing ordinary posssessions and concrete objects, considered in section 4.2. We compare the coding for these in the Pear/Guava Stories with relational terms to show that Mandarin Chinese excludes emotions, clothing and other simple possessions from the domain of inalienability for animate possessors in the double subject constructions.

2. Typological characteristics of Mandarin Chinese

Mandarin belongs to the Sinitic sub-family of languages of the Sino-Tibetan language family. It is a tonal language of the analytic or isolating type with a basic S-V-O word order, which some analyses claim is drifting to S-O-V (cf. *pro* Li - Thompson 1974, 1975; Huang 1978 and *contra* Sun - Givon 1985; Light 1979).

The domain of Mandarin Chinese stretches territorially from the northeast of the People's Republic of China in Manchuria, southwards through Beijing and Nanjing, then southwest to Sichuan and Yunnan provinces. It is also designated as the official language in Taiwan, Republic of China while it is one of four official languages in Singapore. In contrast to this, the non-Mandarin Sinitic languages are largely concentrated in the east and southeast of mainland China: Wu (e.g. Shanghainese) in Zhejiang and Jiangsu provinces; Min (for example, Amoy Hokkien) in Fujian province and Taiwan; Yue (for example, Cantonese) in Guangdong and Guangxi provinces and Hakka which is found scattered throughout the Yue and Min areas. Particularly Cantonese and Hokkien are predominant in many overseas Chinese communities in Southeast Asia, Australia and North America.

In general, the structural principle of Chinese grammar is for the modifier to precede the modified. Hence, attributive adjectives and relative clauses precede their head noun while not only adverbs but also locative, benefactive and instrumental phrases precede the main verb.[10]

Mandarin possesses little inflectional or derivational morphology. Verbs are not marked for tense, number or person; nouns are not marked for number (singular, dual or plural) and neither nouns nor pronouns are marked for case. Most of the few affixes and grammatical morphemes in Mandarin are atonal suffixes, one of the few productive ones being the particle --*men* 们. It is used to pluralize singular pronouns, shown under (a) of Table 1. This function is spreading however to the animate category of nouns indicating professions and occupations as in (b) of Table 1. The other main suffixes in Mandarin are used to modify verbs aspectually (for a detailed discussion, see Chappell 1992c) or to nominalize nouns and form their diminutives.

Although there may be a paucity of affixes in Mandarin, we do find on the other hand highly productive word compounding processes. The latter is typical of loan words, particularly calques and neologisms. Consider example (4) with the morpheme *diàn* 电 'electricity' and (5) with the suffix *zhǔ yì* 主义 'ideology':

Table 1:
(a)   Mandarin pronoun paradigm

	Singular	Plural	
	wǒ	*wǒmen*	'1 pl. exclusive'
	φ	*zánmen*	'1 pl. inclusive'ᵃ
iia.	*nǐ*	*nǐmen*	

Polite forms for 2nd person:
iib.	*nín*	*nínmen*

iii.	*tā*	*tāmen*

(b)   Nouns referring to occupation or profession:

xuésheng	*xuésheng men*
'student'	'students'
lǎoshī	*lǎoshī men*
'teacher'	'teachers'
tóngzhì	*tóngzhì men*
'comrade'	'comrades'ᶜ

ᵃ)   Note that the unsuffixed form *zán* can also be used to mean '1 pl. inclusive'. In some Mandarin (non-standard)
        dialects, the inclusive forms may be used to refer to 1sg.
ᵇ)   Of rare occurrence are the polite 3rd person forms *tān* and *tānmen* (see Chao 1968: 641). Note also that the
        nínmen

is not typical of the spoken language).

ᶜ)   Note that this suffix is not used for nouns designating inanimates such as *zhuōzi* 'table' (*zhuōzimen*).

(4)   电传   电脑   电影
        diàn-chuán   *diàn-nǎo*   *diàn-yǐng*
        electric-transmit   electric-brain   electric-shadow
        'telex'   'computer'   'film'
        电影院
        diànyǐng-yuàn
        electric:shadow-court
        'cinema'

(5)   民主主义   无政府主义   自由主义
        mínzhǔ-zhǔyì   *wúzhèngfǔ-zhǔyì*   *zìyóu-zhǔyì*
        people:master-ideology   no:government-ideology   free-ideology
        'democracy'   'anarchism'   'liberalism'

A special feature of Chinese and of most East and Southeast Asian languages is the use of the measure word or classifier when enumerating a noun. The classifier *tiáo* in (6) is used for nouns designating long and thin flexible objects such as ties, ribbons, rivers, ropes and snakes. The classifier construction in Mandarin has the form Numeral - Classifier –
(Adjective) - Noun:

(6)   两   条   蛇   一   条   旧   裤子
        liǎng tiáo shé   *yī tiáo jiù kùzǐ*
        two   CL   snake   one   CL   old   trousers
        'two snakes'   'one old pair of trousers'

Complex verb phrases are exemplified in (7) by *jì bù tài qīngchǔ* 记不太清楚 'unable to recall clearly' and verb complements of extent with *de* 'to V to the extent that'. Resultative verb compounds in (8) indicating action and result also characterize the Mandarin predicate. Formation of these two kinds of predicates is, similarly to word compounding exemplified above, a highly productive process.

(7)   Complex verb phrase
        我 自己 也 记 不   太   清楚
        wǒ zìjǐ yě jì bù tài qīngchǔ
        I   self   also recall NEG too   clear
        'I myself can't recall too clearly.'   (Pear II.3:17)

        弄   得   糊里糊涂   气   得   要死
        nòng de húlǐ-hútú qì de yào-sǐ
        Make EXT confused   angry EXT want-die
        'to make someone confused'; 'extremely angry'

(8)   Resultative verb compounds: V_1 (Action) -V_2 (State)

穿破   装满
chuān-pò   *zhuāng-mǎn*
wear-tattered   pack-full
'to wear something until'   'pack something until it is full'
 it is in tatters'

猜对   看花
cāi-duì   *kàn-huā*
guess-ight   look-blur
'to guess something correctly'   'to look until the eyes become blurred'

Strictly speaking, there is no adjective class in Mandarin. Adjectives or property designators are a subclass of the verb. This can be tested by the fact that when used predicatively, they can be modified by both adverbs (degree and other categories) and aspectual marking. The predicative adjective *pàng* 胖 'fat' in (9) is modified by the inceptive aspect marker *le* 了 and the adverb *yòu* 由 'again':

(9)   你   的   孩子   又   胖   了!
         #*Nǐ   de   háizǐ   yòu   pàng   le* !
          2sg DE child again fat   INC
         'Your child has got fat again!' OR: 'Your child has got even fatter!'

Hence, despite the absence of complex inflectional morphology which led many 19th century European linguists such as Schleicher (1863) to view Chinese as having no grammar, it can be seen that Mandarin not only possesses complex predicates and productive word compounding processes but also many special features such as aspect marking of the verb as opposed to tense inflections and complex noun phrases with classifier modification.

It was pointed out above that Mandarin has the basic word order of S-V-O. Relevant for the present analysis is its description as a topic-prominent language by Li - Thompson (1976) due to the high frequency of the topic-comment construction, a structure which can be considered as basic to the language as the S-V-O construction. To complicate matters further, constructions with a preposed object NP, also known as "left dislocation" and "pseudo-passive"' with the form Object NP - [Subject NP] - Verb are equally common as are sentences where the object is preposed before the verb (but not into sentence-initial position) for contrastive effect: S-O-V. These are exemplified by (10) and (11) respectively with the O-NP in plain font:

(10)   Left dislocation or pseudo-passive
         考试卷   我   都   看   了   一遍
         Kǎoshìjuǎn   wǒ   dōu   kàn -le   yī-biàn
         exam:paper   I   all   read   PFV   one-time
         'The exam papers I've gone over once.' [Notes: June 1990]

(11)   Contrastive S-O-V
         我   一点儿 困意   都   没有
         wǒ   yīdiǎnr   kùnyì   dōu   méi yǒu
         1sg   little   sleepiness   all   NEG have
         'I wasn't one bit sleepy.' [Bing 18: 267]
         [Literally: 'I any sleepiness did not have']

In addition to this, another construction known as the disposal or *bǎ* 把 construction exhibits S-O-V word order with the marker *bǎ* introducing a typically referential and definite object NP and the predicate expressing the result state affecting this object NP (S-BA-O-V) (see Thompson 1973; Chappell 1992a).

(12)   *bǎ* construction: S-- BA-O-V
　　　 他　 把　 一篓　　 全部　 带走了
　　　 Tā　 bǎ　 yī-lǒu　　 quánbù　 dài-zǒu-le
　　　 3sg　 BA　 one-basket　 all　　 carry-leave-INC
　　　 'He carried off one whole basket.' (Pear I.11:66)

When we include the double subject construction, the topic of this paper, it can be seen that nearly all types of word order are possible for simple clauses in Mandarin: S-V-O; S-O-V; S-BA-O-V; O-(S)-V; topic-comment and S-S-V for the double subject.

The use of passive constructions in Mandarin differs from that in English in two main ways, particularly with respect to the spoken language: First, passives are subject to the special semantic restriction of expressing misfortune in most contexts of spoken genres (see Chappell 1986). Note, however, that this is an areal feature of the Asian region, so-called 'adversity' passives also being found in Vietnamese, Thai, Lao, Cambodian and Japanese (see Clark 1974a, 1974b, Wierzbicka 1979b). Second, object-preposing or left-dislocation constructions which are semantically neutral provide an alternative strategy to the syntactic passive. These structures function in a similar mode to the passives of many European languages in foregrounding the object or patient NP into sentence-initial position, as in (11) above. This also serves to restrict the range of usage of the syntactic passives formed with the exponents *bèi* 被, *ràng* 让 and *jiào* 叫 (see Chappell forthcoming).

On the level of discourse, Mandarin shares with other languages of the Asian area a high frequency use of zero anaphora in preference to pronominal anaphora once a discourse entity has been established in a narrative or conversational discourse (see Chen 1986 for a detailed analysis of referent tracking in Mandarin). This point is taken up again in section 4 below. The example in (13) shows how once *tā* 他 'he' has been overtly expressed in the first clause in Mandarin, it need no longer be mentioned in the following four clauses, contrasting with the English translation and its use of *five* further instances of pronominal anaphora, including the possessive pronoun *his*, which have been underlined in the translation. Furthermore, English only uses zero anaphora twice in the coordinate clauses joined by *and*:

(13)　　 然后　 他　就　是 ...　 //
　　　　 Ránhòu tā　 jiù　 shì...　 //
　　　　 After　　 3sg then　 be
　　　　 跌倒　　　 坐在　 地上　　　 就　 把　 那个
　　　　 Diē-dǎo　　 zuò-zài dì-shàng　　 jiù　 bǎ　 nèigè
　　　　 fall-topple　 sit-at　　 ground-on　 then　 BA　 that:CL
　　　　 裤管　　　 卷　 //
　　　　 kùguǎn　　 juǎn //
　　　　 trouser:leg　 roll
　　　　 大概　　　 脚　 伤了, //
　　　　 dàgài　　　 jiǎo　 shāng-le, //
　　　　 probably　 foot　　 wounded-INC

裤管	卷起来	摸	了	一下
kùguǎn	*juǎn-qǐlái*	*mō*	*-le*	*yīxià*
trouser:leg	roll-up	rub	PFV	once

'After he'd fallen over and φ was sitting on the ground, *he* rolled *his* trouser leg.... Probably *his* foot was hurt, *he* rolled up *his* trouser leg and φ rubbed it.' (Pear I.6:88-92)

As a consequence of this, verbs and predicates which share the same subject NP can be chained together in Mandarin to form complex serial verb constructions. There is one brief example of this in (14) with the simple juxtaposition of two verbs sharing the same subject argument: *tā ... diē-dǎo zuò-zài dì-shàng* 他跌倒坐在地上'he'd fallen over and was sitting on the ground'.

The typological sketch has presented some salient grammatical features of Mandarin Chinese with respect to morphology, nominal and verbal syntax; major grammatical constructions and discourse properties which diverge markedly from English and other European languages. More detailed descriptions of the linguistic characteristics of Mandarin are to be found in Chao (1947, 1968) and Li - Thompson (1978, 1981). A discussion and overview of different syntactic means for expressing inalienability in Chinese follows, including genitive noun phrases, noun incorporation into predicate complements and the double subject construction.

3. Inalienability and the personal domain in Mandarin Chinese

There is typically no obligatory overt morphological marking of alienable versus inalienable possession at the level of nominal syntax in most of the languages of the East Asian and Southeast Asian region (see also Clark, 1994), although some analyses have made this claim for Mandarin with respect to the absence or presence of the genitive marker (discussed below). In contrast to this, alienable versus inalienable possession is frequently found coded as a primary classification in many language families, for example, Australian Pama Nyungan languages; Austronesian languages such as Paamese and Tinrin (see, respectively, Crowley 1994 and Osumi 1994) and African languages such as Ewe and Acholi (see respectively, Ameka 1994 and Bavin 1994).

At the level of syntax, there is, however, in addition to the double subject construction discussed in sections 3.2 and 4 below; a spectrum of sentence constructions in Mandarin for which the claim of expressing the part-whole relation or inalienable possession has been made. These include the following:

(a)   retained object constructions (see Lü 1965; Chu 1976) including one type of the *bǎ* 把 disposal construction with a retained object (Thompson 1973), exemplified by (14);

(b)   the passive construction with a retained object or "passive of bodily effect" , exemplified by (15), where the retained object acts like an incorporated noun not permitting attributive modification (Chappell 1986);

(c)   discontinuous double objects in intransitive predicates discussed by Mullie (1933), Teng (1974) and Modini (1981), exemplified by (16).

(14)   *bǎ* construction with a retained object:

两	人	就	动手	忙起来	，	把	鱼
liǎng	*rén*	*jiù*	*dòng-shǒu*	*máng-qǐlái,*		*bǎ*	*yú*
two	people	then	start:work	busy-INC		BA	fish

刮了	鳞
guā-le	*lín*
Scrape-PFV	scale

'The two of them then got busily to work, scaling the fish.' (Gui 1984: 143)
[literally: 'took the fish and scraped its scales off']

(15)   Passive of bodily effect with a retained object:

主管		的	德国人	...	到	内蒙古		开
zhǔguǎn		*de*	*déguórén*	...	*dào*	*Nèi-Mēnggǔ*		*kāi*
be:in:charge		L	German		to	Inner-Mongolia		fly

飞机	轰	羊 玩	让	老乡	用	步枪
fēijī	*hōng*	*yáng wán,*	*ràng*	*lǎoxiāng*	*yòng*	*bùqiāng*
plane	shoo	sheep play	PASS	villager	use	rifle

打掉了	一条	腿
Dǎ-diào-le	*yītiáo*	*tuǐ*
hit-off-PFV	one:CL	leg

'The German who was in charge ... went to Inner Mongolia, flying in a plane
to shoo the sheep away for fun, and had one of his legs shot off by gun- wielding
 villagers.'   (Beijing 1986: 24)

(16)   Discontinuous double objects:

父亲	只	是	白头发		似乎 又
fùqīn ...	*zhī*	*shì*	*bái tóu fā*		*shìhū yòu*
father	only	be	white hair		seem again

多了几根		
duō-le	*jǐ*	*gēn*
many-PFV	few--	strand

 'As for father ...he just had a few more white hairs.' (literally: 'Father --it was just that his wh
(Sophie 21: 17)

Note that in all these constructions, including the double subject, the NP designating the "whole" precedes the NP designating the "part" without exception which seems to conform to a principle of general preceding specific in Mandarin, elsewhere described in terms of universe-scope relations (see Barry 1975). It is interesting that the same case applies for a non-related language, Djaru (Tsunoda, pers. comm.).

To survey some of these constructions in Mandarin Chinese, we begin by examining both nominal and clausal syntax in this section. First we look at the use and function of the Mandarin genitive marker *de* in nominal constructions in section 3.1 in order to determine whether its presence or absence can create two classes of nouns in Mandarin Chinese resulting in just such a grammaticalized distinction between alienable and inalienable. In section 3.2, we consider this possibility for clause-level

syntax and present a detailed discussion of the argumentation concerning the syntax and semantics of the double subject construction with reference to previous studies which provides the background for section 4, where the main analysis of the double subject construction is carried out within a discourse framework.

3.1.Nominal syntax: Genitive and zeromarked complex noun phrases

According to Nichols (1986), there are two main types of morphological marking found in the languages of the world which she labels "head" and "dependent" marking. This can be exemplified by means of the genitive constructions in Hungarian and English with Hungarian representing head marking through the use of a pronominal suffix *-a* on the head noun 'house' in contrast to English which represents dependent marking through use of the suffix *-s* on the dependent possessor noun 'man':

(17)   *az   ember   ház*-a
          the   man   house-3sg
          'the man's house'[11]

          Although Nichols does not include "isolating" languages such as Chinese in her sample, Mandarin can nevertheless be classified as possessing a dependent-marked genitive construction using the suffix-like particle *de* to mark the dependent noun:

(18)   Genitive construction: NP$_1$ de NP2
          那个   先生   的   房子
          nèigè   xiānshēng   de   fángzǐ
          that: CLgentleman   GEN house
          'that gentleman's house'

This construction in (18) is used to express ordinary possession and ownership in Mandarin. The first NP slot can be filled by a pronoun. Possessive pronouns in Chinese are typically formed by suffixing *de* 的 to the basic pronoun:

(19)   Pro$_1$ de NP2
          他们   的   茶壶;   我   的   计算机
          tāmen   de   cháhú   wǒ   de   jìsuànjī
          they   GEN   teapot   I   GEN   computer
          'their teapot'   'my computer'

The fact that the genitive particle *de* clearly patterns in with the preceding dependent noun and not its following head can be tested with ellipsis: 'the gentleman's' or 'his' in (20) are both possible in Mandarin but not **de fángzǐ* 的房子[*GEN-house] (see also Dragunov 1960).

(20)   那个先生的;   他   的
          nèigè   xiānshēng   de ;   *tā*   *de*
          that:CL gentleman   GEN   3sg   GEN
          'the man's'   'his'

          From a purely syntactic point of view, in neither of the two main realizations of

the genitive construction (i) with a possessive pronoun or (ii) with a lexical noun as the dependent possessor noun, need the marker *de* be invariably present. In fact, in many cases where we would expect to find the genitive marker, it proves to be absent. This phenomenon has been described in some analyses, for example, Hashimoto (1971), as the optional ellipsis of the genitive marker, within a generative framework. In other grammars and analyses of Mandarin, it has also been suggested or claimed that the absence of the genitive marker *de* signals the relation of inalienable possession (Dragunov 1960, Rygaloff 1971, Egerod 1985, Tiee 1986 *inter alia*). In the following discussion, it will be shown that this view oversimplifies the issue to a certain degree. As a starting point, however, let us first outline the descriptions of the use of *de* given in some of these analyses:

Tiee (1986: 127) notes that "when personal pronouns are used as the equivalents of English possessives before the nouns for personal relations or before nouns of place, the marker *de* may be used but is usually omitted" but he does not attribute any meaning contrast to this phenomenon.[12] Chao (1968: 289) and Li - Thompson (1981: 115) take a similar standpoint on *de*, while Dragunov (1960: 52-54) points out that it is particularly kinship terms, but also body parts and parts of a whole which do not require marking by the possessive suffix *de* .

Under kinship terminology, he subsumes neighbours, friends, and village members. For Dragunov, the absence of genitive *de* in a PRONOUN + NOUN construction expresses 'identity' (*Identität*) rather than attribution (1960: 54). He contrasts the following sets of examples in (21) and (22). According to Dragunov, nouns such as 'father' and 'neighbour' in (21) do not require the presence of *de* whereas nouns such as 'house', 'book' and 'horse' in (22) must take what he calls an obligatory possessive suffix *de* after the relevant pronoun. In other words, kin terms are inalienably coded through zeromarking and material possessions are alienably coded through marking by *de*:

(21)   Dragunov: Examples where *de* is not required:

我	父亲 ;	你	邻舍家
wǒ	*fùqīn* ;	*nǐ*	*línshějiā*
I	father	you	neighbour
'my father'		'your neighbour'	

(22)   Dragunov: Examples where *de* is obligatory

他	的	房子	我	的	书
tā	*de*	*fángzǐ*	*wǒ*	*de*	*shū*
3sg	GEN	house	I	IGEN	book
'his/her house'			'my book'		

你	的	马
nǐ	*de*	*mǎ*
you	GEN	horse
'your horse'		

He also points out what seem to be a few exceptions although they are equally "inseparable from the person", as he remarks. These are nouns which like those in (21) do not require *de*:

(23)   你良心   他/她   魂

nǐ liáng xīn		*tā*	*hún*
you conscience,		s/he	soul
'your conscience'		'his/her soul'	

Terms such as 'conscience', 'soul' and 'mind' correspond however to core categories in many languages that are treated as inalienable by the morphology or the syntax of the given language (see introduction to this volume; Bally 1926 [1994] and Chappell - McGregor 1989).

This notwithstanding, Dragunov (1960: 52, and footnote 2) weakens his line of argumentation by proceeding to suggest that either euphony or emphasis is responsible for determining whether or not the possessive suffix *de* will be used in the case of kinship terms and related semantic categories.

In contrast to both Tiee and Dragunov, Rygaloff (1971: 145) attempts a uniform transformational account of nominals formed by *de*. Nonetheless, he too points out that *de* is an optional marker of determination in the case of "inalienable possession" where the head noun is a body part or kin term. For some reason (not discussed), he restricts the modifying constituent to a singular pronoun.

Nevertheless, on examining textual material, it can be seen that examples of zeromarked genitive expressions containing NPs designating a material possession are not rare: Examples (24) and (25) are taken from the Chinese Pear/GuavaStories (see also section 4 to follow):

(24) 他们　　把　　　他　　车子　　扶起来
　　　tāmen　*bǎ*　　*tā*　*chēzǐ*　*fú-qǐlái*
　　　they　　BA　　3sg　bike　support-up
　　　'They stood up his bike.' (Pear: I.0:132)

(25) 不　　　小心,　他　帽子　被　　吹掉了
　　　bù　*xiǎoxīn,*　*tā*　*màozǐ*　*bèi*　*chuī-diào-le,*
　　　NEG　careful　3sg　hat　PASS　blow-away-PFV
　　　'When he wasn't paying attention, his hat was blown away.'(Pear I.12:50)

From the two examples above, it can be seen that neither of the NPs *tā chēzǐ* 他车子 'his bike' nor *tā màozǐ* 他帽子 'his hat' --- uses the genitive marker *de*. This refutes, in an effective way, any hypothesis stating that *de* invariably codes alienable possession while zeromarking codes inalienability (see also discussion below).

Chappell -- Thompson (1992) carried out a discourse study of genitive expressions in Mandarin using a large database containing 440 complex relational noun phrases from informal spoken and written texts. Using a variable rules analysis, they found that semantic and pragmatic factors influencing the choice of *de* are not independent of each other. Out of 23 different variables hypothesized as potentially determinative in the use of *de*, seven were shown to be statistically significant. Three of these factors were structural, pertaining to the possessed or head noun (NP2), specifically, the addition of extra linguistic material in the form of an attributive modifier, locative postposition or a second genitive expression in tandem: These three factors all strongly disfavoured the use of *de* by speakers. This was accounted for in terms of the structural heaviness of the expression leading to omission of *de*. A fourth factor was pragmatic and pertained to givenness or recency of mention (Chafe 1987) of the entire genitive expression. This similarly disfavoured the use of *de* in the case of given referents: The rationale for this appears to be that once the relation or association is established, it need not be signalled again by use of *de*.

The three remaining factors all involved semantic properties of the possessed noun, NP2. All possessed nouns were classified into the categories of kin, body parts, spatial orientiation, location, abstract or concrete terms. Only spatial orientation, kin and location terms were shown to be statistically significant, with spatial orientation least likely to co-occur with *de* at the top of the continuum. For the semantic properties coded for the possessor noun, NP1, there was only a partial indication that first and second person possessors tend to favour absence of *de*, while third person and other human possessors favour its presence.

Chappell -- Thompson (1992) interpret this data in terms of a high correlation between the iconicity or conceptual closeness of possessor and possessed, economic motivation (see Haiman 1983, 1985) and the absence of explicit marking of the possessive relationship by *de*. They show that although the presence or absence of the genitive marker *de* cannot be defined in terms of a categorical rule, the probability of its use or non-use by speakers can be ranged along a continuum with respect to the interaction of the inherent semantics of both possessor and possessed nouns. At one end of the continuum, the combination of first person pronominal possessors with a term for spatial orientation as the possessed item is most likely to be coded *without* the genitive marker, with kin terms as the possessed noun, second highest on this scale, followed closely by location terms. At the other end of the continuum, the combination of concrete and abstract nouns as either possessor or possessed almost invariably leads to use of the genitive marker *de*. In the middle, it is surprising to find that terms for parts of the body as possessed items strongly favour co-occurrence with *de,* that is, the 'alienable' marking strategy. Contra Dragunov (1960) and Rygaloff (1971), this appears to provide evidence that this construction cannot be analysed in terms of inalienability, since it is specifically terms for body parts which are considered to be prototypically inalienable (cf. Nichols 1988, Chappell -- McGregor 1989 but *contra* see Chappell -- McGregor 1994).

In Ewe, a Kwa language of West Africa, a similar continuum holds with body part terms typically coded in the alienable possessive construction while kin and spatial orientation terms are treated as inalienables (see Ameka 1994). In fact, Ameka views terms for spatial orientation as the most inalienable relation which correlates well with the Mandarin analysis where such referents are viewed as the conceptually closest.In summary, there is a convergence of pragmatic and cognitive factors at work in determining whether or not *de* will be used; not only the inherent semantics of the nouns but also the givenness of the entire noun phrase; the presence of modifiers; the presence of a second genitive noun or a postposition all influence its use.

To conclude, the expression of inalienable posssession cannot be defined at the level of nominal syntax for Mandarin in terms of genitive NPs versus zeromarked NPs, even though a tendency has been observed for inherently relational nouns such as those referring to spatial orientation and kin not to require overt genitive marking when combined with possessor nouns treated as conceptually close, such as first person pronouns. - A range of factors interacts in a complex manner to determine the use or omission of *de.*

Although we have countered the inalienability hypothesis at the level of the noun phrase by establishing that the presence or absence of the Mandarin genitive marker *de* does not signal the existence of two distinct morphological classes of nouns in Chinese, the study of reference to parts of the body and other relational terms at the level of clausal syntax in Chinese does, however, turn up interesting correlations between coding and semantics. This is the topic of the next section.

3.2. Clause-level syntax: Genitive subject sentences versus double subject constructions

Teng (1974), Barry (1975), Li - Thompson (1976, 1981) and Modini (1981) have all suggested that the double subject construction in Mandarin expresses inalienable possession as the particular semantic relation holding between the first NP in sentence-initial position representing the "whole" and the second NP representing the "part". Of these, Teng (1974), Barry (1975) and Modini (1981) go further to attempt a classification of topic-comment constructions into the double subject sentence; the partitive construction (see section 4.3) and the general or "topicalised" construction where the topic is completely disjunct from the comment, providing its general frame of reference.[13] This last type corresponds to sentences beginning with *regarding*, *concerning* or *as for* in English and is exemplified by both sentence (1) in the introduction and (28) below. An example of each of the other two types is also presented below.

(26)   Double subject construction:
因为   我   那个   裤子,   口袋   很   短   呢
yīnwéi   wǒ   nèigè   kùzǐ,   kǒudài   hěn   duǎn   ne
Because   I   that:CL trousers pocket   very   short   RP
'Because those trousers of mine, they had very shallow pockets.'   (HK: 9)

(27)   Partitive construction:
完   了 ,   三个   警察 ,   一个   开车   的 ...
wán   le,   sānge   jǐngchá ,   yīge   kāi chē   de ...
Finish   ASP   three:CL   police   one:CL   drive car   L

追   车   去   了
zhuī   chē   qù   le
Chase   car   go   ASP
'After that, three police, one drove the car ... to chase after the bus.'   (HK: 11)

(28)   Generalised construction:
我   说   国内呢,   到处   需要   的   时候
wǒ   shuō   guónèi   ne,   dàochù   xūyào de   shíhòu
I   say   in: country RP   everywhere   need   L   time
怎么 也   看不到   警察
zěnme yě   kàn-bù-dào   jǐngchá
How   also   see-NEG-achieve   police
'I mean, back home, whenever they're needed, how come you never see the police?'   (HK: 6)

Most of these analyses agree implicitly or explicitly that the predicate of topic-comment sentences is sentential (NP-V) while, more specifically, the main verb of the double subject construction has to be stative or intransitive. Note that the same constraint applies to the double nominative construction in Japanese (see Tsunoda 1994 and Kuno 1970). For Modini (1981: 13), the double subject construction expresses attribution of some state or property of the second NP to the first-mentioned NP, while Teng (1974: 463), similarly to Chao (1968: 96) quoted above, describes its use as referring to temperament and physical condition.[14]

In addition to this, some analyses have argued that the 'double subject' construction NP$_1$ NP$_2$ VP is a reduced form of a simple S-V construction [NP$_1$ DE NP$_2$] ---VP where the subject slot is filled by a genitive noun phrase, overtly coded as such by the genitive marker *de* - for example, Hashimoto 1971 and Tang 1972 for Chinese and Kuno 1970 for analogous constructions in Japanese. The opposing view that these represent two separate constructions has been put forward in analyses such as Teng (1974) and Li - Thompson (1976).

First we briefly recapitulate the arguments used in favour of the non-derivability of double subject sentences and review some of the relevant literature which enables a more detailed description of the semantic, syntactic and discourse features of this construction to be presented. Simultaneously, the form and function of simple S-V constructions with genitive subjects are also outlined in this section due to their significance for the double subject construction in determining the syntactic status of its two sentence initial NPs. The discussion of genitive NPs given in the previous section is used as a basis for this. Consider first the following additional example of a double subject construction:

(29)   她   鼻子   贴在   窗户上
         #*tā*   *bízǐ*   *tiē-zài*   *chuānghù-shàng*
         3sg   nose   press-at   window-on
         'Her nose was pressed against the window.'

The problem for the present analysis is how to analyze the relationship between the two sentence-initial NPs: *tā* 她 '3sg' and *bízǐ* 鼻子 'nose'. Analyses which argue for the double subject construction as representing one kind of topic-comment relation would consider *tā*'3sg' as topic, and *bízǐ* 'nose' as subject of the comment (cf. Chao 1968; Teng 1974; Li - Thompson 1976; Modini 1981). In fact, some might say that the English rendering of this relationship might better be captured by the translation: 'As for her, her nose was pressed against the window'.

In the opposing view, these two sentence-initial NPs are treated as a reduced genitive construction, resulting from the deletion of the genitive marker <u>de</u> (cf. Hashimoto 1971), that is, *tā bízǐ* 她鼻子 'her nose' is generated from *tā de bízǐ* 她的鼻子 'her GEN nose'. This is akin to the argumentation for "possessor ascension" where the possessor is raised out of a genitive NPand thereby promoted into an argument role (see Introduction, this volume).

Teng (1974: 456-459) argues that this sentence type which he names 'double nominative' cannot be derived from possessive sentences, as claimed by Hashimoto (1971) and Tang (1972). Using the following two related sentences, Teng postulates two different underlying structures. The following two figures are reproduced from Teng (1974: 461):

(30)   Double subject construction
         NP   NP   VP
         他   肚子   饿
         tā   *dùzǐ*   *è*
         3sg   stomach   hungry
         'He is hungry.'

                            S

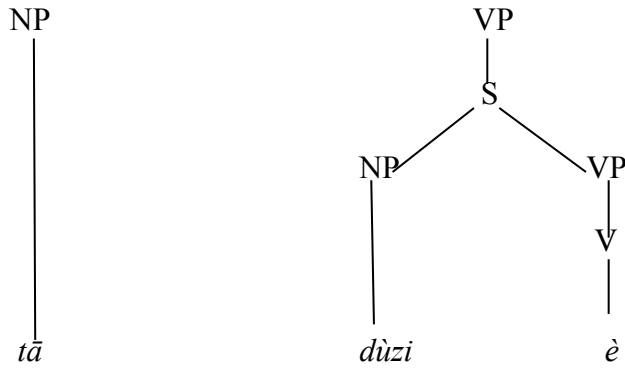NP   VP

S

NP   VP

V

tā   dùzi   è
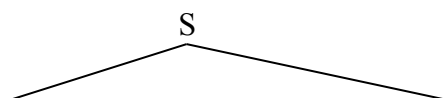
FIGURE 1:Double subject construction: NP NP VP

(31)   S-V construction with genitive subject

NP	DE	N	VP
他	的	肚子	圆
tā	*de*	*dùzǐ*	*yuán*
3sg	GEN	stomach	round

'His stomach is round.'

S

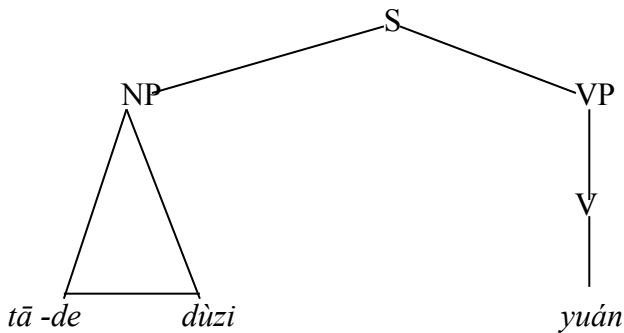NP   VP

V

tā -de   *dùzi*   *yuán*

FIGURE 2:S-V construction with genitive subject: NP DE NP VP

Sentence (30) is analyzed as having a sentence acting as its predicate, rather than a noun, verb or adjective (that is, stative verb) while (31) contains a genitive NP acting as its subject and a stative verb as its predicate. In Teng's analysis, the structure underlying (30) cannot be derived from that of (31), since the relevant NPs are dominated by different nodes.

Several further arguments have been proposed to account for these different underlying structures that are worth briefly summarizing here to show that double subject constructions are not a case of sentences with a reduced genitive NP as subject. Furthermore, these criteria will provide a useful diagnostic for determining which sentences are examples of the double subject construction in the Pear/Guava Stories data examined in section 4 which presents the main analysis.

(i)   Teng (1974: 468), Li - Thompson (1976: 481) and Tsao (1979: 34, 126-129) all
        point out that many double subject sentences have no genitive counterparts
        whatsoever. Consider Teng's examples (39a) and (40a) reproduced here as (32)

and (33):

(32)   Double subject construction:

他们	谁	都	没	来
Tāmen	*shéi*	*dōu*	*méi*	*lái*
they	whichever:one	all	NEG	come

'None of them came.'[15]

(33)   S-V sentence with genitive subject:

他们	的	谁	都	没来
*tāmen	*de*	*shéi*	*dōu*	*méi lái*
they	GEN	whichever	all	NEG come

Similarly, the following two elicited examples given in (34) and (35) sound semantically odd with a genitive NP as subject, as the possessed head noun, a body part, is interpreted as personified and thus as potentially belonging to a context where it is detached from the "owner". Note that example (30) above containing *tā dùzǐ è* 他肚子 [3sg-stomach-hungry] is the common and usual way of expressing 'S/he is hungry' in Mandarin.

(34)   他   的   肚子   饿

tā	*de*	*dùzǐ*	*è*[16]
3sg	GEN	stomach	hungry

'His/her stomach is hungry.' (This is awkward since it is viewed as a separate event from that of the person being hungry)

(35)   她   的   鼻子 贴在   窗户   上

#? tā	*de*	*bízǐ*	*tiē-zài*	*chuānghù - shàng*
3sg	GEN	nose	stick-at	window - on

'Her (detached) nose was stuck to the window.'

Example (35) is the corresponding genitive of the double subject example in (29) above.

(ii)   Mullie (1933), Teng (1974: 458) and Modini (1981: 10) show that only the double subject construction allows adverbial modification to split the two inalienably related nouns.[17] This is not possible when the clause-initial NP contains a genitive, as in (37):

(36)   Double subject construction:

他	又	//	头	疼	了
tā	*yòu*	//	*tóu*	*téng*	*le*
3sg	again	//	head	ache	PFV

'He has a headache again.'   (Teng's (10a))

(37)   S-V sentence with a genitive subject:
他的又头疼了
* *tā de yòu tóu téng le*

(38)   他   的   头   //   又   疼   了

3sg   GEN   head   //   again   ache   PFV
'His head is aching again.'

As outlined in the typological sketch of Mandarin in section 2, adverbs typically occur directly preceding the predicates they modify (cf. also Li - Thompson 1981: 322). In the genitive sentence (38), the adverb *yòu* 又 'again' modifies the verb *téng* 疼 'ache' acting as the predicate. This rule can apply, however, even where the predicate is sentential, that is, contains an idiom in the form of an S-V sentence, as in example (36) with the adverb *yòu* 又 'again' directly preceding *tóu téng* 头疼 'head-ache'. For sentences with genitive subjects, direct adverbial modification of the head noun is not permitted, shown by (37). Chao (1968: 98) also points out that the genitive NP cannot be expanded by insertion of adverbs. Only the genitive sentence in (38) is grammatically acceptable, neatly showing the distinct syntactic behaviour of double subject sentences versus sentences with genitive NPs at their head.

(iii)   In other analyses, such as Chao (1968), Li - Thompson (1976), Jeng (1978: 328) and Tsao (1978: 185; 1979: 87), it has been similarly observed that there can be an intonation break between the "topic" noun and the "subject" noun of the predicate for double subject sentences. This can be verified on insertion of a rhetorical particle such as *a (yā)* 啊 (呀), *ba* 吧, ne 呢 or *me* 嘛 (see Chappell 1992b). These two last criteria are also important for the argument to be developed below, as many of the examples from the Pear/Guava Stories data were found to contain adverbs and rhetorical particles (RP) which separate off the topic by intervening between the two nouns of the double subject, as *a* in (39) which follows:

(39)   李   一峰 啊,   父母   都   不   在   了
        #Lǐ Yīfēng a,   fùmǔ   dōu   bù   zài   le
        (name)   RP   parents all   NEG   be:at   INC
        'As for Li Yifeng, her parents have both passed away.'

Needless to say, the insertion of a rhetorical particle into a genitive NP is not a possible strategy in Mandarin, shown by the unacceptability of (40):[18]

(40)   李一峰   的啊   父母   都   不   在   了
        #Lǐ Yīfēng de   a,   fùmǔ   dōu   bù   zài   le
        (name)   GEN RP   parents   all   NEG   be:at   INC

Hence, these three criteria clearly distinguish double subject sentences from simple S-V sentences with genitive subjects in terms of syntactic behaviour.[19] Moreover, the semantic and discourse relationship between the two nouns representing whole and part for the two types of construction can consequently be expected to be quite different, belying the use of different discourse strategies by speakers.[20]

Finally, it needs to be noted that the notion of topic has been considerably revised in more recent literature to be treated purely as a discourse-level notion (cf. Givón 1983; Barry 1975 and Tsao 1979 for Chinese). This point of view suggests that defining the first constituent of a particular sentence type as the topic is not relevant at the sentence-level for this can only be ascertained within the larger boundaries of a stretch of discourse by examining, for example, how long certain NPs "persist" in a text, how many clauses separate each "mention" (see particularly Givón 1983) and the form each "mention" takes - zero, pronominal or nominal (see Tomlin 1987). This article,

however, restricts itself to defining the discourse, semantic and intonational characteristics of double subject constructions.

4. *The analysis of double subject constructions in the Chinese spoken narrative genre*
4.1. Double subjects in the Pear/Guava Stories
For the purposes of this analsyis, the Chinese Pear/Guava Stories were used as the main database. These are a set of 21 elicited colloquial narratives collected by Mary Erbaugh at National Taiwan University, Taipei, in 1976 (see section 10). The interviews were carried out following the protocol given in Chafe (1980).[21] In addition, two short conversational texts were used to compare results (see section 5).

In the transcription of the Pear/Guava narratives, equivalent to 2 1/2 hours of taping, 66 clauses with noun phrases containing complex relational expressions as head nouns were separated out of the data, regardless of the presence or absence of the genitive marker *de*.[22] That is, the 66 noun phrases contained both genitive NPs marked by *de* and juxtaposed NPs unmarked by *de*.

Of the total number of relational expressions, it was found that possession was typically not marked at all by the genitive particle *de* for 48/66 terms, that is, 72.7% of terms referring to parts of the body and related categories were not linked to the term for the overt possessor by the genitive particle *de*. In other words, the preferred syntactic structures for complex relational NPs in this domain are NP_1NP_2 or PRO_1NP_2 but not the structures NP_1 *de* NP_2 or PRO_1 *de* NP_2. Prima facie this would seem to lend some support for the traditional rules of usage for Mandarin *de* based on elicited data but only in terms of a tendency *not as a categorical rule* (see Chappell - Thompson 1992), the tendency being the absence of *de* with relational terms.[23]

Of the 66 terms, 42/66 were in clause-initial position which earmarked them for checking as potential double subject sentences while 24/66 were in object or oblique grammatical roles.[24] Amongst the 42 clause initial NPs with relational head nouns, 36 were zeromarked with the form NP_1 - NP_2. Hence, there were only 6 genitive NPs in clause-initial position marked by *de*, out of a total of 18 genitive structures in all possible syntactic positions (see section 6 below for a discussion of these).

Of most significance for this study, 22 of the 36 juxtaposed NPs formed part of a double subject or topic-comment construction. This constitutes 1.2% of the 1804 intonation units forming the 21 narratives in the Pear/Guava Stories, a small percentage when calculated in this manner. It is more significant, however, to view the total number of double subject sentences as a proportion of intonation units containing relational NPs as these are the places in the discourse where the speaker has the option of choosing this construction to express inalienable possession. The percentage using this method as a basis is 33.3% (22/66). The double subject sentences were identified as such on the basis of the criteria discussed in section 3.2 above. The remaining 14/36 examples with juxtaposed NPs in clause-initial position were all S-V-O and thus, were not further considered.

Of the 22 examples of double subject sentences, seven examples had a pronominal possessor; four had two fully lexical nominals juxtaposed in sentence-initial position while eight examples, although containing two lexical NPs, did not have these contiguously placed. Three remaining examples had the two relational terms in different clauses, in what were identified as 'reduced double subject' sentences.[25] The three main kinds of syntactic structures with examples from the corpus are given in (41), (42) and (43):

(41) $PRONOUN_1$ NP_2 VP   [7 examples]
         因为   他   个子   又   小，   //
         yīnwèi   *tā*   *gèzi*   *yòu*   *xiǎo*   //

because 3sg build again small
'Because he was smaller in build, as well.' (Pear I. 6:63)

(42)   NP₁   NP₂   VP   [12 examples]
那 个 女 孩子 // 个子 显得 比较 大
Nèi gè nǔ háizi, // gèzi xiǎnde bǐjiào dà
that:CL girl child build appear rather big
'The girl, she appeared to be quite big in build.' (Pear I.0:200)

(43)   NP₁/PRO₁ and NP₂-VP in different clauses   [3 examples]
那 三个 小 孩儿 也 走 了 //
Nèi sāngē xiǎo háir yě zǒu le, //
that three:CL small child also leave PFV
看起来 身体 很 健康 的 样子
kàn-qilai (...) shēntǐ hěn jiànkāng de yàngzi
look-INCH body very healthy DE appearance
'Those three children left too, they looked very healthy.' (Pear I.0:135-137)

This information is summarized in Table 2 which follows:

Table 2: Distribution of 66 complex relational NPs

66 complex relational NPs			
Oblique/object NPs:	24		
Clause-initial NPs:	*42*		
	66		

42 Clause-initial NPs			
1.	6	GENITIVE: NP₁ *de* NP₂	
2.	*36*	JUXTAPOSED: NP₁-NP₂	
	42		

36 Clause-initial juxtaposed NPs: NP₁-NP₂				
(i)	SVO	14		
(ii)	Double Subject	22	a. PRO₁ -NP₂-VP	7
			b. NP₁-NP₂-VP	
12				
			c. PRO₁/NP₁-X-NP₂-VPᵃ	3
Totals:		36		22

a. The symbol 'X' is used to indicate any kind of lexical filler, including a clause, separating the two NPs.

On the basis of the data analysis, a refinement of the syntactic configuration for the double subject construction is proposed: For the examples with a pronominal NP₁, the double subject sentences showed one major difference from the other group with a lexical NP₁ and NP₂: The syntactic form PRONOUN₁ - NP₂ - VP consistently fitted into

one intonation unit (Chafe 1987), whereas examples with the form NP_1- NP_2 - VP or NP_1 - X- NP_2 - VP typically had NP_1 and NP_2 in different intonation units.

There were only two examples given as (19) and (20) in Appendix A, section 8 below, which did not conform to this rule. I do not consider these to be exceptions, however, for two reasons: (a) lexical material clearly separated NP_1 from NP_2 (b) the possessor NP in each case was given, being mentioned explicitly in one of the preceding intonation units, with the effect that the double subject construction had a contrastive function. Jeng (1978: 328) has described the prosodic feature of an intonation break separating the topic from its following microsentence (or sentence-predicate) as a kind of demarcation line reinforcing the syntactic and semantic independence of topic from comment. The spoken data from the Pear/Guava Stories upholds his description exemplified with elicited data.

The data containing two lexical NPs: NP_1 - NP_2 - VP can be viewed as a spectrum, at one of whose ends is found the smallest gap between NP_1 and NP_2 of a mere intonation break[26] while at the other end, non-prosodic segmental material such as rhetorical particles, adverbs and verbs that take sentential complements separate NP_1 and NP_2. [27]

The possibility of an adverb or rhetorical particle preceding possessum NP_2 and thereby separating it from its possessor, NP_1 (see section 3.2 above) is exemplified by (44) where a rhetorical particle *ne* separates the term *nánháizi* 男孩子 'boy' from *liǎn* 脸 'face' and by (45) where an adverb *yídìng* 一定 'certainly' separates *nóngchǎng zhǔrén* 农场主人 'farmer' from *xīn-li* 心里 'heart':[28]

(44)   那个   小   男   孩子   呢   //
            Nèige   *xiǎo*   *nán*   *háizi*   *ne,*   //
            that:CL   little   male   child   RP
            脸上没有表情
            liǎn shàng méiyǒu biǎoqíng
            face-on   NEG   have   expression
            'The little boy, well, there was no expression on his face whatsoever.'
            (Pear II.7/8:77-78)

(45)   那个   农场   主人   一定...   //
            Nèige   *nóngchǎng*   *zhǔrén*   *yídǐng*   //
            that:CL   farm   owner   certainly
            心里   觉得   这个,   //
            xīnli   *juéde*   *zhè gè*   //
            heart-in   feel   this:CL
            唔 ！这   三个   真   是   胆大包天   //
            Wū! *zhè*   *sāngè*   *zhēn*   *shì*   *dǎn-dà-bāo-tiān*   //
            RP   this   three:CL   really   be   gall-big-cover-heaven
            'The owner of the farm certainly ...must have felt that this - well! - these three were really incredibly brazen.' (Pear I.7:107-108)

It is proposed that examples with two lexical NPs, regardless of whether the material intervening between the two NPs is prosodic or segmental, should be collapsed as NP1 - X - NP2 - VP and treated as one and the same phenomenon spanning at least two intonation units. Jeng (1978: 327) similarly points out that the intonation break may coincide with the boundary of an information unit. The definition of intonation unit used here follows Chafe (1987: 22) who defines it in terms of "a sequence of words combined under a single, coherent intonation contour, usually preceded by a pause"

with each intonation unit containing one piece of active information. In this analysis, X can be realized by any of the following items:

(46)   X   =   intonation break
                          rhetorical particle
                          adverb
                          verb taking a sentential complement

In fact, this analysis extends to include three examples where an entire intonation unit separates the inalienably possessed term NP$_2$ from the possessor NP$_1$. An example of this is given in (47):

(47)   那   三个   小   孩儿   也   走   了   //
         Nèi   *sāngē*   *xiǎo* *háir* *yě*   *zǒu*   *le,*   //
         that   three:CL   small   child   also   leave   PFV
         看起来   很   轻松愉快   //
         kànqilai   *hěn*   *qīngsōng yúkuài*   //
         look-INCH   very   relaxed happy
         呃 身体   很   健康   的   样子
         uh *shēntǐ* *hěn*   *jiànkāng* *de*   *yàngzi*
         uh body   very   healthy   GEN   appearance
         'Those three children left too, they looked very carefree, happy, and uh, healthy.'   (Pear I.0:135-137)

        The significance of the inclusion of such examples is that it clearly points to the special syntactic treatment of certain categories of nouns in Mandarin Chinese as inalienable possessa in contrast to other categories of nouns such as ordinary material possessions (see also sections 4.2 and 6 below). If the two lexical NPs representing whole and part are viewed as belonging to two different intonation units, then in all these cases, there is in reality zero anaphora of the possessor NP within the intonation unit and clause containing the possessum NP. This method of analysis is supported by claims made by Chafe (1987) with respect to the English spoken narrative genre. It tallies perfectly with the "one new concept at a time" constraint Chafe proposes (1987: 32) whereby a maximum of one new piece of information is expressed in each intonation unit. That is, the full lexical forms for both possessor and possessed entities are unlikely to occur in the same intonation unit, since lexical forms are typically used to identify new referents or concepts ("previously inactive" in Chafe's terminology). According to Chafe, "old" or "given" referents, for example, those already established in the discourse, tend to be "attenuated", that is, either pronominalized or not overt.
        This leads in turn to the question of whether the structure NP$_1$ - X - NP$_2$ - VP is fundamentally the same structure as that of PRONOUN$_1$ - NP$_2$ - VP, contained in a single intonation unit. If we momentarily regard both as possible syntactic configurations of the double subject construction, then on the basis of the Pear/Guava Story narratives, the preference is for omission, that is, zero anaphoric reference of the possessor NP. Although the corpus of examples is small, the preferred strategy in just over two-thirds of the examples of double subject sentences (15/22 or 68.2%) in the Chinese Pear/Guava Stories is *not to mention the possessor in the same intonation unit unless in pronominal form* as was the case for the remaining 7/22 examples. This was also confirmed by data from two further conversational texts (see section 5.1 below).
        To back up this argument, note that Teng (1974: 458, footnote 3) has pointed out that for double subject sentences with pronominal possessors, a pause usually may

not fall between the pronoun possessor and the possessed noun as in (48). It must be made after the juxtaposed noun phrase *tā fùqin* 他父亲 'his father'. Teng's examples (a) and (b) are reproduced below as (48) and (49):[29]

(48)   他   //   父亲   在   日本   做事
          tā //   *fùqin zài   Rìběn   zuò shì*
          3sg //   father at   Japan   do business
          'His/her father is working in Japan.'

(49)   他   父亲   //   在   日本   做   事
          tā   *fùqin* //   *zài*   *Rìběn zuò   shì*
          3sg   father //   at   Japan do   business
          'His/her father is working in Japan.'

          I conclude that there are two subtypes of the double subject construction in narrative discourse semantically related by virtue of expressing inalienability at this level of syntax and structurally related in sharing many syntactic features and constraints such as a stative or intransitive predicate.
          The structure PRONOUN$_1$ - NP$_2$ - VP which fits into a single intonation unit can be identified as the first subtype of the double subject construction.[30] The hypothesis made on the basis of the Chinese Pear/Guava Stories with regard to this structure is formulated in the following manner:

   (i)   *The subtype of the Mandarin double subject construction with a pronominal possessor preceding a lexical possessum coincides with a single intonation unit. It has the basic structure*: PRONOUN$_1$ - NOUN PHRASE$_2$ - VERB PHRASE (Stative)·

Thus, in the case of single intonation unit utterances, cognitively corresponding to the expression of one new piece of information, it is typical for the possessor not to be lexically coded in a pair of juxtaposed NPs heading a double subject construction but rather to be coded in pronominal form. The corollary to this hypothesis is next stated:

   (ii)   *The preferred strategy for coding an inalienable relation in a Mandarin double subject construction is not to mention the possessor in the same intonation unit unless in pronominal form.*

The configuration NP$_1$ - X // NP$_2$ - VP where the possessor is not made explicit within the same intonation unit as the possessed term is treated here as a reduced form of the double subject construction since it shares the features of a stative predicate and coding of an inalienable relation. The omission of the possessor NP can be explained at the level of discourse as a feature of discourse organization and 'information flow'. In the reduced form of the double subject construction, the overt possessor NP$_1$ is however not more than two clauses distant. Example (13), reproduced here as (50) for the reader's convenience, shows the greatest distance - that of two clauses - between possessor and possessed NPs in the data examined:

(50)   然后   他   就   是   //
          ránhòu   *tā*   *jiù*   *shì*   //
          after   3sg   then   be

跌倒　　　　坐在　　地上　　　就　　把　　那个
diē-dǎo　　 zuò-zài　 dì-shàng　 jiù　　 bǎ　　 nèi gè
　fall-topple　 sit-at　 ground-on　then　　BA　　 that:CL

裤管　　卷　　//
kùguǎn　　　 juǎn//
trouser:leg　　 roll

大概　　　脚　　伤　　了　　　　　　//
dàgài　　 jiǎo　 shāng　 le,　　　　 //
　probably　 foot　 wounded　　INC

裤管　　　　卷起来　　摸　　了　　一下
kùguǎn　　 juǎn-qilai　 mō　 -le　 yíxià
trouser:leg　　 roll-up　　rub　PFV　　once

'After he'd fallen over and was sitting on the ground, he rolled his trouser leg....
Probably his foot was hurt, he rolled up his trouser leg and rubbed it.'
(Pear I.6:88-92)

The rationale behind this discourse strategy can be explained in the following way: When the referent of a possessor term has already been established in the immediate narrative as a discourse entity, it is not necessary for speakers to specify it again through lexical coding within the same intonation unit as its possessum NP. The inherently relational nature of inalienably possessed items means that, in Chinese discourse, the existence of a possessor is inferrable from the basic semantic properties of concepts such as parts of the body and all those belonging to the personal domain. In this way, relational terms are accorded special treatment in discourse: there is no need to continually overtly specify who the possessor is, as long as the concept remains "activated" in the minds of speaker and hearer (Chafe 1980, 1987) nor do they need to keep track of the possessor through use of pronominal anaphora or other lexical means within a given segment of discourse. This leads to postulation of the second main hypothesis:

(iii)　　*The subtype of the double subject construction with a nominal possessor typically contains two lexical NPs in the relation of inalienable possession occurring in consecutive intonation units that belong to the one clause. It has the basic structure*: NOUN PHRASE$_1$ (X) // NOUN PHRASE$_2$ - VERB PHRASE $_{[Stative]}$.

A parallel can be made here with the use of the definite article in preference to the possessive pronoun to mark the personal domain and inalienable possessa in the dative constructions of many Indo-European languages (cf. Bally 1926 [1994]). Consider the German dative construction in (51) where the owner of the body part *Zähne* 'teeth' need not be coded by the possessive pronoun *deine* 'your', although this is a possible alternative. Neumann (1994) makes a stronger case in pointing out, that "in German, the possessive relation need not be made explicit: there is no possessive pronoun when the possessor is mentioned elsewhere in the clause". Typically for these dative constructions, the definite article directly precedes the relational term with the "owner", in this case, of the teeth being directly inferrable from the subject pronoun *du* '2sg:NOM':

(51)　　*Du　　 sollst　 dir　　　 die　　 (/deine)　 Zähne　 putzen*
　　　　2sg　　 should　 2sg: DAT　 the: Pl　 (/2sg:POSS)　 teeth　 clean
　　　　'You should clean your (*the) teeth.' [literally: 'You should to-yourself the

teeth clean']

As Chafe points out (1987: 26), the two typical treatments of given concepts, that is, concepts which have already been activated in the minds of speaker and hearer and established in the prior discourse is (1) to pronominalize or (2) to omit from verbalization, with the latter representing the 'maximum degree of attenuation'. This is clearly the option preferred in Chinese (see also section 2 above).

4.2.   The semantic category of the possessors and possessa
4.2.1.   *The extent of the personal domain*

The possessor NPs in juxtaposed noun phrases of the form NP_1- NP_2 referred exclusively to the main persons in the story - the little boy, the three other boys, the girl and the farmer.[31] In addition to this, there was one NP which referred to 'adults', *dàren* 大人 ,and another NP referring to generic 'you', *ren* 人. No possessor NP referred to an inanimate or animate non-human entity as the topic NP_1 in a double subject construction. This in itself is interesting since there are several props in the story which could be encoded as topic of a double subject sentence, for example, the bicycle, the hat, the goat and the stolen basket of pears.

      Concerning possessa and the characterization of the personal domain in Chinese, most terms referred to either parts of the body or closely associated features such as a person's build, age or health: six examples contained a term referring to the heart, *xīn*, 心 in the metaphorical sense of general psychological state of that person, five examples contained a term for the build or shape of the body, for example, *gèzi* 个子, *gèr* 个儿and four had 'foot', *jiǎo* 脚. There were also two examples each with *shēntǐ* 身体, 'body, health', and *niánjì* 年纪, 'age', in addition to those above. These accounted for 20/22 examples. Finally, there was one example with *dòngzuò* 动作 meaning 'movement' and one with *Zhōngguó* '中国' China. Again, it is worth noting that the six examples in the Pear/Guava Stories of terms for emotions and mental activities were *never* coded as double subjects, not even in juxtaposed NPs, but were found in genitive noun phrases with *de*. This contrast was borne out in the examination of written narratives, particularly the literary narrative discussed in section 5.2.1 below.

      It has been pointed out in section 3.1 that terms for material possessions as NP_2 are found in discourse coded both as possessa in genitive constructions with the genitive marker *de* or without the presence of *de* in juxtaposed NPs. This contrasts with elicited data which typically yields only the genitive construction for material possessions and concrete objects as possessa.

      In the 21 narratives of the Pear/Guava Stories collection, there were 18 complex NPs containing *màozi* 帽子, 'hat'. This included 3, however, where it was, contrary to the traditional rules of usage for *de,* part of an juxtaposed PRO_1 - NP_2 noun phrase, *tā màozi* 他帽子, 'his hat', with zero marking for the genitive in contrast to 15 genitively-marked NPs: NP_1 *de* NP_2. However, none of these three examples of *tā màozi* 他帽子, 'his hat', formed double subject sentences.[32]

      Confining the analysis to this data, the claim can be made that clothing, concrete objects and emotions as opposed to personality traits and physical condition are excluded from the double subject construction expressing inalienable possession of the personal domain in Mandarin Chinese.

4.2.2.   *Inanimate part-whole expressions*

There was, in addition, a total of 35 genitive and juxtaposed NPs where inanimate

nouns filled both positions of NP₁ and NP₂. These consisted of 18 genitive NPs and 17 juxtaposed NPs.[33] Not surprisingly, the grammatical role of object or oblique was the function in which the majority of these inanimate NPs were found, a reflection of the animacy hierarchy.[34] For the juxtaposed NPs, 16/17 were grammatical objects including 3 obliques and only one had the role of grammatical subject, being part of a conjoined subject, presented in (52).

(52)　　　那个　　球　　和　　　那个　　拍子
　　　　　Nèigè　qiú　hé　　nèigè　pāizi
　　　　　that:CL　ball　and　　that-CL　bat
　　　　　上面　　　　连着　　　　　一条　　线
　　　　　shàngmiàn　lián-zhe　　　yī tiáo　xiàn
　　　　　top:side　　　connect-CONT　one:CL　string
　　　　　'The ball was connected to the upper side of the bat by a thread.'
　　　　　(Pear I.O:121)

This example was not classified as a double subject construction, although similar in the stativity of the verb and the non-agent role of the subject for the following reason: Of the total number of juxtaposed complex inanimate NPs, 15/17 had a locative expression representing the head noun, such as *shàngmiàn* 上面, 'upper side, top' in (52) or *lǐtou* 里头, 'inside'. Only two contained terms for a part of a bicycle, both referring to its saddle, *zuò* 座 (or front rack). An example of this type of juxtaposed NP in the role of grammatical object is given in (53) below:

(53)　　　放在　　　他　　那个　　脚踏车　　前座　　　　　上
　　　　　fàngzài　tā　　nèige　jiǎotàchē　qiánzuò　　shàng
　　　　　place:on　3sg　that:CL　bicycle　front:seat　　on
　　　　　'(He) put it on the front rack of his bicycle.'　　　(Pear I.11:68)

　　　　In addition to these 35 examples of inanimate NPs, there were 3 complex partitive NPs also with inanimate head nouns. Two of these could be classified as subjects of topic-comment sentences and are thus discussed in section 4.3 which follows.

4.3.　Partitive constructions

In section 3.2 above, the topic-comment construction was classified into three types. In addition to double subject sentences, the main focus of this paper, two other types of structures are generally recognised. To briefly recapitulate, these are partitive sentences which also have a juxtaposed NP sentence-initially, and the general category of topicalised sentences.

　　　　In the data, 12 examples with zeromarked partitive noun phrases with a person as the head noun were noted, that is sentences where NP₁ represents a collective and NP₂, individual items or members of this collective.[35] Teng (1974: 368) and Barry (1975: 4-5) both describe this type of double subject sentence as representing a 'subset relation'.

　　　　Most of the examples in the Pear/Guava Stories data that have such a partitive subject are however S-V-O in form or contain transitive verbs in their predicate (9/12). Apart from one S-O-V example, the remaining two could be classified as a type of double subject sentence. They conform to the analysis given in section 4.1 by virtue of

the fact that the predicate is stative, being filled by a nominal (in both examples, a numeral and classifier) and by the presence of an intonation unit break between the topic NP₁, *Sāngè nanhái* 三个男孩 'three boys', and the second NP representing the subset, *yīgè* 一个 'one' or 'each'. All twelve examples refer exclusively to the scene of the three boys each eating or holding a pear - their reward for helping the hero of the story after his bike crash. The two partitive double subject sentences are reproduced below:

(54)　　　他们　　就　…　//　三个　　　人
　　　　　Tā men jiù … // sāngè　　rén
　　　　　3pl　　　then...// three:CL　person

　　　　　一人　　//　　　一个
　　　　　yīrén　　//　　yīgè
　　　　　one　　person　one:CL

　　　　　'Then they...the three of them each had one.'　　　(Pear II.5:70-71)

(55)　　　然后　　呢　　一　　抬　　眼　看见　　　//
　　　　　Ránhòu　ne　yī　tái　yǎn　kànjiàn　//
　　　　　after　　RP　one　raise　eye　see
　　　　　三个　　　　男孩　　　一　　人　　一个
　　　　　sāngè　　nánhái　yī　rén　yīge
　　　　　three:CL　　child　one　person　one:CL

　　　　　'After that, well, as soon as (he) looked up, he saw three children,
　　　　　each had one (of his pears).'　　　(Pear II.6:54-56)

　　　　　Finally, note that we could collapse this partitive category with the double subject sentences representing a part-whole relation discussed above and increase our total number to 24 examples for this corpus of data. However, the standpoint adopted in this paper is that the partitive relation, though related, is not semantically identical to the inalienable part-whole relation. The main point in this section is to show that sentences expressing a partitive relation also conform to the characteristic features of the double subject construction, particularly to the feature of an intonation break between the NP designating the collective and the NP designating the subset.

5. Double subject constructions in Chinese conversational and literary genres

In addition to the Chinese Pear/Guava Stories, another two short conversational texts were examined for the treatment of relational terms in the personal domain in order to check the first set of findings based on the spoken narrative genre. The first transcription, 'Bing', concerns a daughter recounting a three-day camping trip to the countryside in Australia to her father. The second, 'Education', is a conversation between three adults about the difficulties of enrolment in China's senior secondary education system and the hardships of studying abroad when separated from one's family. They are respectively 20 minutes and 13 minutes in length.

　　　　　Eight additional double subject sentences were found: There were two double subject sentences with lexical head NPs in different intonation units, conforming to the first claim; two double subject sentences with pronominal possessors and four reduced double subject sentences.[36] These four all contained relational terms as the subject NP

with the possessor being overtly mentioned in a preceding clause not more than two clauses distant. Each conversation is briefly analysed separately below.

5.1.   Conversational texts
5.1.1.   Conversation 1 'Bing Bing goes camping'
Conversation 1, 'Bing', had only four (4) double subject sentences out of a total of 523 intonation units (0.765 %). This is quite high however when we consider that altogether there were only 12 intonation units with relational NPs having the form NP$_1$ (*de*) NP $_2$ out of which double subject sentences could potentially be formed (33.3% of total). In fact, this is the same proportion as for double subject sentences in the Pear/Guava Stories (see section 4.1 above). Ten of these relational NPs were in juxtaposition with their possessor NPs (that is, zero marked for the genitive) and two were marked by genitive *de*.

The relational NPs could be classified in the following manner: seven with kin or social relations as head noun; two with body part terms as head noun and three with inanimate head nouns. The example of the double subject sentence with two lexical NPs in different intonation units has one of the two body part terms as NP$_2$. It is found in (56) below:

(56)   那个   狗   吧 //   还   身   怀   绝技
        Nèigè   gǒu   ba, //   hái   shēn   huái   juéjì
        That:CL dog   RP   even   body   possess unique:skill
        'As for that dog, it was very talented.'   (Bing 29:420)

In addition to this, there were eight clauses containing relational terms where the possessor was not explicit (zero anaphora). Three of this type were able to be classified as reduced double subject sentences in that they all contained a stative predicate. Two examples had an inanimate "whole" as the subject, reproduced in (57) while the other one had a body part term, reproduced in (58):

(57)   Inanimate part-wholes in reduced double subject clauses:
            (On eating dessert of icecream and fruit:)
            然后   给   你   搁在   冰淇淋旁   边儿
            Ránhòu gěi   nǐ   gēzài   bīngqílín   pángbiānr
            after   for   2sg   put:at   icecream   side

            ...味道   蛮   不   错   的
            ...wèidào   mán bú   cuò   de
            .. taste   full NEG   bad   DE

            味道   好极   了
            wèidào   hǎojí   le
              taste   good-extreme   INC

            'Then they put it (the fruit) on the side of the icecream for you ...
            the taste is really not bad, the taste is great!' (Bing 17:245-249)

(58)   Body part term in a reduced double subject clause

耳朵		也	是	耷拉		着
Ěrduǒ		yě	shì	dālā		zhe
Ear		also	be	droop		CONT

'Its ears were droopy too.' (referring to a little black dog)   (Bing 25:370)

5.1.2.   Conversation 2: 'China's Education System'

Conversation 2, 'Education', also contained four double subject sentences out of a total of 474 intonation units (0.84%). However, the percentage of double subject sentences in relation to the total number of intonation units with relational NPs is again relatively high at 12.9% (4/31). The 'Education' transcription contrasted with both the Pear/Guava Stories and 'Bing' in containing a large proportion of kin terms in relational NPs. In fact, out of a total of 31 relational NPs with the structure NP$_1$(*de*) NP$_2$, 23 referred to kin and social network , including place of work (21 without *de*, 2 with *de*); seven referred to inanimate part-whole relations and one to a person's studying abilities. The two examples of double subject sentences with kin terms both had pronominal possessors. These are given in (59) and (60):

(59)
你	女儿		够	lucky	的	我	说	//
Nǐ	nǚér		gòu	lucky	de	wǒ	shuō	//
2sg	daughter		enough	lucky	DE	1sg	say	

'Your daugher is really lucky, I mean.'(Ed. 18:270)

The second example had inverted word order - a type of 'afterthought' construction, which repeats the topic of the given passage (which is also the subject of the clause) after the predicate. This provides backup evidence for the PRO$_1$ NP$_2$ structure normally falling within the one intonation unit and, hence, Chafe's 'one new concept at a time' constraint, since even when a speaker inverts the word order as in (61), the pronominal form and head noun are kept together:

(60)
够	意思	啊 //	你	女儿
Gòu	yìsī	a //	nǐ	nǚér
quite	terrific	RP	2sg	daughter

'Really terrific, your daughter.'(Ed. 1:2-3)

The third example had two lexical NPs in different intonation units and so, conformed to specifications of the first hypothesis. It characterized a young high school boy in terms of studying abilities:

(61)
那	孩子 //	学习	特		棒
Nà	háizǐ //	xuéxí	tè		bàng
that	child	study	extremely		good

'That child was extremely good at his studies.'(Ed. 17:252-3)

Finally, out of two cases of zero anaphora of the possessor, one clause could be considered to be a reduced double subject, given in (62).[37]   This counts as the fourth example:

(62)   Reduced double subject

| 我 | 说 | 他 | 觉得 | 内疚 |
| Wǒ | shuō | tā | juéde | nèijiù |

1sg   say   3sg   feel   guilty
本来   心情   就   不   好
běnlái xīnqíng jiù   bù   hǎo
original feelings then   NEG   good
'I mean he had a guilty conscience, and he wasn't in good spirits in the first place.'
(Ed.28:435-436)

5.2. Written texts

5.2.1. *Shāfēi Nǚshì de Rìjì* 莎菲女士的日记 [Diary of Miss Sophie]

In addition to these conversational texts, two further texts of written narrative were briefly consulted in order to find out if double subject sentences might have a higher frequency in this genre, as opposed to unplanned spoken narrative and conversation. The converse proved to be true in the case of the first text chosen, a 42-page short story written in the vernacular in the late 1920s by one of China's most famous modern writers, Ding Ling, *nom de plume* of Jiang Bingzhi. This is her well-known story *Shāfēii Nǚshì de Rìjì* 莎菲女士的日记 [Diary of Miss Sophie]. There were only nine double subject sentences in this text, six of these being reduced double subject forms with the possessor NP in the preceding clause or sentence and three with pronominal possessors in the same clause. Hence, the double subject construction as a representative type of topic-comment structures would appear to be very much a feature of spoken language as opposed to written. The small number of examples in this literary narrative also conformed to our predictions stated as hypotheses above.

The majority of complex relational NPs were genitive structures, comprizing a total of 178 out of 229 relational NPs, that is, 77.7 %, particularly for body part terms and emotions. This is not surprising given that the story is written in first person and describes in detail the psychological state of the heroine as well as the physical appearance and personality traits of her friends in the form of diary entries. In other words, the genitive is the preferred structure when particular emotions, personal characteristics and physical attributes are being focussed on for the purposes of description. This is backed up by the findings of a discourse study of the genitive in Mandarin (see Chappell - Thompson 1992) where terms for abstract concepts, including emotions, perceptions and thoughts were almost categorically coded with the genitive marker *de*. Recall that the number of genitive versus zeromarked juxtaposed structures in the Pear/Guava Stories were in inverse proportion to this with 48/66 relational NPs *not* being marked by *de*, that is, only 27% were genitives. (See Section 6 below on the function of the genitive in the Pear/Guava Stories.)

5.2.2. *Běijīng Rén* 北京人 [Chinese Lives]

Secondly, one personal narrative was selected at random from the collection *Běijīng Rén*: *Yībǎi ge Pǔtōngrén de zìshù* 北京人: 一百个普通人的自述 [Chinese Lives: One hundred personal narratives from ordinary people]. This was *yǐngzi* 影子 'Shadow/Son of film' (1986: 388-392). Although this collection of narratives has been edited out of tape recordings made by the two authors, it remains nonetheless close to its original colloquial form. This may account for the fact that the selected piece patterned more like the spoken narratives and conversational texts than the short story *Diary of Miss Sophie* which can be classified as a narrative in literary style. The short narrative, five pages in length, that was selected from this anthology revealed five double subject clauses out of 101 full sentences. This is quite a high proportion in comparison with the short story by Ding Ling which contained only nine examples of this construction type spread over 42 pages of text. When we consider this in terms of

the total number of relational NPs which was 17, the proportion becomes significantly higher (29.4%). Two of these had pronominal possessors and three were reduced double subject sentences all with the possessor NP in either the preceding clause or the preceding sentence.

Two conclusions can be made on the basis of this comparison of written and spoken materials:

(a)   In general, the frequency of double subject sentences is higher in the colloquial narratives and conversational discourse examined than in the literary genre, namely the written narrative by Ding Ling. This generalization includes the edited spoken narratives.

(b)   The personal domain in Mandarin does not include emotions and feelings in either genre of the colloquial or the literary narrative: Where a term for an emotion or feeling was the head noun, the genitive marker *de* was categorically used in this corpus of data.

6. Semantic function of alienable possessa in genitive structures

When body part and relational terms turn up as possessa in genitive constructions in the Chinese Pear/Guava stories, they are given a different semantic treatment from when they occur as the inalienably possessed item in a double subject construction. This corresponds to the use of the genitive in many other languages (cf. Bally 1926 [1994]) and thus to the general semantic concept of alienability (see Chappell - McGregor 1989): I argue the case for Mandarin in this section.

In NP_1 *de* NP_2 genitive constructions in Mandarin, body parts and other relational terms are treated as individuated entities rather than as implicitly related to the person who constitutes the "whole". As such, they are found to be adjectivally modified in, for example, descriptive passages, something that does not occur for body part terms in juxtaposed NPs occurring clause-initially in double subject constructions. Teng (1974: 463) also points out that the double subject construction "rarely refers to physical description which is usually rendered by possessive patient", a finding which tallies well with the analysis of the Pear/Guava Stories data given here. By "possessive patient", Teng means nouns occurring as the head of genitive object noun phrases.

In the corpus of colloquial narratives examined, there were only 18 genitive NPs containing body part and relational terms out of the total of 66 NPs. This gives a percentage of 27.3%. Significantly, eleven of these were in object or oblique grammatical roles and only seven in subject position where they were not semantically agents: The cross-linguistic picture shows that inalienable possessa such as body parts are dispreferred in agent roles (see Allen 1964). In the following two examples, the semantic interpretation of a body part treated as an individuated entity is clearly evident. Not surprisingly, both belong to passages describing the appearance of the fruit picker in (63) and that of the girl on the bike in (64).

(63)   那个   人   的   眼睛   不   像   是
        Nèigè rén   de   yǎnjīng bù   xiàng   shì
        that:CL person L   eye   NEG   resemble be
        工作
        gōngzuò
        work
        'That person didn't look like he wanted to work.' (One could tell from looking at the expression in his eyes.)   (literally: 'That person's eyes didn't look like they
        wanted to work.')   (Pear I.0:34)

(64) 因为   她   的   头发   是   黑   颜色   的
      Yīnwéi *tā*   *de*   *tóufā*   *shì*   *hēi*   *yánsè*   *de*
      because   3sg   GEN   hair   be   black   colour   DE
      'Because her hair was black.'(Pear I.0.96)

In (63), the body part term in the genitive subject is used metaphorically for the fruit picker's attitude to work while (64) occurs in a context where the narrator is providing a detailed description of the appearance of the little girl who comes riding along on her bike and consequently focuses on the girl's features and clothing. From Bally's analysis of the personal domain (1926), it is predictable that the genitive construction would also be used in such contexts in Mandarin Chinese when particular parts of the body are being viewed as individuated entities and are not being related to the whole, that is, to the person.[38] Hence, speakers have recourse to two strategies for body part terms used in clause-initial position: In the case of detailed description of a person's appearance or in the use of metaphor, syntactic forms with a genitive subject are chosen. However, in cases where the narrators want to say something about the condition of a person in terms of a part of the body, then the body part term unmarked by genitive *de* will be chosen.

Similarly, in (65), the little boy is described as focusing his gaze on a particular part of the body to examine his injuries after the bike tumble. The NP containing the body part term is in the grammatical role of object and again, the genitive construction is used:

(65) 他   摔倒   地上   了
      Tā   *shuāidào* *dishing*   *le*
      3sg   fall-over   ground-on   INC

      自己   看   自己   的   脚
      Zìjǐ   *kàn*   *zìjǐ*   *de*   *jiǎo*
      self   look   self   L   foot
      'He had fallen over onto the ground and was gazing at his foot.'
      (Pear 8:49-51)

7. Conclusion

This analysis of the double subject construction has presented two new findings which I believe are significant with respect to its syntactic, semantic and intonational properties as shaped by the requirements of discourse. This has lead to a new characterization of the double subject construction in terms of its realization in both single intonation unit utterances and larger segments of discourse such as complex clauses. In addition to this, its semantic property of expressing inalienable possession, noted by many previous analyses, has been confirmed for the first time on the basis of discourse data. The use of zeromarked juxtaposed noun phrases in double subject clauses was also semantically contrasted with that of the genitive in Mandarin.

In the analysis of the three main texts comprising the 21 spoken narratives of the Pear/Guava Stories and two short conversational texts, 109 relational head NPs were found with the form NP$_1$-NP$_2$. Of these, 30 (27.5%), formed double subject sentences, nine having a pronominal possessor in the same intonation unit as the possessed item; and fourteen with a lexical possessor in a different intonation unit from the head noun. If, as argued in the analysis above, we include seven reduced double subject sentences, that is, stative intransitive clauses with the possessed head noun as subject but no overt

possessor ([φ POSSESSOR NP_1] POSSESSED $NP_{2(Relational)}$ - $VP_{(Stative)}$), we then arrive at the total number of 30.[39] We present this in tabular form below for all three texts:

Table 3: Classification of double subject sentences in three sets of spoken texts

	TYPE Iª	TYPE II	TYPE III	
Text:	PRO_1-NP_2 Total/Text	NP_1-NP_2	Ø - NP_2-VP	
PEAR	7	12	3	22
BING	0	1	3	4
EDUCATION	2	1	1	4
Total/Type:	9	14	7	30

a. Type I = Single intonation unit with pronominal possessor NP_1; Type II = Possessor NP_1 in preceding intonation unit separated by intonation break only, rhetorical particle, adverb or verb taking a sentential complement; Type III = Reduced double subject sentence with possessor NP_1 in a preceding clause, not more than 2 clauses distant.

    The double subject construction in Mandarin functions to express an inalienable relation in the personal domain, typically describing a person's physical or psychological condition through a related part of the body or aspect of the personality, but can also refer to kin relations. The first subtype of the double subject construction fits into a single intonation unit having a pronominal possessor and a stative predicate. The second subtype with two lexical noun phrases typically contains possessor and possessed in two different but consecutive intonation units. This is in accordance with Chafe's "one new concept at at time" constraint with respect to the introduction of new referents and the manner of their coding within the basic linguistic unit Chafe has labelled "the intonation unit": In the first subtype of the double subject construction, the possessor term is given and only the possessed noun represents a new referent, hence both can be coded into the same intonation unit, while in the second subtype where both NPs can be lexical, the intonation unit break separates the two nominals, avoiding information overload.

    Discourse organization also plays an important role, allowing the term for the possessor to be omitted (also described as undergoing zero anaphora), once this entity has been established in the discourse. Examples of this phenomenon were labeled as "reduced double subject constructions". The effect of this patterning is that, in general, two fully lexical NPs designating the possessor and possessum in double subject structures rarely occur in the same intonation unit in our spoken data.

On the basis of the data from two main genres - spoken narrative and conversation, the treatment of relational terms has also been shown to differ significantly from that of other categories of nouns. They are coded with a higher frequency as inalienable than other terms such as material possessions and inanimate entities. Terms for body parts, attributes and kin were shown to be accessible to immediate treatment as inalienable through coding in either juxtaposed NPs with the form NP₁-NP₂ at the head of a double subject clause or as sentence-initial nouns in stative clauses with the possessor omitted, that is, in reduced double subject sentences. This latter possibility was explained in terms of their discourse status as "inferrable" entities.

Body part and relational terms in genitive NPs, NP₁-*de*-NP₂, were accounted for in terms of the genitive construction serving to individuate parts of the body for the purposes of physical description or focus. These possibilities of expression including both double subject and genitive structures can be viewed as major discourse strategies available to speakers of Mandarin Chinese for coding inalienability in the personal domain as well as possession, the choice depending on communicative intent. The findings presented in this study concerning the patterning of Mandarin with respect to the coding of alienable and inalienable possession are a result of approaching the problem from a new and different angle that has examined the conjunction of nominal and clausal syntax at the levels of semantics, discourse and prosody.

8.   APPENDIX A: TOTAL OF 30 EXAMPLES OF DOUBLE SUBJECT SENTENCES FROM THE THREE TEXTS

I.   PRONOUN₁   NOUN PHRASE₂(Relational)   VP(Stative)
[9 examples]

(66)   因为   他   个子   又   小,   //
　　　　Yīnwéi   tā   gèzǐ   yòu   xiǎo,   //
　　　　because 3sg   build again small
　　　　'Because he was smaller in build, as well, ...'   (Pear I. 6: 63)

(67)   我   想   他   心里   就   会
　　　　Wǒ   xiǎng,   tā   xīn-lǐ   jiù   huì
　　　　I   think   3sg heart-in   then   be: likely
　　　　觉得   很   奇怪   //

juéde   hěn   qíguài
feel   very   strange
'I think that he would have felt very strange.' [literally: 'In his heart, he felt very strange.'] (Pear I.4: 94)

(68) 他 人   太 小   //
Tā rén   tài xiǎo   //
3sg person too small
'He was too small in build.'(Pear I.7: 40)

(69) 我 想   他 心里   在   担心   吧 //
Wǒ xiǎng tā xīnlǐ zài   dānxīn ba //
I   think 3sg heart-in PROG worry RP
'You know I think he was worrying.'(Pear I.7: 61)

(70) 因为 他 脚 也 跌伤   了 //
Yīnwéi tā jiǎo yě diēshāng   le //
because 3sg foot also fall-wound INC
'Because his foot had also been injured in falling over.'(Pear I.7: 72)

(71) 不过   他 动作   比较   笨拙一点
Búguò   tā dòngzuò   bǐjiào   bènzhuóyīdiǎn
However   3sg movement rather   clumsy a:little
'However his movements were rather clumsy.'(Pear II.1: 9)

(72) 那种   水果   好像   是   我们
Nàzhòng shuǐguǒ hǎoxiàng shì   wǒ men
that:CL fruit   seem   be   1pl
中国   没   有   //
Zhōngguó   méi   yǒu   //
China   NEG   have
'It seems that that type of fruit is something (our) China does not have.'
(Pear I.9: 7)

(73) 你 女儿   够   lucky   的 我 说   //
Nǐ nǚér   gòu   lucky   de wǒ shuō   //
2sg daughter enough lucky DE 1sg say
'Your daugher is really lucky, I'd say.'(Ed. 18:270)

(74) 够   意思   啊,   你   女儿 //
Gòu yìsī a,   nǐ   nǚér //
quite terrific RP   2sg   daughter
'Really terrific, your daughter.'(Ed. 1:2-3)

II.   NOUN PHRASE₁   NOUN PHRASE₂ (Relational)   VP(Stative)
[14 examples]

a.   Intonation break separates NP₁ from NP₂: (5/14 examples)
(76) 呃… 那个   女孩子 // 个子 显得   比较   大…
Uh…Nèige   nǚháizǐ // gèzǐ xiǎnde bǐjiào dà…

Uh that:CL girl-child build appear rather big
'Uh ... the girl, she appeared to be quite big in build.' (Pear I.0:200)

(77) 那个 小孩 …// 个儿 很 小
Nèige xiǎohái …// gè'ér hěn xiǎo
that:CL small-child build very small
'That little child... he was very small in build.' (Pear II.6:17-18)

(78) 帮 他 忙 的 是 三个 男孩子
Bāng tā máng de shì sāngè nánháizǐ
help 3sg work NOM be three:CL male-child

年纪 显得 比较 大
niánjì xiǎnde bǐjiào dà
age appear rather big
'There were three boys helping him, they seemed to be quite a bit older.'
(Pear I.0: 198-199)

(79) 所以 , 他 骑 的 时候 不 能
Suǒyi, tā qí de shíhòu bù néng
so 3sg ride L time NEG can
像 一般 大人 那个 样子 //
xiàng yìbān dàren nèigè yàngzi //
resemble ordinary adult that:CL way
两 脚 能够 踏
liǎng jiǎo nénggòu tā
two feet can pedal
'So when he rode, it wasn't like the way adults normally do it, with both feet
pedalling.'(Pear I.6: 32-34)

(79) 那 孩子, // 学习 特 棒
Nà háizǐ, // xuéxí tè bàng

that child study extremely good
'That child was extremely good at his studies.'
(Ed. 17: 252-3)

b. *Rhetorical particle separates NP₁ from NP₂:* *(2/14 examples)*

(80) 那个 小 男孩子 呢 //
Nèige xiǎo nán-háizi ne, //
that:CL little boy-child RP
脸上 没 有 表情
liǎn-shàng méi yǒu biǎoqíng
face-on NEG have expression
'The little boy, well, there was no expression on his face whatsoever.'
(Pear II.7/8: 77-78)

(81) 那个 狗 吧, // 还 身 怀 绝技
Nèigè gǒu ba, // hái shēn huái juéjì

that:CL dog   RP   even   body   possess unique:skill
'That dog, it was really talented.'   (Bing 29: 420)

c. Adverb separates NP₁ from NP₂: *(3/14 examples)*

(82)   那个   农场   主人   一定   ...   //
         Nèigè   nóngchǎng zhǔrén yídìng ...   //
         that:CL   farm   owner   certainly
         心里   觉得   这个,   //
         xīnli   juéde   zhèigè,   //
         heart-in   feel   this:CL
         唔！ 这   三个   真   是   胆大包天
//
         Wū! zhè   sāngè   zhēn   shì   dǎn-dà-bāo-tiān   //
         RP   this   three:CL   really   be   gall-big-cover-heaven
         'The owner of the farm certainly ...must have felt that   this - well! - these three
         were really incredibly brazen.'   (Pear I.7: 107-108)

(83)   那个   男孩子   就 ... //
         Nèigè   nán-háizi   jiù ... //
         that:CL male-child   then
         因为   心 ... //   慌   嘛
         yīnwèi   xīn... //   huāng   ma
         because heart   confused   RP
         'The boy then...because he was confused you see.'   (Pear I.13: 46-48)

(84)   我   想   这个   农人   可能
         wǒ   xiǎng   zhèige   nòngrén   kěnéng
         1sg   think   this:CL   farmer   perhaps
         心里   觉得 欸, // 少了   一篓   果子
         Xīn-li   juéde   ei, // shǎo-le   yī lǒu   guǒzi
         heart-in   feel   hey,   be:short-PFV   one:CL   fruit
         'I think that farmer perhaps had the feeling, hey, he was missing a basket of
         fruit.'   (Pear I.4:89-90)

d.   Verb taking sentential complement separates NP₁ from NP₂: *(4/14 examples)*

(85)   那个   男孩子   好像   个子   还   比较   小
         Nèige nán-háizi   hǎoxiàng   gèzi   hái   bǐjiào   xiǎo
         that:CL male-child   seem   build   still   rather   small
         'The boy seemed to be rather small in build.'   ('Pear I.6:31-32)

(86)   让人觉得   ... //   呃   心里头
         ràng rén juéde   ...// uh   xīnli tóu
         make   people feel   uh   heart-inside
         看见   这个   风景   非常   平静
         kànjiàn   zhèige   fēngjǐng fēicháng   píngjìng

see this:CL scenery extremely calm
'It makes you feel, um, having seen the scenery, extremely calm.'
(Pear I.0:18)

(87) … 那个 带 水果 的 小 孩子, //
… *Nèi gè dài shuǐguǒ de xiǎo háizi ,* //
... that:CL carry fruit REL small child

看起 年纪 显得 最 小
kànqi niánjì xiǎnde zuì xiǎo
seem age appear most small

'As for that small child carrying the fruit, he appeared to be the youngest in age.'
(Pear I.O:195-196)

(88) 然后 他 嗯… //
Ránhòu tā en … //
after 3sg um …

好像 脚 也 弄 ... //
hǎoxiàng jiǎo yě nong... //
Seem foot also do

弄伤 了, // 还 弄疼 了 //
nong-shāng le , // *hái nong-téng le* //
do-wound INC also do-hurt INC

'Afterwards he, um, it seemed that his foot was ... was also injured as well as painful.'   (Pear I.2:41-44)

III. REDUCED DOUBLE SUBJECT SENTENCES
[φ POSSESSOR NP₁] //NOUN PHRASE₂(Relational)VP(Stative)
[7 examples with possessor noun in a preceding clause]

(89) 然后 他 就是 ... // 跌倒 坐在
Ránhòu tā jiùshì ... // *diē-dǎo zuò zài*
after 3sg then be fall-topple sit-at

地上 就 把 那个 裤管 卷 //
dì-shàng jiù bǎ nèige kuguǎn juǎn //
ground-on then BA that:CL trouser:leg roll

大概 脚 伤 了
dàgài jiǎo shāng le
probably foot wounded INC

'After he'd ... fallen over and was sitting on the ground, he then rolled his trouser leg -.. probably he'd hurt his foot.' (Pear I.6: 90)

(90) 他 再 回 树上 // 回 树上 的 时候
tā zài huí shù-shàng // *huí shù-shàng de shíhou*
3sg again return tree-on return tree-on L time

因为 身体 很 大…
yīnwèi shēntǐ hěn dà…

because   body   very   big
'He went back up the tree again. When he went back up the tree, because his
body was very big...'   (Pear II.7/8: 17-18)

(91)   那   三个   小孩儿   也   走   了   //
         Nèi   sānge   xiǎo-háir   yě   zǒu   le   //
         That   three:CL   small-child   also   leave PFV

         看起来   很   轻松   愉快   //
         kànqilai   hěn   qīngsōng   yúkuài   //
         look-INCH   very   relaxed   happy

         呃 身体 很 健康   的   样子
         uh *shēntǐ hěn jiànkāng de   yàngzi*
         uh body very healthy DE   appearance
         'Those three children left too, they looked very carefree, happy and uh,
         healthy.' (Pear I.0: 135-137)

(92)   (On eating dessert of icecream and fruit:)
         然后   给   你   搁 在 冰淇淋   旁边儿   //
         ránhòu   gěi   nǐ   gē zài bīngqílín pángbiān ér
         after   for   2sg   put:at icecream   side
         ...味道 蛮   不   错   的
         ...*wèidao   mán   bú   cuò   de*
         ...taste   full NEG   bad   DE
         'Then they put it (the fruit) on the side of the icecream for you ...
         the taste is really not bad.'(Bing 17: 245, 248)

(93)   味道   好极   了!
         wèidao hǎo-jí   le !
         taste   good-extreme   INC
         'The taste is great!' (Bing 17: 249) [directly follows example (57) in the text,
         repeated above as (92)]

(94)   ...不   知道   哪儿   来了   一条   黑   狗 (...)//
         ...*bù   zhīdào nǎr   lái-le   yī tiáo   hēi   gǒu*(...)//
         NEG   know   where   come-PFV   one:CL   black dog

         耳朵   也   是   耷拉   着
         ěrduo   yě   shì   dāla   -zhe
         ear   also   be   droop   CONT
         '... a little black dog turned up out of nowhere. (...) Its ears were droopy too.'
         (Bing 25: 370)

(95)   我   说   他   觉得   内疚   //
         wǒ   shuō   tā   juéde   nèijiù   //
         1sg   say   3sg   feel   guilty
         本来   心情   就   不   好
         běnlái xīnqíng jiù   bù   hǎo
         original feelings then   NEG   good
         'I mean he had a guilty conscience, and he wasn't in good spirits in the first

place.'(Ed.28: 435-436)

9.   APPENDIX B

The outline of the Pear Story is reproduced here from Chafe (1980: xiii-xiv) for the convenience of the reader.

The film begins with a man picking pears on a ladder in a tree. He descends the ladder, kneels, and dumps the pears from the pocket of an apron he is wearing into one of three baskets below the tree. He removes a bandana from around his neck and wipes off one of the pears. Then he returns to the ladder and climbs back into the tree.

Toward the end of this sequence we hear the sound of a goat, and when the picker is back in the tree, a man approaches with a goat on a leash. As they pass by the baskets of pears, the goat strains toward them, but is pulled past by the man and the two of them disappear in the distance.

We see another closeup of the picker at this work, and then we see a boy approaching on a bicycle. He coasts in toward the baskets, stops, gets off his bike, looks up at the picker, puts down his bike, walks toward the baskets, again looking at the picker, picks up a pear, puts it back down, looks once more at the picker, and lifts up a basket full of pears. He puts the basket down near his bike, lifts up the bike and straddles it, picks up the basket and places it on the rack in front of his handle bars, and rides off. We again see the man continuing to pick pears.

The boy is now riding down the road, and we see a pear fall from the basket on his bike. Then we see a girl on a bicycle approaching from the other direction. As they pass, the boy turns to look at the girl, his hat flies off, and the front wheel of his bike hits a rock. The bike falls over, the basket falls off, and the pears spill out onto the ground. The boy extricates himself from under the bike, and brushes off his leg.

In the meantime we hear what turns out to be the sound of a paddleball, and then we see three boys standing there, looking at the bike boy on the ground. The three pick up the scattered pears and put them back in the basket. The bike boy sets his bike upright, and two of the other boys lift the basket of pears back onto it. The bike boy begins walking his bike in the direction he was going; while the three other boys begin walking off in the other direction.

As they walk by the bike boy's hat on the road, the boy with the paddle ball sees it, picks it up, turns around, and we hear a loud whistle as he signals to the bike boy. The bike boy stops, takes three pears out of the basket, and holds them out as the other boy approaches with the hat. They exchange the pears and the hat, and bike boy keeps going while the boy with the paddleball runs back to his two companions, to each of whom he hands a pear. They continue on, eating their pears.

The scene now changes back to the tree, where we see the picker again descending the ladder. He looks at the two baskets, where earlier there were three, points at them, backs up against the ladder, shakes his head, and tips up his hat. The three boys are now seen approaching, eating their pears. The picker watches them pass by, and they walk off into the distance.

10. PRIMARY SOURCES OF DATA

I.   Main texts:

(a)   *Chinese Pear/Guava Stories* (ca. 2 1/2 hrs)
         The Chinese Pear/Guava Stories is a transcription in Mandarin Chinese based on two and a half hours of taping (unpublished transcription ms.) made by

Francisco Y-w Hwang on behalf of Mary Erbaugh, University of Oregon, referred to by the abbreviation 'Pear' after language examples in the analysis above. This set of 21 narratives was collected by Mary Erbaugh in March 1976 at National Taiwan University (NTU) in Taipei, ROC.

The 20 participants in the interviews comprised women college students or graduates at NTU and also 5 women teachers. Following the protocol set out in Chafe (1980), all the young women were shown the film and interviewed within an hour of seeing it. They were requested not to discuss the film in the intervening period.

Two of the narratives are made by the interviewer herself, before and after seeing the film. All but one of the interviewers are native speakers of Mandarin (known as *guóyu* 国语 in Taiwan, ROC), being raised in monolingual Mandarin families. The "exception" was a fully bilingual Taiwanese-born speaker, whose proficiency enabled her to become a teacher of Mandarin to foreigners at the Stanford Center, NTU (Mary Erbaugh, pers. comm.).

I would like to thank Mary Erbaugh for making these transcriptions available.

(b) *Bing Bing goes camping* (20 mins)
This conversation was recorded and transcribed by Liu Mingchen in April 1988 in Melbourne, following the guidelines of Du Bois et al (1992) at the request of the author. A twelve-year old girl, Liu Bing Bing is the main speaker in this conversation. At the time of the conversation, Liu Bing Bing has just arrived in Australia from Beijing where she grew up. She recounts her experiences during a three-day camping trip with her English class and teachers to the Victorian countryside (Southeastern Australia) to her father. Abbreviated as 'Bing'.

(c) *China's Education System* (13 mins)
 A second conversation between three adult native speakers of Mandarin was recorded and transcribed in September, 1988, in Melbourne, following the guidelines of Du Bois et al (1992), at the request of the author. The conversation takes place at the home of a married couple from Beijing. A third person, a woman friend, also from North China (Hebei province) drops in one Saturday evening to see them and relate the latest news from China. All three are in the 40-50 years age range. They have come to Australia for study or work purposes. The visitor has, however, come on her own. The conversation mainly concerns the difficulty her daughter has experienced, like so many other students in China, in gaining a place at a polytechnic senior college (*Zhong Zhuan*) in China. In addition, other current problems in the education system in China are discussed as well as the increasingly popular trend to study abroad. Abbreviated as 'Education'/ 'Ed.'.

II. Other texts consulted

(d) *Written narrative: A short story*
Ding Ling. 1928/1956. *Shāfēi Nǔshì de Rìjì* [The Diary of Miss Sophie] pp.2-44 in *Dīng Líng xuǎnjí* [Selected Stories of Ding Ling]. Hong Kong: Wenxue Chubanshe. Abbreviated as 'Sophie' .

(e) Written narrative: A novel
Chen Ruoxi. 1984. *Guī* [Return].Taipei: Lianhe Bao Congshu.

(f) Written narratives based on edited spoken texts
Zhang Xinxin -- Sang Ye. 1986. *Běijīng Rén: Yìbǎigè pǔtōng rén de zìshù*
[Chinese Lives: One hundred personal narratives from ordinary people]
Shanghai: Shanghai Wenyi Chubanshe

(g) *Notes from a Chinese colleague*
A collection of short notes in Mandarin Chinese, gathered during the period
March - July 1990 at La Trobe University, Melbourne by the author, addressed
to her by a colleague from Beijing. Abbreviated as 'Notes'.

(h) *A conversation entitled "Hong Kong Police"* recorded in Hong Kong with
native speakers of Mandarin in July, 1990, and transcribed by Hongyin Tao,
University of California at Santa Barbara. Abbreviated as "HK".

Notes

1. See Modini (1981) for an overview of this construction in East Asian languages.
For analyses of double subject constructions in unrelated languages, see
Burridge (1994) on Middle Dutch, Hosokawa (1994) on Yawuru and Tsunoda
(1994) on Japanese.

2. I thank Wallace Chafe, Jack Du Bois, Bill McGregor, Hongyin Tao, Sandra
Thompson and Tasaku Tsunoda for their comments and discussion at various
International Conference on Sino-Tibetan Languages and Linguistics, held at
the University of Texas at Arlington in October, 1990.
The transliteration system used in this paper for the Mandarin language
examples is the *pīnyīn* system of romanization. This was officially adopted in
People's Republic of China in 1958 for this purpose and is the system most
commonly used in Chinese linguistics.
Tone is phonemic in Mandarin. The four tones are marked by the
following diacritics on the nucleus vowel of the syllable rhyme:

	Description	*Y.R. Chao relative tone pitch*	
Tone 1:	High level	ā	55
Tone 2:	High rising	á	35
Tone 3:	Low falling-rising	ǎ	214
Tone 4:	High falling	à	51

The absence of any tone diacritic indicates the neutral tone (q.v. Chao 1968),
for example, an unstressed syllable which does not receive its full tonal value.
In addition to this, many grammatical and discourse particles are atonal. Tone
sandhi has been indicated for the combinations of syllables which have citation
tones in isolation as follows: Tone 3 + Tone 3 => Tone 2 + Tone 3 [ǎ + ǎ => á
+ ǎ] ; and for individual lexical items such as yì 'one, a' which changes to
Tone 2 before another Tone 4 [yì+ à => yí+ à].
Any example preceded by the symbol # represents elicited data. The
abbreviations used in the interlinear glossing are as follows: BA = exponent of
the pretransitive or 'disposal' construction in which grammatical objects are
positioned preverbally; BEI = exponent of the passive construction; CL =
classifier; CONT = continuous aspect marker, *-zhe*; EXT = marker of the
extent construction 'so much that; INC = marker of inceptive aspect (inception
of a new state of affairs); INCH = marker of the inchoative aspect, *-qilai* ; L =
linking particle *de* which enables attributive modification, also functioning as a

subordinator and as a genitive marker; N = noun;NEG = negative marker; NOM = nominalizer, *de*; NP = noun phrase; O = object; PASS = colloquial passive markers other than; PFV = perfective aspect marker; PROG = progressive aspect marker: zài; Q = quantifier; P = discourse particle; S = subject noun; V = verb; 1sg = first person singular pronoun; 2sg = second person singular pronoun; 3sg = third person singular pronoun. Note that the symbol "//" is used to denote an intonation unit break.

4. For details of defining criteria of the double subject, see discussion in section 3.2 below.

5. Modini (1981) examines inalienable possession and double subject constructions in several East Asian languages including Mandarin. In outlining the syntactic
characteristics of the double subject construction, Teng (1974) also points to the possibility of such a semantic relationship but ultimately rejects it.

6. Extrapolation to other genres is attempted in section 5 of this analysis. - As the database proves to be quite small, however, for conversational texts, we confine most of our comments and conclusions purely to the spoken narrative genre.

7. Example (3) is from Li - Thompson (1976). See Li - Thompson (1976) and Gundel (1987) for a discussion of topic-comment constructions within a cross-linguistic perspective.

8. With respect to the analysis above, if there was no genitive marker *de* present, I treated the combination of *Pronoun + Noun + Stative* Verb as a double subject construction.

9. Note however that it can also be used for both kin and inanimate part-whole relations, for example, *shù yèzi dà* 'As for the tree, its leaves are big.' (This is a reproduction of example (23) from Li - Thompson 1976). However, none of this type of double subject construction was found in the Pear/Guava Stories data. Inanimate part-whole expressions were found typically in object and oblique positions (see section 4.2.2 below for further discussion of inanimate appositional NPs). The reason why no kin terms were found in the Pear/GuavaStories is that such a possible relationship between any of the characters was not part of the story or at least relevant in a silent film. Double subject constructions with kin terms or inanimates as the head noun are, however, found in the conversational texts discussed in section 5.

10. A more detailed typological description would however need to discuss locatives of destination goal which iconically follow the main verb (see Tai 1975); similarly resultative and extent constructions which are also postverbal express the end state of affairs.

11. This is example (2) in Nichols (1986: 57).

12. Acceptability of the N-N structure is not only determined by factors such as nominal versus pronominal but also by the person of the pronoun (1,2,3) and number (singular versus plural) in conjunction with the semantic category of the noun. See Chappell - Thompson (1992).

13. Chao (1968) also carries out a semantically-based classification of the different kinds of S-P predicates (his label for topic-comment sentences). See also Shen who (1987) applies the framework of Dik's functional grammar in the analysis of double subject sentences and Chappell (1994: section 8) for an analysis of double subject constructions as a syntactic means of expressing the language universal of (inalienable) possession in Mandarin.

14. Teng (1974: 463) is the most explicit of these analyses in specifically stating the following: "Only state and process verbs ...are observed to occur in the

sentence predicate construction. This kind of predicate only specifies an event which affects a patient, or a patient experiencing a certain state."

15.   Teng (1974: 468) describes this example as having a "subset relation" (q.v. section 4.3 below).

16.   Modini (1981: 9) also labels the similar example of? *tā de tóuténg* 'His/her head aches' as marginal in acceptability.

17.   Note, however, that Li - Thompson (1976: 487-88; foonote 9) object to adverb placement as a test of VP-hood.

18.   Note that such a sentence might occur where the speaker hesitates momentarily and uses [*a*] or some other similar morpheme as a pause particle. In this case, it would not have the same rhetorical or semantic value as [*a*] in (39) and does not, therefore, vitiate our argument. Our point of view here largely coincides with Tsao (1978: 184-185) who uses the possibility of insertion of a pause particle as a means of identifying topic in Chinese. See his examples (45) and (46).

19.   Li - Thompson (1976: 481) adduce what would be a fourth criterion, namely that of coreferential deletion. In topic-comment sentences, coreferential deletion is controlled by the topic whereas in genitive sentences it is controlled by the head noun of the genitive subject NP (erstwhile subject of the predicate sentence in an analogous topic-comment construction). For reasons of space, we will not include it here.

20.   See section 6 below on the discourse properties of sentences with genitive subjects. Chao (1968: 95-96) remarks on the difference in meaning between double subject sentences and sentences with genitive NPs at their head that the "transformation" from one to the other "may either change the style or even the sentence value. Thus, while *Ta ell.dou roan* always means 'He is gullible'. *Ta de elldou roan* may mean either (1) 'He is gullible.' or (2) 'His ear is (physically) soft.'"

21.   A resumé of the story from Chafe (1980) is reproduced in Appendix B of section 9 above. Note also that for the purposes of the data analysis, the preface at the beginning of each narrative has been discounted. This is where the interviewer explains the task to each of the 19 women students from National Taiwan University. As the explanation is merely repeated, more or less verbatim, before each narration, its exclusion is essential to avoid skewing the results. The Chinese Pear/Guava Stories are so named due to the fact that the majority of storytellers identify the unripe green fruit in the silent film as guavas instead of pears (see also Erbaugh 1990).

22.   However, as indicated, the sixty-six terms sifted out from the Pear/GuavaStories data included not only terms for body parts and emotions but also those for related categories in the personal domain such as the build or shape of a person's body, a person's age, clothing, actions and friends. The rationale for initially including all these categories was to allow for comparison of syntactic behaviour across categories, noting that all were possible candidates for treatment as inalienables according to Bally (1926 [1994]). This was also crucial for independently obtaining a definition of inalienability for Chinese. Note that all complex relational NPs, regardless of grammatical role were included.

           It is also important to note that excluded from consideration were compound verbs, adjectives and adverbs as well as four-character idioms containing body part terms from the final corpus. Examples of these categories are: *huí-tóu* [return-head] 'to turn around'; *wān-shēn* [bend-body] 'to bend over'; *zhuān-xīn* [exclusive-heart] 'with concentration'; *shāng nǎojīn*

[wound-brain] 'to rack one's brains'; *cā jiān ér guò* [rub-shoulder-and-pass] 'to brush past someone'.

23.   This is discussed in section 3.1 above.

24.   The descriptive term "clause-initial' is deliberately vague as to whether the body part head noun acts as subject of an S-V-O sentence or as subject of a sentential predicate in a topic-comment construction. In many examples, the body part term was the subject of an embedded sentence or the pivot noun in a pivot construction, that is, simultaneously the object of the matrix clause and subject of the following embedded clause. That topic-comment sentences are not restricted to basic declarative sentences is pointed out by Li - Thompson (1976: 483) who give an example of embedding. This evidence is also used to argue for the basicness of topic-comment constructions in their analysis.

25.   All examples in the corpus of double subject sentences from the spoken texts are presented in Appendix A of section 8.

26.   This was generally indicated in the transcription by double oblique lines or by a new line or comma, following in the latter case, Du Bois et al's guidelines (1993) for transcription work.

27.   The possibility of such configurations is foreshadowed in Chao (1968), Teng (1974), Li - Thompson (1976) and Modini (1981). The 12 relevant examples are listed under Group II in Appendix A of section 8.

28.   Both body part terms in these two examples occur with a locative postposition *liǎn shàng* 'face-on' and *xīnli* 'heart-in' which is common in the data. We consider these nonetheless to form double subject constructions while acknowledging this feature requires further investigation.

29.   Teng (1974: 458, footnote 3) considers such examples as (49) to have had the genitive marker deleted in the surface.

30.   As pointed out in note 8 above, this view conforms to standard practice in Chinese Linguistics, where both pronominal and nominal possessors have generally been subsumed under the one construction type of the double subject, for example, in Mullie (1932, 1933), Chao (1968) and Li - Thompson (1976, 1981).

31.   A resumé of the story is given in Appendix B of section 9 above.

32.   In two of these cases, it was the preposed direct object of a *bǎ* disposal construction (S-BA-O -V) (see Chappell 1992a). In the other, it was the subject of a *bèi* passive but not of a double subject construction. One of the *bǎ* constructions is exemplified below:

骑过		去	把	他	帽子	撞掉		了
Qí-guò		*qù*	*bǎ*	*tā*	*màozi*	*zhuàng-diào*		*le*
ride-past		go	BA	3sg	hat	knock-down		PFV

'Riding past, (she) knocked his hat off.'   (Pear I.7: 67)

33.   This excludes three appositional NPs contained in attributive modifiers which grammatically require *de* to be omitted.

34.   With regard to the group of 18 genitive NPs, 14 were objects and only 4 subjects. As they do not fit the criteria for a double subject construction, we will not discuss them further.

35.   Teng (1974) and Lü (1965) both distinguish the partitive relation from the part-whole relation in the manner described above in the text. I follow suit in the belief that the two relations, though similar, are not semantically equivalent.

36.   With such a small number of double subject sentences in each transcription, it is

not possible to absolutely confirm the findings presented above. Nonetheless, no counterexamples to the hypotheses were found.

37.   'Bing' also contained 4 partitive sentences while 'Education' had 8 partitive constructions.

38.   See also Malczewska - McGregor (1990) for a detailed analysis of the personal domain and individuation in Polish dative constructions.

39.   The total number of double subject constructions constitutes 1.1% of the combined total of intonation units of the three texts (30/2801).

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