THE DOUBLE UNACCUSATIVE CONSTRUCTION IN SINITIC LANGUAGES

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1. Introduction

The present study examines a syntactically aberrant construction in Sinitic languages which I provisionally label the double unaccusative.This construction represents a clear example of a syntactic construction where the rules of grammar, narrowly understood, are violated: in the double unaccusative, intransitive process verbs take two arguments, one more argument than the verb valency should allow, recalling the "one-too-many-argument" problem described in Shibatani (1994).

The two arguments of the intransitive verb designate possessor (PR) and possessum (PM). Furthermore, the nouns in this possessive relationship occur discontinuously and belong to different constituents. Specifically, the noun appears in the canonical position for grammatical subject (S) clause-initially while the PM appears postverbally in the canonical object position (O). An example of this construction from Cantonese is given below, following the structural formula:

Double unaccusative construction:
$\text{NOUN}_{\text{POSSESSOR}}$ $\text{VERB}_{\text{INTRANSITIVE}}$ $\text{NOUN}_{\text{PART/KIN TERM}}$

Cantonese Yue

(1) 爺樹落咗好多葉。
Poh[1] *sue*[6] *lok*[6] *joh*[2] *ho*[2] *doh*[1] *yip*[6]
CL_{REF} tree fall PFV very many leaf
'That tree has lost many leaves [more literally: The tree fell very many leaves].'[1]

In this analysis of one type of external possessor construction [EPC] in Sinitic languages, I show that the noun in the canonical preverbal position of syntactic subject acts as the affected PR or experiencer of the event while it is clearly the postverbal noun, in canonical O position, which holds an argument relation with the intransitive verb. Furthermore, I argue that this construction only allows the verb class of unaccusatives, as a specific subtype of intransitive verbs. Unaccusative verbs are intransitive verbs whose single argument is a semantic undergoer but never an agent. This leads to the claim that it is precisely the relationship of inalienable possession (see Chappell and McGregor 1995) which licenses the use of this unusual intransitive construction with two nouns, the 'extra'

noun in syntactic S position being semantically a PR.[2] Hence, I conclude that the construction does not represent a double case phenomenon at all.

This kind of construction is significant for language universals and syntactic theory in that Sinitic languages, as can be anticipated from their typological profile, do not use any overt morphological device such as an applicative affix on the verb to adjust the verb valency. Interestingly, this bears similarities to the case for the IlKeekonyokie dialect of Maasai which has various applicative devices but unexpectedly does not use them in the EPC with intransitive verbs taking two arguments (see Payne and Barshi - this volume). Nor is oblique case marking possible on the PR noun in Sinitic languages which could otherwise indicate non-argument status. The conclusion is that this syntactic configuration has to be explained first of all in terms of its semantic and discourse motivation. Hence, this Sinitic construction can provide a limiting case for setting up the common syntactic and semantic parameters for the language universals of EPCs.

2. Previous Studies in Sinitic

As is typical for EPCs and topic-comment constructions in Sinitic, this unaccusative construction has been little studied in the literature. It is a topic treated in Mullie (1932), Gao (1969), Wang (1969), Teng (1974a, 1974b) and Modini (1981) for Mandarin and Teng (1995) for Taiwanese Southern Min but, surprisingly, it is only briefly mentioned in Chao's grammar of Mandarin (1968: 323-324, 673-674). Chao classifies his three examples - all with the verb *sǐ* 'die' - as 'inverted subject' sentences. These are sentences where the subject of certain intransitive verbs can occur postverbally, to wit, with verbs of appearance and disappearance. These do not, however, permit an extra argument slot for verbs otherwise subcategorized just for one. Hence, I treat them as a separate construction type with normal valency for intransitive verbs.

Inverted subject construction
$\text{VERB}_{\text{INTRANSITIVE}}$ NOUN

Mandarin:
(2) 起霧了。
qǐ *wù* *le*
arise fog INC
'There rises a fog.' (Chao 1968: 324)

3. Typological Notes on Sinitic Languages and the Database

Sinitic languages are a sister phylum to Tibeto-Burman languages in the Sino-Tibetan language family located in East and Southeast Asia. Typologically, these tonal languages show analytic or isolating features, though in some Min languages, for example, the development of case markers and complementizers from lexical verbs and the use of a range of nominal suffixes has moved further along the path of grammaticalization than

for Mandarin. Complex allomorphy is widespread in Min dialects while tone sandhi can be used as a derivational device in many languages, for example, in the formation of diminutives in Hong Kong Cantonese. In Toishan Cantonese, aspectual distinctions such as for the perfective may also be signalled by tone change.

Mandarin is the official language in the People's Republic of China where it is called *pǔtōnghuà* 普通話 and also in Taiwan where it is known as *guóyǔ* 國語. Demographically, it has the largest number of speakers of any Sinitic language, spoken by 71.5% of the population in China in one of its dialect forms (Ramsey 1987: 87), and it covers the largest expanse of territory from Manchuria in the northeast of China to Yunnan and Sichuan provinces in the southwest. The other seven main dialect groups fall neatly into almost complementary geographical distribution with Mandarin, covering the east and southeast of China. Sinitic languages can thus be classified into three main groups following Norman (1988):

A. NORTHERN GROUP
I. Northern Chinese (Mandarin)
  (i) Northern
  (ii) Northwestern
  (iii) Xiajiang or Lower Yangtze dialects
  (iv) Southwestern

B. SINITIC LANGUAGES WITH A TRANSITIONAL CHARACTER BETWEEN THE NORTH AND SOUTH:
II. Xiang (mainly Hunan province)
III. Gan (Jiangxi province)
IV. Wu dialects such as Shanghainese (Zhejiang and southern Jiangsu provinces)

C. SINITIC LANGUAGES OF SOUTHEASTERN CHINA:
V. Min dialect group (Fujian province)
  (i) Southeastern Min - Taiwanese, Xiamen (Amoy) and Chaozhou (Teochew)
  (ii) Northeastern Min - Fuzhouese [3]

VI. Kejia or Hakka (scattered over Guangdong and Fujian provinces, Taiwan)
VII. Yue dialects such as Cantonese (Guangdong and Guangxi provinces

Some sinologists also recognize three further dialect groups: these are the Jin dialects in Shanxi province and Inner Mongolia; the Hui dialects found in parts of Anhui, Jiangxi and Zhejiang provinces; and the Pinghua dialects of Guangxi (see Sagart, to appear and Zhang (1996) for further description).

Most of the major dialect groups within Sinitic languages are represented in the database for this analysis. These are the following seven languages.

(a) Mandarin (standard mainland variety of *putonghua*; standard Taiwanese Mandarin)
(b) Changsha Xiang
(c) Nanchang Gan
(d) Shanghainese Wu
(e) Southeastern Min - Taiwanese
(f) Hong Kong Cantonese Yue
(g) Hakka[4]

Data from these dialects on unaccusative constructions are used to model the specific syntactic and semantic features of this type of external possessor construction, shared by Sinitic languages, as defined in Payne (1997) and Payne and Barshi (this volume).

3.1 Basic Word Order of Transitive Clauses in Sinitic

In general, S-V-O (or Agent-Verb-Object) is the basic word order with transitive verbs in Sinitic languages (cf. Norman 1988:10 and Ramsey 1987: 73). This has been confirmed in recent studies such as Sun (1996) and Tao (1996) for Mandarin and in my own database for seven of the Sinitic languages. Tao's findings in a discourse study of a large corpus of conversational Mandarin show that postverbal position is the canonical position for transitive objects while transitive agents occur only preverbally (Tao 1996: 122, 201). Matthews and Yip (1994) similarly posit S-V-O as one of the basic word orders for Cantonese. Hence, my analysis takes A-V-O and S-V as the basic word orders for transitive and intransitive predicates respectively.

3.2 Transitivity in Chinese Languages

The claim is made in the present analysis that the type of EPC under consideration in Sinitic languages is used exclusively with two argument clauses that contain verbs that, in all other syntactic environments, are prototypical one-argument intransitive verbs as far as their case frame goes.

But what are the parameters of transitivity in Sinitic? This needs to be clearly delineated. First, I take transitivity to be a property of the whole clause as in Halliday (1967) and Hopper and Thompson (1980). Verbs which are labile or ambitransitive were excluded from the investigation. These are verbs similar to English *walk, melt* or *march* which can form both transitive and intransitive clauses, the transitive usage being licensed by the causative feature of the construction.

(3) *They walked for many miles.*
(4) *He walked the dog.*

Chao (1968: chapter 8) defines intransitive verbs in Mandarin as the type which only allows cognate objects such as verbal classifiers, as opposed to transitive verbs

which can take any kind of object; Chao proceeds to classify transitive and intransitive verbs into 9 categories. He considers areas of class overlap and finds that, similarly to English, Mandarin has verbs that can form both types of clauses, such as *xià* 下 'fall, move in a downwards direction', which has a transitive usage in *xià-qí* 'play chess' and *xià-dàn* 'lay eggs'.

I thus excluded pseudo-transitive verbs comparable to English *eat,* which takes either a cognate object from the domain of food or can be used intransitively with the external object understood:

(5) *Can you ring back later? We're eating right now.* [$Verb_{INTR}$]
(6) *Jess is eating her favourite Italian dessert, tiramisu.* [$Verb_{TRANS}$]

Nor could any of the verbs be nonvolitional, such as *forget*, *lose* or *drop* which have a transitive case frame in English and also in many Sinitic languages:

(7) *You dropped your pen on the floor.* **You dropped.*

A final diagnostic was that none of the clauses could be passivized:

(8) **The tree was fallen many leaves by the wind.*

Wierzbicka (in press) defines prototypical transitivity in terms of an agent, A^{PR}, who "does something to some thing [O^{PR}], because of which, something else happens to O^{PR} at the same time. After this, O^{PR} is not like before. A^{PR} wanted this to happen." She further identifies three core semantic roles of AGENT, PATIENT and UNDERGOER. In her view, S or subject is not a semantic primitive but only a grammatical notion found in certain syntactic contexts that cannot be "linked with any identifiable semantic prototype". I adopt her useful distinction between PATIENT to which an agent does something (found only in prototypical transitive clauses) and UNDERGOER to which something happens (applicable to intransitive clauses of the unaccusative type: *The little boy fell over; I'm scared; You got hurt*). Since the general semantic role of AGENT is defined by Wierzbicka in terms of "X did something," it is thus applicable to agent NPs in both transitive and intransitive clauses (known as 'unergative' clauses: *I cried*; *She snored loudly; The child jumped up and down*). Wierzbicka defines grammaticalized TOPIC as "I want to say something about Y".

The predicates in the EPC describe a process involving a change of state that directly affects the UNDERGOER, coded by the noun slotted into postverbal position. This event affects an inalienable PR coded by the noun in preverbal position, the TOPIC. There is no possibility for a prototypical transitive interpretation of a volitional agent acting upon a patient to achieve some desired result state, nor is any degree of transitivity possible such as a causative interpretation. For example, with expressions such as the Mandarin unaccusative EP: *Tā yǎ-le sǎngzi* 她哑了嗓子'3SG go:hoarse PFV throat' 'She went hoarse in the throat', the "surface subject" *tā* '3sg' is not interpreted as responsible for this event in the sense of making her own throat go hoarse (for example, by talking or shouting too much). If a speaker wants to attribute responsibility to the subject, then a

causative type of resultative compound verb is more appropriate: *Tā kū-yǎ le sǎngzi* 她哭哑了嗓子‘3SG cry:hoarse PFV throat ‘She cried her throat hoarse’ in the sense that she did something which caused the resultant state but without necessarily wanting this to happen.

4. Possession Constructions in Mandarin: Double Subjects and Double Objects

The unaccusative construction is not the only EPC which can be found in Sinitic languages. For the purpose of contrast with the main analysis, I briefly digress to describe some other EPCs, using Mandarin data.

4.1 Double Subject Construction

In Chappell (1995), I investigated double subject constructions in Mandarin Chinese discourse, showing that these code an inalienable relationship between a person and body parts, as well as other aspects of the personal domain such as kin and units of social organization.

The double subject or double nominative construction is so labelled due to the feature of the two nouns juxtaposed in sentence-initial position which appear to share a subject-like role vis-à-vis the stative verb in the predicate. Using the semantico-syntactic primes proposed by Dixon (1979, 1994) of A, S and O, and similarly by Comrie (1981), we could label this construction as S_1-S_2-V:

Double subject construction
NP_{WHOLE} NP_{PART} $VP_{STATIVE}$

(9) *wǒ* *xīn* *hán* 我心寒。
1SG heart cold
‘I felt discouraged.’ [Bai 1993: 56]

I showed in Chappell (1995) that for spoken Mandarin from conversational and narrative discourse, lexical NPs as PRs are coded into an intonationally separate unit, preceding the clause with a stative predicate that contains the part noun.

TOPIC-NP_{WHOLE} // SUBJECT-NP_{PART} $VP_{STATIVE}$

(10) 那個女孩子个子显得比较大。
Nàge nǚhái zi// gèzi xiǎnde bǐjiào dà
that:CL girl:child build appear rather big
‘That girl, she appeared to be quite big in build.’ [Pear 1.0: 200]

In contrast to this, pronominal PRs are typically coded into the same intonation unit or written clause:

(11) 他朋友多人缘儿好。

Tā	*péngyou*	*duō,*	*rényuánr*	*hǎo*.
3SG	friend	many	popularity	good

'He had lots of friends and was very popular [lit. Him - friends were many and popularity good.' [Bai 1993: 51]

The first noun could be categorized as a kind of topic NP when it occurs in its own intonation unit as in (10) above (see also Tao 1996 for a discussion of NP intonation units in Mandarin); it encodes something like affected PR in the pronominal subtype, exemplified in (9) and (11). Apart from the obvious word order distinction, this construction differs from the unaccusative EPC in two main features: (i) the predicate is stative, that is, not the required intransitive process type; and (ii) a person's physical or psychological condition is described, neutral in effect for the PR; that is, neither beneficial nor adversative.

4.2 A Triplet of Constructions with Discontinuous Double Objects

In Mandarin, there are two construction types with transitive verbs that allow what appear to be discontinuous constituents and one with intransitive verbs; these are (i) the passive (of bodily effect), (ii) the *bǎ* construction (with a retained object) and (iii) the unaccusative construction - the subject of this study. Using syntactic primes again in a first *ansatz* on this problem, these three constructions appear to be aligned on an ergative principle of either O_1 PASSIVE MARKER - A - V - O_2 for the passive; A - BA - O_1 - V - O_2 for the *bǎ* construction (that is, direct objects or semantic patients of transitive verbs); and S_1 - V - S_2 for the unaccusative where S is understood as the semantic undergoer of an intransitive verb. All three constructions are semantically united by virtue of the PR and PM representing the patient or undergoer while, syntactically, they share the feature of a discontinuous constituent for the whole and part nouns, described elsewhere in the literature as 'double case'. This appears to confirm Payne and Barshi's hypothesis (this volume) that unaccusative subjects and direct objects (of non EPCs) are highest in accessibility for the formation of EPCs. Examples of each are given below.

(i) Passive of bodily effect: O_1 - PASSIVE MARKER (*ràng/bèi/jiào*) - Agent - V - O_2

The following example illustrates the passive of bodily effect. The passivized subject *zhǔguǎn de Déguórén* 主管的德国人 'the German in charge' holds a possessive relationship with the retained object (postverbal noun) *tǔi* 腿'leg' (see Chappell 1986):

(12) 主管的德国人到内蒙古去开

Zhǔguǎn	*de*	*Déguórén*	*dào*	*Nèi-Měnggǔ*	*kāi*
be:in:charge	GEN	German	to	Inner-Mongolia	fly

飞机轰羊完，让老乡用步枪
fēijī hōng yáng wán, ràng lǎoxiāng yòng bùqiāng
plane scare sheep play PASS villager use rifle

打掉了一条腿。
dǎ-diào le yītiáo tuǐ
hit-drop PFV one:CL leg

'The German who was in charge flew to Inner Mongolia to have fun chasing sheep but had one of his legs shot off by gun-wielding villagers.'
[Beijing 1986: 24]

(ii) *Bǎ* construction with a retained object:
Agent - TRANSITIVE MARKER (*bǎ*) - O_1 - V - O_2

Similarly, in a subtype of the *bǎ* construction, the noun representing the whole and the PR occurs preverbally (but after the transitive marker *bǎ* as its object), while the noun representing the part is retained postverbally (see also Thompson 1973).

(13) 两个人就动手忙起来，把鱼刮掉了鳞。
Liǎngge rén jiù dòng-shǒu máng-qǐlai, bǎ yú guā le lín.
two:CL person then start:work busy-INC BA fish scrape PFV scale
'Then the two of them got busily to work, scaling the fish' (more literally: took the fish and scraped off their scales).' [Chen: 1984: 183]

(iii) Unaccusative external possession construction
$NOUN_{POSSESSOR}$ $VERB_{INTRANSITIVE}$ $NOUN_{POSSESSUM\ [PART/KIN\ TERM]}$

I analyse the third case of double semantic undergoers below. This third construction type differs from the the passive of bodily effect and the *bǎ* construction with a retained object, in that the main verb is not a transitive but an intransitive unaccusative one: S_1 - V - S_2.

The following example from a Mandarin novel codes a relationship between a mass noun and individual items:

(14) 父亲只是白头发似乎又多了几根。
Fùqin zhǐ shi <u>bái tóufa</u> shu yòu duō-le
father only be white hair seem again be:many-PFV

<u>jǐ gēn</u>
few strand (CLF)
'As for father, he just had a few more white hairs.'
(more literally: 'As for father - just white hair seems to have increased a few strands.') [Ding 21:17]

All four types of possession construction in Mandarin are united by the syntactic feature of the whole or PR noun preceding the part; and more significantly, by the general feature of the constructional semantics in coding inalienable possession - something happens to the whole in terms of an event or state affecting a part.

5. The Unaccusative EPC in Sinitic Languages

In the main analysis which follows, the unaccusative EPC is examined in detail with respect to the seven Sinitic languages of Taiwanese Southern Min, Shanghainese Wu, Changsha Xiang, Cantonese Yue, Gan, Hakka and Mandarin.

5.1 Grammatical Relations in the Unaccusative EPC

A defining feature of intransitive and stative verbs is that they take only one argument position. The EPC is striking in that two nouns accompany an intransitive verb and both appear at first blush to have the identical semantic role of undergoer and syntactic role of S. For this reason, I use the term 'double unaccusative'.

Consider the following pair of agnates which shows a semantic relation between the EPC in (15) and its counterpart with a genitive subject in (16):

Unaccusative construction
[NP $_{possessor}$]$_{patient}$ VERB $_{intransitive\ process}$ [NP $_{possessum}$]$_{patient}$

Taiwanese Southern Min:
(15) 伊跛着脚。
I *pái* *tioh* *tǒh* *khah*
3SG lame RES left leg
'He has gone lame in the left leg.'

Genitive subject construction:
[$N_{possessor}$ (GEN) $N_{possessum}$]$_{patient}$ $VERB_{intransitive\ process}$

Taiwanese Southern Min:
(16) 伊的左脚跛啊。
I *ê* *tǒh* *khah* *pái* *a*
3SG GEN left leg lame PFV
'His left leg has gone lame.'

In (16) with a genitive subject, only the PM as the head noun of the subject NP holds a core grammatical relation to the verb, namely S; the PR stands in a dependent relation to it. I return to the problem of one or two arguments for the EPC in section 6 below. In

order to decide on the verb valency question, relevant semantic and syntactic features are next presented.

Note that since this study concentrates on the invariant semantic and syntactic features of the unaccusative constructions in order to characterize it as a Sinitic construction, only a brief description of variation between Chinese languages is provided. It can, however, be confirmed from the data collected that the range of predicates and metaphors coded by this construction in each language varies widely and quite idiosyncratically with respect to the lexical items used.

5.2 Range of Verb Classes

Two types of intransitive verbs are generally recognized: unaccusative verbs are those whose subject is in the semantic role of undergoer, unergative verbs are those which have agentive subjects, as defined in Levin and Rappaport Hovav (1993). In all seven Sinitic languages investigated, a postverbal subject can co-occur with semantically intransitive predicates such as 'die', 'fall', 'go:rotten', 'go:white', 'go:blind', 'go:bad', 'redden', 'become:more', 'go:hoarse', 'go:numb' and 'get:injured'; that is, with unaccusative verbs. They do not in general co-occur with unergative verbs such as 'run away', 'go' or 'cry'. The exclusion of unergative verbs is shown by the Cantonese example in (17) with *jau*^{2} 走'run, leave'. Compare this example with its grammatically well-formed genitive counterpart in (18):

Cantonese Yue EPC

(17) *佢哋走咗細路.

**Kui*^{5}*dei*^{6}	*jau*^{2}	*joh*^{2}	*sai*^{3}*lo*^{6}.
3PL	run	PFV	children

Genitive subject

(18) 佢哋細路走咗.

Kui^{5}*dei*^{6}	*sai*^{3}*lo*^{6}	*jau*^{2}	*joh*^{2}.
3PL	children	run	PFV

'Their children have left/run away.'

Table 1 provided in the appendix shows that unergative verbs like 'run' are equally unacceptable in this construction for Taiwanese Southern Min, Changsha Xiang, Nanchang Gan, Shanghainese Wu and Hakka. However, there is one apparent problem for this claim in that Mandarin allows the use of *pǎo* 跑 'run away, flee' in this construction and thus seems at first to constitute a puzzling exception:

Mandarin

(19) 他們傢跑了媳婦。

Tāmen jiā		*pǎo*	*le*	*x fu.*
3PL	home/family	run	PFV	wife

'Their daughter-in-law (or wife) ran away from home.'

The same Mandarin construction as in (19) could alternatively have many other animate nouns such as *lǎomāzi* 老媽子‘(female) servant’; *yī-qún niú* 一群牛‘a herd of cattle’ or *yītiáo gǒu* 一條狗 ‘a dog’ in the postverbal slot as the ‘escapees’, yet these similarly do not hold an inalienable relation to the preverbal noun (which could also just be *tā* ‘3SG’). The six other Sinitic languages selected for the database use a different lexeme for ‘run away’, etymologically distinct from *pǎo* 跑. These are cognates of the verb *jau*^{2} ‘leave, run away’ in Cantonese (see (17) and (18) above) that has the related meaning of ‘leave, walk’ in Mandarin [= *zǒu*]. Similarly, Mandarin *zǒu* 走‘leave, walk’ cannot be used in this EPC; for example, it cannot be substituted for *pǎo* in (19) above. The explanation for this problem can be better understood if we consider that in examples such as (19), the NP in clause-initial position has a basic locative meaning of ‘house’ or ‘home’. This is often explicitly coded as a locative by means of postpositions such as *-li* 裏‘in’ in (20):

(20) 樹林裏跑出來兩個逃兵。

Shùlín-li	*pǎo-chūlai*	*liǎng*	*ge*	*táobīng.*
forest-in	run-out	two	CL	deserter

‘Out of the forest two deserters came running.’
(more literally: ‘Out of the forest came running two deserters.’)

Hence, this kind of example in Mandarin can be reclassified as belonging to the type of inverted subject sentence, briefly described in the introduction, whose predicates are restricted to postural verbs and verbs of appearance, disappearance and existence. In this case, *pǎo* ‘run:away’ is a disappearance verb and the postverbal noun *xífu* ‘wife, daughter-in-law’ is (arguably) its agentive subject. When optional preverbal NPs are present, they commonly represent a location (see Chao 1968: 671-674; Fan 1996: ch. 8; p.167 for further discussion and examples of the Mandarin inverted subject construction with *pǎo* and preverbal locatives). I thus persist in the claim that unaccusative verbs must be specified for use in the predicate of this Sinitic construction.

In the next section, I argue that there is a semantic rationale behind allowing two undergoer nouns to co-occur with certain intransitive verbs in Sinitic languages: this concerns the fact that the two nouns are related through inalienable possession, either as a part-whole relationship for inanimates, or for body parts and kin with human and animate PRs.

5.3 Semantic Category of the Postverbal Noun and Inalienable Possession

The EPC restricts the relationship between the PR and PM to an inalienable one, with part-whole and kin as the main subtypes. The postverbal noun codes either a body part of a human or animate noun, part of an inanimate whole, or kin while the preverbal NP codes the PR. The very first example in the introduction gives an instance of an inanimate part-whole relation coded by the EPC in Cantonese with ‘leaf’ and ‘tree’. Ordinary kinds of material possessions and alienable kinds of ownership cannot be expressed through

this construction, however, as comparison of the Cantonese examples (21) and (22) clearly show:[5]

Cantonese Yue
(21) 佢死咗太太。
Kui[5] *sei*[2] *joh*[2] *taai*[3]*taai*[2]
3SG die PFV wife
'He was bereaved of his wife (literally: He died wife).'

Cantonese Yue
(22) *我嬤嬤死咗啲花。
**Ngoh*[5] *ma*[4]*ma*[4] *sei*[2] *joh*[2] *di*[1] *fa*[1]
1SG grandmother die PFV CL_{PL} flower
(not: 'My grandmother had her flowers die on her.')

To become grammatical, (22) needs to be reformulated as an S-V-O sentence with a resultative verb compound, as in (23):

Cantonese Yue
(23) 我嬤嬤淋死咗啲花。
Ngoh[5] *ma*[4] *ma*[4] *lam*[4]*-sei*[2] *joh*[2] *di*[1] *fa*[1]
1SG grandmother soak-die PFV CL_{PL} flower
'My grandmother killed the flowers by overwatering them.'

The category of kin is an interesting, if not idiosyncratic one. The predicate 'to die' cited as the main or only example in some of the references on this construction (Chao 1968, Gao 1969, Wang 1969) turns out to be a singleton in all Sinitic languages surveyed for the category of kin. This generalization includes other synonyms for 'die' such as Mandarin *sang* 喪, a more formal and polite expression. Semantically similar predicates such as 'get:ill' are not acceptable, despite the fact that they are unaccusative. The following pairs of examples contrast the EPC with agnate genitive subject intransitive sentences in Cantonese and Taiwanese respectively.

Cantonese Yue
(24) *佢病咗太太。
**Kui*[5] *beng*[6] *joh*[2] *taai*[3]*taai*[2]
3SG be:ill PFV wife

(25) 佢嘅太太病咗。
Kui[5] *ge*[3] *taai*[3]*taai*[2] *beng*[6] *joh*[2]
3SG GEN wife be:ill PFV
'His wife has become ill.'

Taiwanese Southern Min

(26) *我破病侬啊。

*Góa	phòa-pīⁿ	ang	a
1SG	get:sick	husband	PFV

(27) 阮侬破病啊。

Gún	ang	phòa-pīⁿ	a
1SG:POSS	husband	get:sick	PFV

'My husband got sick.'

Nor are verbs meaning 'get:rich' or 'grow up' permitted.

Why are there such restrictions for kin possession in this construction? In the course of providing an explanation, the category of kin can be used to highlight several further core semantic features of the construction; it has been shown that the unaccusativity requirement generally rules out the co-occurrence of predicates such as 'leave, run away', exemplified above for Cantonese Yue (see 17). This extends to semantically similar unergative verbs such as 'leave (home) the children'.

Shanghainese Wu

Unaccusative EPC:

(28) *伊拉出道嘞伊拉小人。

*I^{53}la^{53}	ts'e^{ʔ5}dɔ^{13}	lə^{ʔ2}	i^{53}la^{53}	ɕiɔ^{34}ȵiŋ^{13}
3PL	leave	PFV	3PL	children

(not: 'Their children have left on them.')

Genitive construction:

(29) 伊拉小人才出道嘞。

I^{53}la^{53}	ɕiɔ^{34}ȵiŋ^{13}	zɛ^{3}	ts'e^{ʔ5}dɔ^{13}	lə^{ʔ2}
3PL	children	all	leave	PFV

'All our children have left home (and become independent)'.

This can be usefully compared with European languages such as German where the different types of dative constructions not only allow unaccusative verbs such as 'die', but also unergative verbs such as 'run away':

(30) German

Mir	*ist*	*die*	*Frau*	*weggelaufen.*
1SG:DAT	is	the	wife	run:away

'My wife ran away on me.'

This leads to the claim that there is an adversity feature, intrinsic to all the Sinitic unaccusative constructions, which rules out unaccusative predicates expressing fortunate events like 'become:rich the son' or even more neutral events like 'grow:up the children'. Only constructions with a genitive subject are acceptable with these predicates:

Taiwanese Southern Min
Unaccusative EPC:

(31) *我發囝啊

*Góa	hoat	kiã^{n}	a
1SG	get:rich	son	PFV

Genitive construction:

(32) 阮囝發啊。

Gún	kiã^{n}	hoat	a
1SG:POSS	son	get:rich	PFV

'My son got rich.'

Shanghainese Wu
Unaccusative EPC:

(33) *阿拉大嘞阿拉 個小囡。

*A^{ʔ5}la^{53}	du^{13}	le^{ʔ2}	a^{ʔ5}la^{53} kə^{ʔ5}	ɕiɔ^{34} nø^{13}.	
1:PL	big	PFV	1:PL	CL$_{POSS}$	children

(not: 'They've had their children grow up on them.')

Genitive construction:

(34) 阿拉養大嘞阿拉 個小囡。

AA^{ʔ5}la^{53} ɦiəŋ^{13}-du^{13}	le^{ʔ2}	a^{ʔ5}la^{53} kə^{ʔ5}	ɕiɔ^{34} nø^{13}.		
1:PL	raise:big	PFV	1:PL	CL$_{POSS}$	children

'We've brought up our children.'

None of these situations can be easily interpreted as having any marked effect on the PR, coded as the preverbal subject. This explains why the verb 'get:sick' exemplified in (24) to (27) above for Cantonese and Taiwanese Southern Min does not work, a situation which applies equally to other Sinitic languages. It is an undesirable state of affairs but not one which is sufficiently adversative. For the analogous dative construction in German with a kin PM, these kinds of predicates are similarly proscribed:

(35) German

*Mir	sind	die	Kinder	krank/reich/arm	geworden.
1SG:DAT	are	the	children	sick/rich/poor	become

Hence, even though kin forms a peripheral category in the unaccusative EPC, it can nonetheless be profitably used to display the bundle of features that combine to determine its constructional semantics. In summation, the construction requires an unaccusative predicate which codes an adversative effect on the PR by means of an event that has affected either kin, a part of the body, or part of an inanimate whole, resulting in a marked change of state for the kin or part. More support for these features is provided in the next section on parts of wholes.

5.4 Part-Whole Expressions

The prototype category for the unaccusative EPC involves body parts and their 'owners', the body part being coded into postverbal position and the PR into the preverbal one. A subsidiary category is formed by the inanimate part-whole relation which patterns in the same way as for animates.

Just as for kin, a marked effect on the body part is a primary semantic constraint since the data show that dynamic processes causing changes of state which are short-lived are incompatible; for example, 'get:suntanned (literally: darken the skin)' or 'get:tired in the legs'. In contrast to this, all Chinese languages investigated permit predicates expressing a change to a part of the body which affects one of the main organs of perception or the limbs and results in some kind of dysfunctionality. These include 'go:lame', 'fall:out (hair, teeth)', 'get:injured (hand)' and 'get:broken (hand, arm, leg)'. All languages apart from Taiwanese Southern Min can use the stative verb 'be:many, more' to express the meaning of an increase in some feature such as white hairs or wrinkles. And all apart from Changsha Xiang can use a predicate for 'go:bad' with a large number of body parts to generically express some kind of malfunctioning. The majority of languages can also use verbs for 'go:blind' [all except Taiwanese and Xiang] and 'go:deaf' [all except Taiwanese and Shanghainese] in this EPC in combination with the relevant body part. Mandarin and Gan permitted the expression 'go:numb in the legs' while only Mandarin allowed 'go:hoarse in the throat'. I suggest that the restriction on the last two predicates is precisely due to the constraint requiring a marked effect on the body part, and that in this respect Mandarin is somewhat more liberal than other Chinese languages. Furthermore, all these predicates are adversative for the PR. Mullie (1932, 1933) and Fan (1996) give many examples of this pattern for Mandarin, which they treat, like Chao (1968), as a case of subject inversion.

Taiwanese Southern Min

(36) 伊今年洛 勿會 少頭毛。

I	*kin-n î*	*làu*	*bōe*	*chió*	*thâum ô*
3SG	this:year	fall	NEG	few	hair

'He lost quite a lot of hair this year [more literally: He has fallen not a little hair this year].'

Cantonese Yue

(37) 佢爛 嘸 啲牙。

kui^{5}	*laan*^{6}	*saai*^{3}	*di*^{1}	*nga*^{4}
3SG	rot	COMP	CL:PL	tooth

'All her teeth went bad [more literally: She rotted all teeth].'

Four languages can use the predicate 'go:white (several strands of) hair' [Mandarin, Xiang, Taiwanese, Cantonese]. This is excluded in Shanghainese where the expression is accidentally homophonous with 'pull:out the hair'. The transitive agentive reading apparently overrides the intrepretation for the less frequent unaccusative construction. This predicate is exemplified from Changsha Xiang in (38):

Changsha Xiang

(38) 我白噠幾根頭髮噠。

ŋo^{41}	*pɤ*^{24}	*ta*^{21}	*tɕi*^{41}	*kən*^{33}	*təu*^{13}*fa*	*ta*^{21}
1SG	white	PFV	several	CL	hair	INC

'Several strands of my hair have turned white.'

It is striking to find that the same stative verb for 'white' cannot be used in any of the languages for a beneficial change such as 'go:white in the teeth' or 'go:pale in the skin'.[6] Examples (38) and (39) show this revealing contrast for Xiang.

Changsha Xiang

(39) *咯隻細伢子白噠牙齒噠。

**ko*^{24}	*tsa*^{24}	*ɕi*^{45}*ŋa*^{13}*tsɪ*	*pɤ*^{24}	*ta*^{21}	*ŋa*^{13}*ts'ɪ*	*ta*^{21}
this	CL	child	white	PFV	teeth	INC

(not: 'The child has had her teeth become whiter.')

Other beneficial predicates tested were 'get:smoother skin' to provide a contrast with the (acceptable) 'get:wrinkled skin' or 'become:many wrinkles', not to mention 'go:wavy hair' (as a natural change, not a perm) compared with 'lose' or 'fall:out hair'. All have the consistent result that only adversative changes of state are possible. One apparent counterexample occurs in Fan (1996: 140) for Mandarin (my added glossing and translation):

Mandarin

(40) 他好了瘡疤，忘了疼。

Tā	*hǎo*	*le*	*chuāngbā*	*wàng*	*le*	*téng.*
3sg	good	PFV	scar	forget	PFV	pain

'He forgot the bitter past after he was relieved of his suffering.'
(more literally: 'He forgot the pain after his wound had healed.')

As a metaphor, (40) does not, however, express a desirable state of affairs. It is used as a criticism when someone shows they haven't learned from a past lesson by making the same mistake again. Hence, in general, the adversative constraint appears to hold.

Inanimate part-whole relations pattern on the person-body part model. Five such examples were tested across Sinitic languages with differing results, which can be viewed in Table 1 at the end of this article. These were for 'fall the leaves [tree]' as in (1) above; 'get:punctured (or go:flat) the tire [car]'; 'collapse the roof [house]'; 'go:wrong the leg [chair]' and 'go:rotten to the core [as in fruit and vegetables]'. Only the first predicate with 'fall the leaves [tree]' can be used in all languages surveyed while 'go:flat [tire]' is next highest in acceptability as only the Changsha Xiang speaker cannot use it in this construction. The remaining three predicates had varying patterns of acceptability, as the table shows.

5.5 Metaphors and other Predicates for Temperament and Disposition

Metaphors for emotions and personality traits are often formed by body-part terms combined with stative verbs in Chinese languages, as (9) above exemplifies for Mandarin with *heart-cold* for 'discouraged' (see also Chao 1968: 96-100 for a discussion of Mandarin; Matisoff 1978 and Clark 1995 for this widespread phenomenon in Southeast Asian languages). Metaphors and predicates which describe a person's inherent temperament or physical features do not, however, readily lend themselves to use in the EPC since they are semantically stative. These include metaphors meaning 'be easily swayed/credulous [literally: have soft or light ears (depending on the language)]'; 'be jealous [literally: be red in the eyes]' or 'be bad tempered [literally: be bad in the spleen]'.

Such metaphors were used to test the flexibility of the unaccusative EPC in Sinitic languages. The findings confirm the general principle that the small number of acceptable metaphors are those that can be used to code a change in emotion. Furthermore, metaphors coded as unaccusative constructions are generally possible in only a small number of cases across the languages surveyed. Table 1 (Appendix) shows the limited use of metaphors in this EPC. In Changsha Xiang, their use is completely excluded. This restricted occurrence in the unaccusative EPC is the consequence of two factors:

(i) Metaphors with stative verbs of color and quality are often used to describe some inherent personality trait or aspect of a person's disposition. The next two examples with unmarked genitive subjects use a lexicalized metaphor for 'temper' based on the morpheme for 'spleen' with stative verbs that mean 'bad':

Nanchang Gan:

(41) 佢脾氣好壞。
tɕʻɪɐ p'itɕʻi hau fai
3SG temper very bad
'Her temper is very bad.'

Cantonese Yue:

(42) 佢脾氣好壞。
Kui^{5} *pei*^{4}*hei*^{3} *ho*^{2} *waai*^{6}.
3SG temper very bad
'She's very bad-tempered.'

This metaphor cannot form unaccusative EPCs in either language which mean 'Her temper's got worse [more literally: she's got worse in the temper]', despite appropriate aspectual marking.[7] This is shown by (43) and (44):

Nanchang Gan EPC:

(43) *佢壞了脾氣。
* *tɕʻɪɐ fai lə p'itɕʻi.*
3SG bad PFV temper

Cantonese Yue EPC:

(44) *佢懷咗脾氣。
*Kui[5] waai[6]-joh[2] pei[4]hei[3].
3SG bad-PFV temper

This particular metaphor could only form an unaccusative EPC in Taiwanese Southern Min with *phái*[n],[8] yet Cantonese *waai*[6], Gan *fai* and Mandarin *huài*, all meaning 'be bad', could be used quite successfully in other predicates with postverbal body parts to form acceptable EPCs such as 'go bad the teeth' or 'go wrong a (chair) leg' (see section 5.4 above on part-whole relations coded into the unaccusative EPC). For example, these stative verbs could be used to form expressions such as Mandarin *Tā huài le dùzi* 他坏了肚子。'He's got diarrhea' [a lexicalization from the literal meaning of 'something has gone wrong in the stomach'] and Taiwanese *I phái*[n]*-tio̍h pak-to͘-a* 伊歹著腹肚啊 [3SG-go:wrong-RES-stomach-PFV 'He's got something wrong with his stomach'] referring to either diarrhea or an unspecific stomach ache. In other words, this particular set of stative verbs has a wide range of application in EPCs due to the generic meaning of something going wrong (whether that be illness, infection, becoming broken, damaged or going rotten).

(ii) In general, the acceptability of stative verbs for color depends on the appropriate aspect marking. Aspect markers which express a marked change of state are required, if not a durative action process (see also Chao 1968: chapter 8 for aspect marking possibilities of Mandarin stative verbs). The notable exceptions to this restriction are the transitory emotions of 'go:red the eyes' [Mandarin, Gan, Wu, Yue] as a metaphor for jealousy, and 'go:red the face' [Mandarin, Gan, Wu, Yue] as a metaphor for anger or embarrassment.

For the predicate 'go:red the eyes', Mandarin, Nanchang Gan, Cantonese Yue and Shanghainese Wu allow this collocation in the unaccusative EPC. However, in Shanghainese, it only has the metaphorical meaning of 'get jealous'; in Cantonese it only has the literal meaning of the eyes becoming red due to crying, tiredness or some other cause such as infection,[9] while in Mandarin and Gan, it can be used both metaphorically and literally:

Cantonese Yue unaccusative EPC
(45) 佢紅嘅 對眼睛話 : "對唔着囉 !"
Kui[5] hung[4] saai[3] dui[3] ngaan[5] gam[2] wa[6]: "Dui[3]-m[4]-jue[6] loh[1]".
3SG red COMP CL eye like:this say sorry PRT
'She said "Sorry" with reddened eyes.'

Shanghainese Wu unaccusative EPC
(46) 伊紅嘞眼睛。
ɦi[53] ɦoŋ[13] le[ʔ2] ŋɛ3[13] tɕiŋ[53]
3SG red PFV eye
'He's become jealous.'

The metaphor of ‘go:red in the face’ for anger or embarrassment can be used in Mandarin, Gan, Wu and Yue, but not in the other three languages (Xiang, Hakka, Min):

Mandarin unaccusative EPC

(47) 我答不出來, 紅了臉。

Wǒ	*dá-bu-chūlai,*	*hóng*	*le*	*liǎn*
1SG	answer-NEG-out	red	PFV	face

‘I couldn’t answer and went red in the face.’ (Bai 1993:56)

Nanchang Gan unaccusative EPC

(48) 佢們為什麼紅了臉？

tɕʻɪɛ-mɛn	*uei-ɕitli*	*fəŋ*	*ləʔ*	*liɛⁿʔ*
3PL	why	red	PFV	face

‘Why have they gone red in the face?’ (e.g. in a context of quarrelling)

In Taiwanese Southern Min, neither of these expressions can be used in the EP form, either with literal or metaphorical interpretations. I give one pair of examples with eye-red for ‘jealous’ to illustrate this contrast in acceptability:

Taiwanese Southern Min unmarked genitive subject construction

(49) 汝 目孔赤啊。

Lí	*bak-khàng*	*chhiah*	*a*
2SG	eye-socket	red	PFV

‘You’re jealous.’

Taiwanese Southern Min unaccusative EPC

(50) *汝赤目孔啊。

**Lí*	*chhiah*	*bak-khàng*	*a*
2SG	red	eye-socket	PFV

In several Sinitic languages there is a metaphor based on ‘ear’ referring to a credulous person, that is, to someone who is easily taken in by others. This metaphor is possible in Mandarin, Yue and Wu with the stative verb ‘be:soft’ and for Southern Min with the stative verb ‘be:light’ in genitive or double subject form. However, it is only in Mandarin and Taiwanese Southern Min that an unaccusative form can be found.

Mandarin unaccusative EPC:

(51) 我軟了耳朵就買下好多股票。

Wǒ	*ruǎn*	*le*	*ěrduo,*	*jiù*	*mǎi-xià*	*hǎo*	*duō*	*gǔpiào.*
1SG	be:soft	PFV	ear	then	buy-DIR	very	many	share

‘I was so gullible that I bought a lot of shares.’

Taiwanese Southern Min

(52) 伊輕了耳孔啊。

I	*khin*	*liáu*	*hī^{n}khang*	*a*
3SG	be:light	COMP	ear	PFV

'She's become easier to persuade.'

In Shanghainese, only the double subject construction is available with both literal and metaphorical meanings for 'be:soft in the ears', while the EPC was not acceptable to my informant:

Shanghainese Wu double subject construction:

(53) 趷个小人耳朵老軟个。

Dɪɪ^{ʔ2}	*kə^{ʔ5}*	*ɕiɔ^{34}ȵiŋ^{13}*	*ȵɪ^{13}tu^{34}*	*lɔ^{13}*	*ȵyø^{13}*	*kə^{ʔ5}*
this	CL	child	ear	very	soft	PRT

'This child has very soft ears.' OR: 'This child is quite credulous.'

Shanghainese Wu unaccusative EPC

(54) *趷个小人軟嘞耳朵。

**Dɪɪ^{ʔ2}*	*kə^{ʔ5}*	*ɕiɔ^{34}ȵiŋ^{13}*	*ȵyø^{13}*	*lə^{ʔ2}*	*ȵɪ^{13}tu^{34}*
this	CL	child	soft	PFV	ear

(not: 'This child has gone soft in the ears/become credulous.')

The reader is once again referred to Table 1 for the overall patterning of Chinese languages with respect to five different metaphors for emotion or disposition. Note, however, that this only represents a very small sample of the large inventory of metaphors available in each language.

6 Double Unaccusative or Single Argument Verb?

Teng (1974b: 81) has argued that the discontinuous possessive construction, as he labels it, can be analyzed as a sentential predicate accompanied by a noun in Experiencer role, that is, the PR. I agree with his analysis of the V - $SUBJ_2$ as a sentential predicate insofar as it is the postverbal noun which consistently holds the relationship of intransitive subject to the main verb. While the PR noun in preverbal position acts as an undergoer semantically ('affected person' or 'affected whole'), it cannot always stand alone with the verb, that is, minus the postverbal 'part' term. Consider the following Mandarin examples (the symbol # indicates syntactically well-formed but semantically odd):

Mandarin

(55) 她瞎了，瘸了， 聾了。

Tā	*xiā*	*le;*	*qué*	*le;*	*lóng*	*le*
3SG	blind	INC	lame	INC	deaf	INC

'S/he's gone blind; lame; deaf.'

(56) *她多了 *她 爛了。
#Tā duō le; #tā làn le
3SG be:many INC 3SG go:rotten INC
'S/he's increased; gone rotten.'

The interpretations for the two clauses in (56) are semantically implausible when used as completed utterances: 'He's increased' and 'She's gone rotten.' In contrast to this, there is no difficulty for the appropriate body part terms to combine with all of these unaccusative predicates, with or without a preceding genitive or PR noun:

(57) 他的眼睛瞎了，腿瘸了，耳朵聾了。
(Tā de) yǎnjingxiā le; tuǐ qué le; ěrduo lóng le
(3SG GEN) eye blind INC leg lame INC ear deaf INC
'(His/her) eyes have gone blind; (His/her) leg has gone lame; (His/her) ear has gone deaf.'

(58) 他的皺紋多了。 她的手爛了。
Tā de zhòuwen duō le; tā de shǒu làn le
3SG GEN wrinkles be:many INC; 3SG GEN hand rotten INC
'His wrinkles have increased.' 'Her hand got infected.'

If omission of the postverbal noun does not result in an implausible interpretation, then at the minimum a change of meaning is wrought. If we leave out the postverbal kin term 'wife' in Cantonese *Kui^{5} sei^{2} joh^{2} taai^{3}taai^{2}* 佢死咗太太 [3SG-die-PFV-wife], then the meaning changes radically from 'He was bereaved of his wife' to 'He died' [*Kui^{5} sei^{2} joh^{2}* 佢死咗].

A similar situation pertains in the other languages. Here are the same kind of examples from Taiwanese and Cantonese as indicative of the general case:

Taiwanese Southern Min
(59) 伊加了皺痕。 *伊加了。
I kē -liáu jiâu-hûn as opposed to *#I kē -liáu*
3SG be:more COMP wrinkles 3SG be:more COMP
'He's got more wrinkles.' 'He's increased.'
(more literally: 'He has become more the wrinkles.')

Cantonese Yue
(60) 佢斷咗隻腳趾。 *佢斷咗
Kui^{5} tuen^{5} joh^{2} jek^{3} geuk^{3}ji^{2} as opposed to *#Kui^{5} tuen^{5} joh^{2}*
3SG be:broken PFV CL toe 3SG be:broken PFV
'She broke her toe.' She's broken.'

Could it be argued that the postverbal noun is actually an instance of noun incorporation, and thus, that the preverbal PR noun is the real argument, that is, the

nominal that holds a relation to the verb?[10] It appears not to be the case given that the stative verb, as has been argued, needs to take aspectual marking, generally in the form of an enclitic or suffix, which thus separates it from the postverbal PM, while the postverbal PM can itself take attributive modification (see examples 1 and 15 above) or be marked by a classifier as in (60), just like any other individuated direct object noun which normally occupies this position.

A stronger case for noun incorporation can be made for certain kinds of double subject constructions, since the body part term precedes the stative verb rather than follows. The sentential predicate of the double subject construction basically has the reverse word ordering to the unaccusative EPC of [$NOUN_{BODY\ PART}$ - $VERB_{STATIVE}$]$_{VP}$. I noted in section 5.5 that many of the predicates in these double subject constructions have become fixed expressions, including metaphors, for different kinds of emotions and dispositions. As such, the body part term and the verb act as a unit. Clark (1995) treats similar constructions involving metaphor in several Southeast Asian languages as instances of noun incorporation. In fact, they can be viewed as the lexicalization of the sentential predicate: [$NOUN_{BODY\ PART}$ - $VERB_{STATIVE}$]. Chao (1968: 96) gives some examples with *yāo suān* 腰痠 'waist-sore' where the sentential predicate is treated as a unit for the purpose of the question operation, rather than just the stative verb alone in the VERB-NEG-VERB form:

Mandarin double subject construction:

(61) 你今兒還腰酸不腰酸啦？

Nǐ	*jīnr*	*hái*	*yāo*	*suān*	*bù*	*yāo*	*suān*	*la?*
2sg	today	still	waist	sore	NEG	waist	sore	PRT

'Does the small of your back still feel sore today?' [from Chao (1968: 96)]

Many of these sentential predicates eventually form compounds as the ultimate stage in the lexicalization process. For example, compare the sentential predicate *(tā) xìngzi (tài) jí* 他性子太急[(she) temperament-too-quick] 'She is (too) quick-tempered' with the compound verb it has generated: *xìngzi jí*性子急'be quick-tempered'. In the compound, the components are bound and brook no insertion of adverbs like *tài* 'too' (see Chao 1968: 99 and Teng 1974a, 1974b, 1995) . Teng, in particular, has argued for the necessity of distinguishing fixed NOUN-VERB expressions from true sentential predicates in the double subject construction.

From this we conclude that the postverbal PM holds the core grammatical relation of subject to the unaccusative verb, while the PR noun has a more peripheral status as a kind of topic. Hence, it cannot be upheld that the unaccusative EPC represents the phenomenon of double case, specifically of two semantic undergoers both acting as subject (see, however, McGregor on double case in 'favorite' constructions of Australian languages, this volume). The preverbal slot for the PR as experiencer of an adversative event affecting kin or a body part is not an argument of the verb but fills an extra syntactic slot licensed by the constructional semantics of inalienable possession.

Shibatani (1994) discusses similar phenomena in a range of languages, including the Japanese adversative passive and ethical dative constructions.

This does not appear to tally with the definition given in Payne and Barshi (this volume) for EPCs whereby it is the PR that is hypothesized to hold a core grammatical relation and not the PM. This notwithstanding, the syntactic configuration conforms to other aspects of syntax in Chinese languages, such as a general ordering constraint for the whole noun to always precede the part noun (Barry 1975) and the possibility for a small subset of intransitive verbs to form an inverted subject construction with a postverbal subject.

7. Arguments against deriving the Unaccusative EPC from a Genitive Construction

Some theoretical frameworks might treat the unaccusative as having a source construction in an intransitive construction with a genitive NP as subject. Through the process described as PR raising or PR ascension, the dependent PR noun is extracted from a complex genitive subject NP and becomes the new subject with argument status, while the head noun, the PM, is shifted to postverbal position. Apart from the fact that it is difficult to find a motivation for these two syntactic changes to constituency and position, the superficial resemblance between such agnates is quickly dispelled when further syntactic and discourse features are tested.

As Teng (1974a, 1974b) has already observed, the subject as a topical element differs between the two agnate constructions - the genitive and the EP. I reproduce my example (47) as (62) below:

Mandarin

(62) 我答不出來, 紅了臉。
Wǒ dá-bu-chūlai hóng le liǎn
1SG answer-NEG-out red PFV face
'I couldn't answer and went red in the face.' (Bai 1993:56)

(63) 我的臉紅了。
Wǒ de liǎn hóng le
1SG GEN face red INC
'My face went red.'

The first example conveys what happened to *wǒ* 1SG 'me,' the schoolboy main character in a first person narrative who is unable to answer the teacher's question; the second in the pair conveys what happened to *wǒ de liǎn* 我的臉 'my face', and is thus far less affective in meaning. The PR is thus more likely to function as an important discourse topic than the PM, an issue which needs further empirical study.[11]

The affected PR reading of the unaccusative construction is shown neatly by Teng's example (31) (reproduced here as 64 and 65 from Teng (1974b: 465), who uses it, however, to illustrate a pragmatic feature).

(64) 孔子的後裔死了。

Kǒngzi	*de*	*hòuyì*	*sǐ*	*le*
Confucius	GEN	descendant	die	INC

'Confucius' descendants died.'

(65) 孔子死了後裔。

**Kǒngzi*	*sǐ*	*le*	*hòuyì*
Confucius	die	INC	descendant

?'Confucius lost his descendants.'

Teng explains the unacceptability of (65) in terms of presupposition: Confucius would normally be presupposed as alive in the case of the EPC, whereas this is not relevant for the sentence with the genitive subject in (64). In my view, it is precisely the necessity for the preverbal NP to be an affected PR which enables this interpretation. Hence, it is difficult to uphold a derivational relationship between the two construction types since they serve different discourse functions and display distinct constructional semantics: the genitive construction has a more general meaning of some event affecting a possession - alienable or inalienable, including all kinds of kin relations. It does not code the specific relation of inalienable possession whereby a PR is adversely affected by an event affecting kin or a body part. Nor is the PR in an experiencer role and thus to be presupposed as living (in the case of animate PRs).

Finally, the unaccusative EPC facilitates metaphorical interpretations not always reflected or uppermost in the generally more literal interpretation of the genitive construction. For example, the unaccusative construction in (66) refers to finding the first telltale signs of aging. This interpretation is not implicit in the genitive agnate in (67) which primarily predicates something about 'hair', even though it is, culturally speaking, a valid inference. The same applies to the similar example in the Changsha dialect of Xiang, given in (38).

Taiwanese Southern Min

(66) 我白 幾若枝頭毛啊。

Góa	*pe̍h*	*kúi-ná ki*	*thâu-mô͘*	*a.*
1SG	be:white	several CL	hair	PFV

'I've got some white hairs now.'

(67) 阮老爸的頭毛變白啊。

Gún	*lāupē*	*ê*	*thâu-mô͘*	*(piàn)*	*pe̍h*	*a*
1POSS	father	GEN	hair	(change)	white	PFV

'My father's hair has gone white.'

The final example of this special affinity of the unaccusative EPC for figurative meanings comes from the Shanghai dialect of Wu. It is a kind of hyperbole and is used, for example, when someone carelessly and clumsily bumps into another:

Shanghainese Wu:

(68) 儂瞎脫嘞眼睛啊？

Noŋ^{13} *ha*^{ʔ5}*təʔ*^{ʔ5} *ləʔ*^{ʔ5} *ŋɛ*^{13}*tɕiŋ*^{53} *a*^{ʔ5}*?*

2SG be:blind:COMP PFV eye PRT

'What's wrong with your eyes? (Can't you see properly?)'

(more literally: 'Have you gone blind in the eyes?')

This analysis of unaccusative EPCs in Sinitic languages shows that they have a different and a more specialized semantic structure when compared with their corresponding genitive constructions. Indeed, only a subset of predicates permissible with a genitive subject has an agnate unaccusative EPC.

8. Conclusion

The core semantic features of the unaccusative EPC are summarized below:

NOUN [EXPERIENCER] $_{\text{POSSESSOR}}$ - VERB$_{\text{UNACCUSATIVE}}$ - NOUN [UNDERGOER SUBJECT]$_{\text{POSSESSUM}}$

INTRANSITIVE PART/KIN TERM

(i) A relationship of inalienable possession is coded by this unaccusative type of EPCin Sinitic languages. The whole is coded by the preverbal subject NP and the part by the postverbal NP. The category of kin was shown to be peripheral as its use was restricted to the verb 'die' and its synonyms.

(ii) The predicate is broadly specifiable as an unaccusative intransitive one which requires explicit aspectual modification of an erstwhile stative verb to code a process of change. This change involves an adversative process whereby a part of the body or a part of the whole becomes dysfunctional, if not lost. This component of meaning accounts for the fact that the description of a person's disposition or temperament, typically coded by semantically stative predicates, is similarly proscribed.

(iii) As a corollary of (ii), the change involved must be one that causes a marked effect; hence, transitory processes are not generally coded by this construction, unless metaphor is in use, such as with 'redden the face' for anger or embarassment.

(iv) The genitive counterpart of this construction does not express the same meaning as the unaccusative. This is shown by the fact that the genitive does not always lend itself to metaphorical extension of meaning but has its interpretation restricted to the literal description of a process affecting a part of the given whole. The unaccusative EPC has a different discourse function, focusing on how a process that causes a change in a part affects the whole. The construction with a genitive subject is also unlimited in the kind of predicates it may take, be they unaccusative or unergative, not to mention transitive.

(v) In Sinitic languages, the use of unaccusative verbs in this particular EPC is clearly determined by the constructional semantics. There is no syntactic reason which can explain why 'go white the hair' is acceptable in several of the Sinitic languages whereas 'go white the teeth' is not; or why 'go bad the stomach' is possible in some Chinese languages but not 'go:bad the temper' in the same ones.

(vi) This kind of EPC in Sinitic languages does not make use of any syntactic or morphological mechanism to overtly change the argument structure of the verb. It has been argued that the feature of inalienable possession in its constructional semantics licenses the addition of an extra position for the PR. It represents the affected entity in an adversative process that befalls the associated part.

This EPC corresponds roughly to the type described in Payne and Barshi (this volume) as one where there is no merging of external possession with a noun incorporation process, the PR appears to be a core argument, the PM is not a chômeur and an increase in verb valency has occurred. (This interpretation depends, of course, on the analysis of Dative or Experiencer NPs as either arguments or adjuncts of the clause.) The challenge to Barshi and Payne's conjecture lies in the fact that it is the PM in Sinitic languages - and not the PR - which acts as the core argument - the undergoer subject of an unaccusative verb.

Finally, the unaccusative EPC of Sinitic languages provides another instantiation of the preference of EPCs and noun incorporation constructions for interacting with the syntactic role of the subject of unaccusative verbs and with the direct object in other discontinuous possessive constructions.

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Appendix
These data were collected over several sessions with each language consultant and have thus been controlled for consistency for individual speakers of each of the representative dialects of the seven Chinese languages.

Due to lack of space, the entire inventory of actual examples is not reproduced here. Hence, it should be noted that there is no intention to imply cognacy of the predicates across Sinitic languages. Not only are the intransitive predicates non-cognate in many cases but so are the aspect markers used to code completed change of state. The examples given in the discussion above provide an adequate indication of this.

Abbreviations :
EPC = External possessor construction; PM = possessum; PR = possessor

TABLE I: COMPARISON OF EPCs IN SINITIC LANGUAGES

	KIN	Mandarin	Xiang	Gan	Wu	Minnan	Yue
1	die + KIN	√	√	√	√	√	√
2	get ill + KIN	**x**	**x**	**x**	**x**	**x**	**x**
3	run away + KIN	**x**	**x**	**x**	**x**	**x**	**x**
4	grow up + KIN	**x**	**x**	**x**	**x**	**x**	**x**
5	get rich + KIN	**x**	**x**	**x**	**x**	**x**	**x**

	BODY PARTS	Mandarin	Xiang	Gan	Wu	Minnan	Yue
6	go:numb + BP	√	**x**	√	**x**	**x**	**x**
7	fall:out teeth/hair	√	√	√	√	√	√
8	go:bad + BP	√	**x**	√	√	√	√
9	go:white teeth/skin	**x**	**x**	**x**	**x**	**x**	**x**
10	go:white hair	√	√ **[+CL]**	√	**x**	√	√
11	become: more white hairs/wrinkles	√	√	√	√	**x**	√
12	get:injured + BP	√	√	√	√	√	√
13	get:broken arm/leg	√	**x**	√	√	√	√
14	go:lame left leg	√	√	√	√	√	√
15	go:deaf right ear	√	√	√	**x**	**x**	√
16	go:blind eyes	√	√	√	√	**x**	√
17	get:hoarse throat	√	**x**	**x**	**x**	**x**	**x**

	INANIMATES	Mandarin	Xiang	Gan	Wu	Minnan	Yue
18	fall:leaves	√	√	√	√	√	√
19	go:flat tire	√	**x**	√	√	√	√
20	collapse roof	√	**x**	√	**x**	**x**	√
21	go:wrong leg (chair)	√	√	√	**x**	√	√
22	go:rotten core (cabbage)	√	**x**	√	**x**	√	**x**

	METAPHOR	Mandarin	Xiang	Gan	Wu	Minnan	Yue
23	go:red eyes	√ **jealousy, literal mng**	**x**	√ **jealousy literal mng**	√ **jealousy only**	**x**	√ **literal mng**
24	go:red face	√**anger, embarrass-ment**	**x**	√**anger**	√	**x**	√ **embarrass-ment**
25	go:soft/light ears	√	**x**	**x**	**x**	√	**x**
26	go:wrong temper	**x**	**x**	**x**	**x**	√	**x**
27	go:wrong belly	√	**x**	**x**	**x**	√	**x**

Key: **√ grammatically well-formed unaccusative EPC for which a plausible context can be described**

x grammatically unacceptable combination of elements for an unaccusative EPC where no interpretation is possible

[+CL] the postverbal part term requires modification by a classifier construction, a bare noun is not grammatically acceptable

[1] For the examples, I use *pinyin* romanization for Mandarin; Sidney Lau's romanization system for Hong Kong Cantonese Yue; the Church romanization for Taiwanese Southern Min and the International Phonetic Alphabet for Shanghainese Wu, Changsha Xiang and Nanchang Gan. The abbreviations for grammatical glosses are as follows: BA pretransitive marker, CL classifier, COMP completive marker, DAT dative case, GEN genitive marker, INC inceptive or change of state marker, NEG negative marker, PASS passive marker, PFV perfective aspect marker, PL plural, POSS possessive, PRT clause-final discourse particle, REF referential use, RES resultative, SG singular.

[2] Shibatani (1994) adopts a similar approach in his explanation for the semantic integration into the clause of extra-thematic arguments in ethical datives, indirect adversative passives and possessor raising constructions. It is either the adversative reading or the relationship of inalienable possession which licenses the valency augmentation.

[3] Traditionally, the Min group of dialects was classified into Northern and Southern but this has been challenged more recently by Norman (1988) *inter alia*. I adopt Norman's proposed classification here.

[4] Only a brief elicitation session was carried out with the Hakka informant to verify that the unaccusative EPC existed in this Sinitic language. For this reason, I do not include Hakka data in the table given in the appendix.

[5] Examples used to support the proposed semantic and syntactic features of this construction are intended to be representative for Sinitic, unless otherwise stated. The precise details for each Sinitic language in the survey are given in Table 1.

[6] Traditionally, keeping your skin as fair as possible, particularly for women, is desirable; getting tanned is a sign of working outdoors and of a peasant background; it is not culturally desirable.

[7] Similarly, in Mandarin, it is not acceptable to use *Tā huài-le pí qi* [3SG-bad-PFV-temper] but only *Tā (de) pí qi hěn huài* [3SG-(GEN)-temper-very-bad] 'Her temper is bad' or an appositive structure with a nominal predicate N-N: *Tā huài pí qi* [3SG-bad-temper] which is also available in Taiwanese: *I chiok phái*^{n} *phî-khì* [3SG-enough-bad-temper] 'She's bad-tempered'.

[8] The unaccusative form for this expression in Taiwanese can be used in contexts where people's inherited physical qualities and personality traits are being compared: 'She's bad in the skin (she inherited it that way) while he's got it bad in temperament', and so on.

[9] The 'red eyes' metaphor for jealousy exists in Cantonese too, but only in the unmarked genitive subject EPC: *kui*^{5} *ngaan*^{5} *hung*^{4} 3SG-eyes-red 'She's jealous [more literally: As for her, the eyes are red]'.

[10] I thank Marianne Mithun, the discussant for my paper at the External Possession Conference (U Oregon, September 1997), who suggested this possibility as a further avenue for investigation.

[11] I thank an anonymous reviewer for raising this point. The question of discourse topic status of the PR is, nonetheless, beyond the scope of this study. The data is restricted to sentence examples of the unaccusative EPC due to the necessity of eliciting data from seven Sinitic languages.