

Some Cases for Case in Mandarin Syntax\*

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In this essay, I will attempt to explain some conceptual differences between the syntax of American English and Mandarin Chinese. The descriptive framework used will run along the lines of "case syntax" theory as first proposed and later extensively developed by Charles J. Fillmore.<sup>1</sup>

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<sup>1</sup>See, for instance, Fillmore (1968a). I will also be drawing upon material presented in Fillmore's lectures on Case Syntax at the LSA 1970 Summer Institute.

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Let me first point out two of the more salient similarities in Mandarin and English grammar relevant to our discussion: (a) both languages lack the highly developed surface case-marking systems of Latin, German, and Russian. Mandarin does not even inflect personal pronoun object forms as does English. Also, (b) the preferred surface word order in both Mandarin and English is subject-verb-object. Two major differences should also be pointed out: (a) Mandarin can front a "topic of discourse" and follow it immediately with a surface subject, through a process which Fillmore calls "secondary topicalization" (Fillmore (1968a), 57). In English the corresponding form would be dialectal or sub-standard for most speakers. This point is strikingly illustrated when we look at the forms English and Mandarin have available for the description of inalienable body parts:

- (1) NEYG SHEAUHARL YEOW HEI DE TOURFAA  
"that-child-has-black-SUB (subordinating particle)-hair"  
"That child has black hair."

or in Fillmore's (1968a, 63-64) notation:  $P^{nom} \text{have } [A \rightarrow B^{acc}]$  where P = possessor, A = adjective, and B = body part.

- (2) NEYG SHEAUHARL DE TOURFAA HEI ?  
"that-child-SUB-hair-be black"  
"That child's hair is black."

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\*I am indebted to Mr. Chang-Keng Hsu for providing many of the Mandarin examples cited in this essay.

<sup>2</sup>In Mandarin, words like HEI are a species of verb, and do not require a copula.

Schematically, (2) could be represented as  $D^{gen} \rightarrow BE \text{ be } A$ .

- (3) NEYG SHEAUHARL TOUFAA HEI  
'that-child-hair-be black'

In Fillmore's notation, (3) clearly seems to be a case of  $what_{NP} \text{ be } A$ . A somewhat dialectal or substandard-sounding English equivalent might be 'That child his hair is black'; otherwise, we would have to fall back upon the forms given in (1) and (2). Note, however, that optional fronting of the direct object (usually for emphatic purposes) is frequent both in Mandarin and in English:

- (4) NEY BEEN SHU WOO YIJING DWU LE  
"that-AN (auxiliary noun)-book-I-already-read-PP  
(final particle)"  
"That book I've already read."

(b) Mandarin has no special class of words corresponding to prepositions in English. There does exist a fairly limited set of verbs which become lexically weakened and form verb-noun combinations expressing much the same thing as do English prepositional phrases. Since such constructions will be appearing in examples later on, they deserve a fairly detailed description here.

Verb-noun combinations of the above type may include as components:

A. CRV's - case-relator verbs, which show case relationships between an Object, Source, or Goal and the rest of the Proposition. Some commonly used CRV's include:

GEN - literally 'to follow', corresponding in usage to English 'with' or 'and' in the sense of 'accompanied by' (Cf. Japanese to). E.g. (5):

- (5) WOO MINGTIAN GEN NII WAL, HAO BA?  
"I-tomorrow-with-you-play, OK-PP?"  
"Let's you and me play tomorrow, OK?"

GEI - literally, 'to give', corresponding to English 'to' or 'for' in the benefactive sense. E.G. (6):

- (6) TA GEI WOO TZUOH LE JII JFAN IFWU  
"She?for-me-make-ASP (aspect marker)-several-AN-  
clothes"  
"She made me some clothes."

TSORNG - literally 'to follow', corresponding to English 'from'. E.g. (7):

- (7) NII TSORNG DAHLUH TAURCHULAI LE MA?  
 "You-from-mainland-escape-ASP-IP?"  
 "You escaped from the mainland?"

YONQ - literally 'to use', corresponding to English 'with' (+Instrument), but only in the premeditative sense. For instance, (8); is possible, but not (9):

- (8) TA YONQ CHWEITZ DINQ JINN LE I GEN DINGTZ  
 "He-with-hammer-drive-in-one-AN-nail!"  
 "He drove in a nail with the hammer"

- (9) \*TA TZAY DINQ JINN DINGTZ DE SHYRHOWL YONQ CHWEITZ  
 DAA LE TA DE MUHJYY LE  
 "He-be at-drive-nail-SUB-time-with-hammer-hit-ASP-  
 he-SUB-thumb-IP"

with the intended meaning:

"While driving the nail he hit his thumb with the hammer."

In other words, 'with' can be used with accidental events, but not YONQ, although both introduce an Instrumental noun.

DAW - literally 'to arrive, reach', corresponding to English 'to, toward, until'. E.g. (10):

- (10) WOO DAW JONGGWO CHIUH LE  
 "I- to-China-go-ASP"  
 "I went to China."

TZAY - literally 'to be at', corresponding to any of various English prepositions. TZAY can be existential, e.g. (11); or directional, e.g. (12):

- (11) WGO TZAY DAHSYUE NIANN SHU  
 "I-at-university-read-books"  
 "I'm studying at the university."

- (12) WOO TZAY CHOUIELL LIITOUR FANZ LE SAN BREN SHU  
 "I -into-drawer-inside-put-ASP-three-AN-book"  
 "I put three books in the drawer." (Cf. Latin in + Ablative vs. in + Accusative).

B. Mandarin also has a class of words we might call CRN's (case-relator nouns), which indicate position and thus often act as Sources or Goals, e.g.

LII(TOUR) - the inside part  
 HOWTOUR - the part behind  
 CHYANTOUR - the part in front of  
 SHANGQ(TOUR) - the part above, the top of  
 SHIANBIAL - the part beneath, below  
 JONGJIAN - the part between

CRH's can combine with other nouns in a genitive-like relationship e.g. CHOUTIELL (DE) HOWTOUR "drawer-SUB-behind part" or "behind the drawer" where CHOUTIELL is in the Dative case and DE is a subordinating particle which occurs idiosyncratically before CRH's. Note also that CRH's combine with CRV's (often TZAY and DAW) to form phrases like

$\left\{ \begin{array}{l} \text{DAW} \\ \text{TZAY} \end{array} \right\}$  CHOUTIELL LII(TOUR)  $\left\{ \begin{array}{l} \text{to} \\ \text{at} \end{array} \right\}$  -drawer-inside' or  
 $\left\{ \begin{array}{l} \text{Into} \\ \text{In(to)} \end{array} \right\}$  the drawer'. (cf. (12))

As in English, Mandarin nouns dominated by the Agent node often become surface subjects,<sup>3</sup> whereas those dominated by the Object node

<sup>3</sup>Mandarin has no CRV phrase corresponding to English 'by' + Agent.

become direct objects. Neither Agent nor Object has any CRV explicitly associated with it. Also, in Propositions where the verb syntactically requires a Goal and optionally allows an Object, those two case categories may in certain cases be distinguished only by word position and semantic environment, rather than by a CRV. For instance:

- (13) WOO YAW WENN NII I G WENNTYI  
 "I-want-ask-use-one-AN-question"  
 "I want to ask you a question."

but not

- (14) \*WOO YAW GEEI NII WENN I G WENNTYI  
 (cf. English \*I want to ask to you a question.)

Also,

- (15) TA IDEAL CHYAN DOU BU GEEI WOO  
 "He-a bit-money-all-not-give-me"  
 "He wouldn't give me a cent."

but not

(16) \*TA IDEAL CHYAN DOU BU GEEI GEEI WOO<sup>4</sup>.

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<sup>4</sup>Which verbs require a CRV with what case nodes, and also how case-realtor phrases are themselves positioned in the sentence, are problems too complex to discuss here.

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In "Lexical entires for Verbs", Fillmore (1968a, 57) notes that the verb 'hit' in English conceptually requires an Instrument, a Place (we will be using the term 'Object' here) and allows an optional Agent. If we assume such terms as Agent, Object, and Instrument to be case universals, then the Mandarin verb DAA is one fairly close conceptual equivalent to English 'hit',<sup>5</sup> Syntactically speaking,

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<sup>5</sup>Some minor semantic differences between 'hit' and DAA will become evident later (see note

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however; there are some differences:

(a) In Mandarin, the Object of DAA does not have to surface if it is understood; in fact, if the understood Object is non-human, it rarely surfaces at all. For example: (17) becomes (18):

(17) MAU TZERDONG DAA LE CHUANGHUH LE  
 "Mao Tse-tung-hit-ASP-window-FP"  
 "Mao Tse-tung hit the window."

(18) MAU TZERDONG DAA LE  
 "Mao Tse-tung-hit-FP"  
 "Mao Tse-tung hit it."

There are actually many Mandarin verbs whose syntactic case frameworks may be permanently or optionally identical to that of DAA; these verbs may also opt for non-surfacing of an understood Object, e.g.

(19) MAU TZERDONG TOU LE  
 "Mao Tse-tung-steal-FP"  
 "Mao Tse-tung stole it."

(20) LIN BIAU MAE LE  
 "Lin Piao-buy-FP"  
 "Lin Piao bought it."

In contrast, English must express a third-person object pronoun (at least when an Agent has also been surface-expressed); sentences like \*He hit, \*He bought, or \*He stole are not allowed.<sup>6</sup>

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<sup>6</sup>At least, \*He hit, etc. are unacceptable as responses to questions of the type Did he hit it?.

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(b) In English, we can have at least two different forms when the Object of 'hit' is someone's inalienable body part, e.g.:

(21) "Mao Tse-tung hit Lin Piao's nose"

where the Dative 'Lin Piao' surfaces with the possessive marker 's'; and also

(22) "Mao Tse-tung hit Lin Piao on the nose"

where 'Lin Piao' receives no particular surface marking, although it is still Dative.

In Mandarin, only one form is available, corresponding to (21) e.g., (23), never (24).

(23) MAU TZERDONG DAA LE LIN BIAU DE BYITZ LE  
"Mao Tse-tung-hit-ASP-Lin Piao-SUB-nose-FP"  
"Mao Tse-tung hit Lin Piao's nose"

(24) \*MAU TZERDONG DAA LE LIN BIAU TZAY BYITZ (SHANQ) LE  
"Mao Tse-tung-hit-ASP-Lin-Piao-on-nose('s top)-FP"

This is interesting because as we saw earlier (3), Mandarin does permit an unmarked Dative when the body part is the surface subject.

(c) In English, it is frequent for the Instrument to surface as subject with verbs like 'hit', e.g.:

(25) "The piano keys activate hammers, the hammers hit strings, and the strings produce sounds"

(26) "The ball hit the window, shattering it"

The Object of a Proposition may also become subject under certain conditions:

(27) "The window was hit several times"

Although in Mandarin, some of the rules for subjectivizing Instruments and Objects are quite similar to those in English, others are quite different. We will discuss these rules in more detail shortly.

We now turn to a comparison of English 'break' and Mandarin POH, where these verbs belong to a set of verbs in either language which refer to the falling apart of an Object under impact or pressure. For example:

English: break	Mandarin: POH
shatter	SUEY
collapse	KOA or TA
snap	DUANN

Conceptually speaking, it is difficult to say that there is any difference between 'break' and POH type verbs. Both require an Object, tolerate an Instrument, and allow an Agent only when an Instrument is conceptually present. Syntactically speaking, however, 'break' and POH are quite different, in ways one might not suspect. That is, the frequent occurrence of English 'break'-type verbs with Object alone tends to blind us to an important fact: almost every English verb that has a syntactically obligatory Object can express an appropriate Agent and/or Instrument within the same simple Proposition:

- (28) "Mao Tse-tung broke the window."  
 "A rock broke the window."  
 "The window was broken by Mao Tse-tung/a rock."  
 "Mao Tse-tung broke the window with a rock.", etc.

The few exceptions in English include 'collide', 'die', 'fall', 'rise', and 'arise'.

With POH and dozens of other verbs in Mandarin,<sup>7</sup> practically the

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<sup>7</sup>See Chao (1968, 444-46) for a list of such verbs.

opposite is the case. We can say (29) but never (30) and (31):

- (29) CHUANGHUH POH LE  
 "The window broke."  
 (30) \*MAU TZERDONG POH LE CHUANGHUH LE  
 "Mao Tse-tung broke the window."  
 (31) \*SHYRTOUR POH LE CHUANGHUH LE  
 "The rock broke the window."

In other words, only the Object can surface when POH is the only verb in the Proposition.

If, then, Agent and/or Instrument are conceptually present with verbs like POH, how might they get expressed? There are several possibilities:

- (32) Two simple sentences:  
 MAU TZERDONG DAA LE CHUANGHUH LE; CHUANGHUH POH LE  
 "Mao Tse-tung hit the window, the window broke."  
 (33) A subordinate clause linked to an independent one:  
 MAU TZERDONG DAA LE CHUANGHUH YIIHOW, CHUANGHUH  
 "after"  
 JIOW POH LE  
 "then"  
 "After Mao Tse-tung hit the window, the window then broke."

- (34) A sentential subject with the main verb indicating  
'cause'::

MAU TZERDONG DAA CHUANGHUH SHYY CHUANGHUH POH LE  
'cause'

"Mao Tse-tung's hitting the window caused the window  
to break."<sup>8</sup>

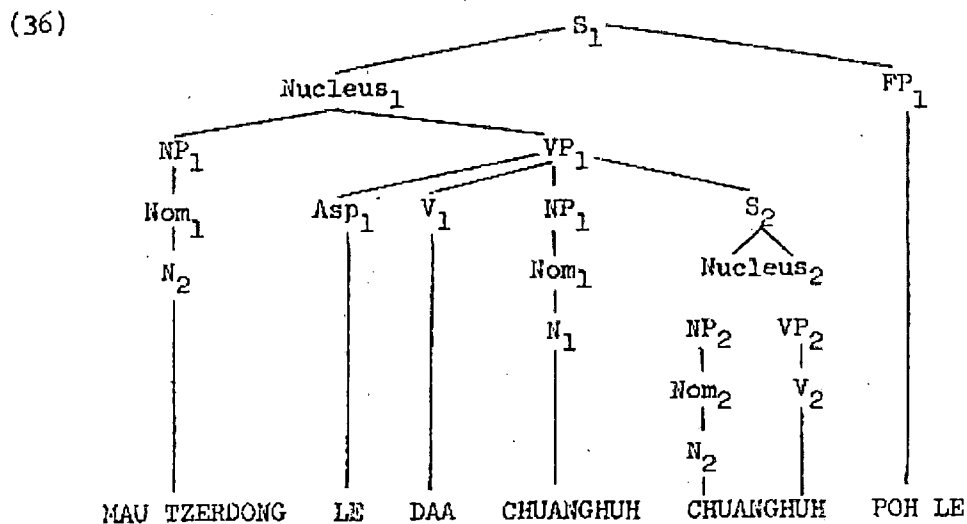
<sup>8</sup>Sentential subjects require no special marking in Mandarin as they do in English.

One other alternative, in fact, the one most frequently used, the resultative-complement construction (RCC). Here the Agent (e.g. MAU) becomes subject, the instigative verb (e.g. DAA) and the resultative verb (e.g. CHUANGHUH) surfaces as the direct object, giving:

- (35) MAU TZERDONG DAA POH LE CHUANGHUH LE  
"Mao Tse-tung broke the window (by hitting it)."

One recent transformational analysis of RCC's can be found in Anne Y. Hashimoto's *Embedding Structures in Mandarin* (1966, 135-54), where the author proposes the following deep structure diagram (nodes are filled in with lexical items from (35)):<sup>9</sup>

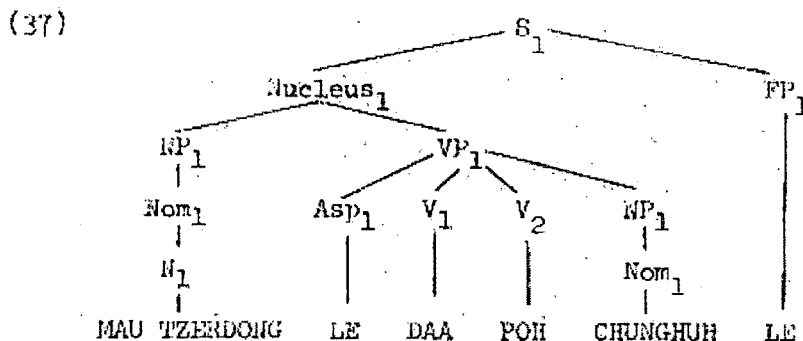
<sup>9</sup>Hashimoto (1966, 234). Although Hashimoto gives the structural diagram for a slightly different sentence (it has a negative and no final particle; (35) *vice versa*), the terminology we are using is justified by trees given elsewhere in her work (cf. 235-36 and 150-53). Hashimoto's node labelling conventions are followed exactly, except that FP has been substituted for ' (final particle).



To summarize briefly, Hashimoto's resultative transformation (p.232-33)



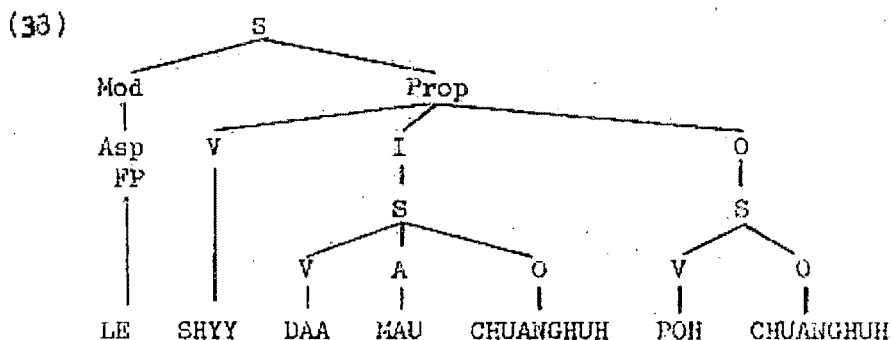
collapses together elements of VP<sub>1</sub>, deleting the extra CHUANGHUH and leaving the surface structure: (p. 234. Comments as in note 8)



which yields (35) upon aspect-transportation.<sup>10</sup>

<sup>10</sup>In preceding tree structures and in ones to follow, aspect and final particle nodes will be represented only in a most *ad hoc* fashion. Mandarin aspect is too complicated a subject to discuss formally at this time; in any case, its presence or non-presence, whether it should be associated with the V node or instead the Mod node, and so on, are not too critical to our arguments.

I will now propose another deep structure tree to account for RCC's, not because I think Hashimoto's analysis is basically "wrong", but because I feel that case syntax can provide some new insights into the problem:

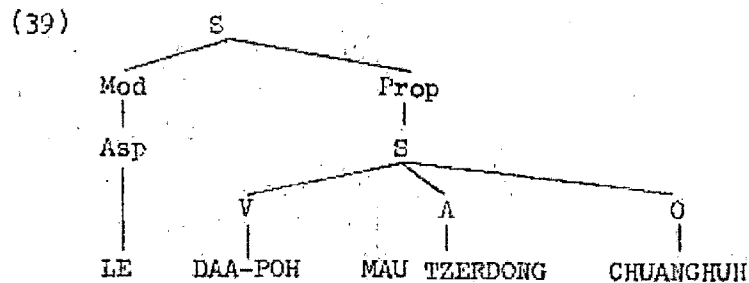


The above tree is ostensibly derived from sentences of the type (34); the instigative sentence MAU DAA CHUNAGHUH is embedded as the Instrument of causation, whereas the resultative sentence CHUANGHUH POH is the Object of causation. This is actually quite close to the argument. Fillmore mentions for deriving "Fred broke the lens" from "Fred cause (the lens break)":

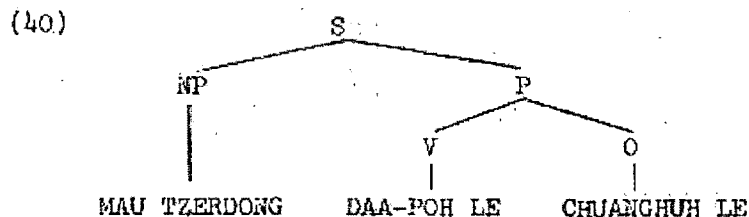
"In each case the subject of the underlying verb CAUSE is the subject of the transitive sentence; the analysis interprets the sentences as representing the proposition that the entity identified by the subject

NP of CAUSE is causer of an event characterized by the intransitive sentence." (Fillmore (1970) 35-36).

The steps for deriving the correct surface structure (35) from (38) are quite similar to those in Hashimoto's transformational rule. First, semantic elements of the Object sentence are matched against those of the Instrument sentence; identical elements are collapsed as one. In most cases, it is the Objects of the Object and Instrument sentences that are semantically the same; thus, in (38) the collapsed elements are the two CHUANGHUH's. Non-matching elements are simply concatenated, so that in the case of (38), we get a new "verb": DAA-POH. Thus, upper I and O nodes necessarily lose their separate identities and must be deleted, as must the verb SHYY, which now governs no nodes at all. This leaves us with the following:



Since Prop now governs only one node, which is itself a sentence, we can simply delete the S node. After subject raising and modal adjustments, we get:



RCC's can be surface-negated in at least two ways, reflecting different modal values. In the first case,

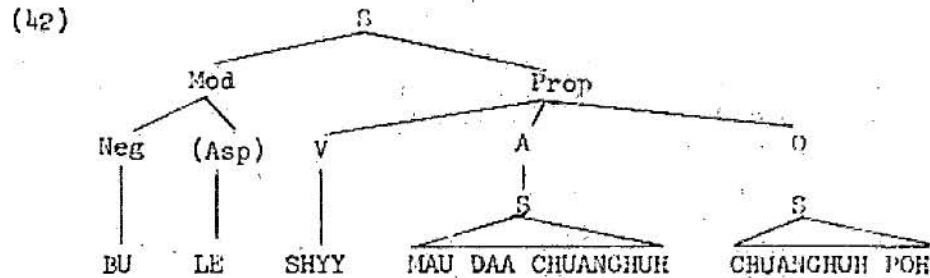
(41) MAU TZERDONG BU DAA-POH CHUANGHUH<sup>11</sup>  
 MEI(YEOU)

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<sup>11</sup>BU is negator of the Verb Phrase in Mandarin; when the verb is marked for the completive aspect, BU usually changes to MEI(YEOU).

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the deep structure representation is (42).



with the literal meaning: "Mao may or may not have instigated the event described in the Instrument sentence; in any case, he did not cause the event described in the Object sentence to happen". This can be used in several situations:

(a) Mao hit the window, but he didn't break it. In any case, breakage of the particular window definitely did not occur.

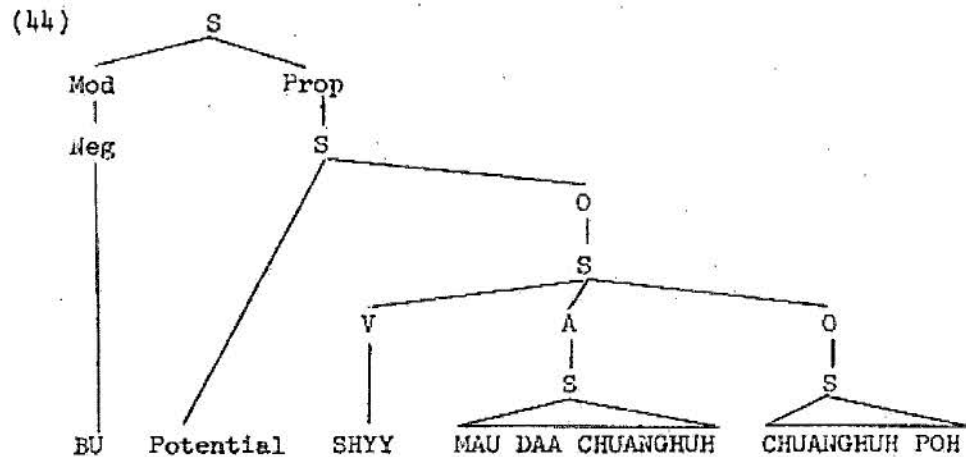
(b) Mao hit the window, but it wasn't Mao who broke the window, although breakage of the particular did occur. Perhaps Lin Piao broke it.

(c) Mao had nothing to do with the hitting and possible resultant breakage of a particular window. Whether the said window was hit and thereby possibly broken is not specified or known.

In the second case, the negative marker occurs after DAA and before POH:

(43) MAU TZERDONG DAA BU POH CHUANGHUH

with the following deep structure:



Literally, (44) means: "Mao instigated the event described in the Instrument sentence in an attempt to cause the event described in the Object sentence to happen; his attempt was unsuccessful." In other words, "Mao hit the window in an attempt to break it, but he couldn't get it to break."<sup>12</sup>

<sup>12</sup>In this position, BU does not inflect regardless of whether Aspect is present in the deep structure. Thus, without a context, (43) can be interpreted either as completive or non-completive; we have chosen the completive alternative here.

The positive potential may also be marked in the same position as BU in (44), with the particle DE:

- (45) MAU TZERDONG DAA DE POH CHUANGHUH  
 "Mao Tso-tung hit the window in an attempt to break it and in fact got it to break."

The deep structure tree for (45) looks like the tree for (44), except that Mod does not contain Neg.

The above analyses are justified by the fact that there exist sentences synonymous with (32) and (34) but which use the explicit potential verb NENGGOW "be able":

- (46) MAU TZERDONG NENGGOW DAA POH CHUANGHUH (cf. (45)).  
 (47) MAU TZERDONG MEI NENGGOW DAA POH CHUANGHUH (cf. (43)).

The corresponding tree structures are the same, except that this time the potential node gets realized as NENGGOW.

As we noted earlier, there are certain restrictions on the syntactic expression of Instrument in sentences with verbs of the type DAA and POH. When POH occurs alone, there is no sentence position in which a noun can surface as Instrument. However, with DAA or DAA-POH type constructions, an Instrument may surface in one of three sentence positions, depending largely on whether or not it is used in a pre-meditative sense.

When a noun is used non-premeditatively as an Instrument, this means that it was not used as Instrument by any Agent at all, or if it was, the Agent played a minimal (or perhaps irresponsible) role. In any case, an Agent and a non-premeditative Instrument (NPI) cannot co-occur within the same Proposition. Nouns which often act as NPI's can be categorized in the following manner:

I. Quasi-Agentive NPI's. Such Instruments are "almost" Agents in that they are viewed as acting of their own power, although, unlike true Agents, they cannot themselves govern Instruments. Quasi-Agentive NPI's can always surface as the sentence subject, the first of the three possible positions open to Instruments in Mandarin. They include:

(a) Natural phenomena and disasters such as lightning, typhoons, earthquakes, hailstorms, floods, famines, and so forth; e.g.:

- (48) LEIDIANN DAA DAO LE SAN KE SHUH  
 "Lightning-hit-overtorn-ASP-three-AN-tree"  
 "Lightning struck down three trees."

Since the occurrence of such events is ultimately beyond human control,

they are invariably non-premeditative when used as Instruments.

(b) Instruments involved in processes and actions which are largely automatic, requiring a minimum of Agental instigation, if any:

- (49) GANGCHYNJIANN SHYY CHEWEITZ HWODONOQ; CHWEITZ DAA SHYAN; SHYAN FACHU SHENGIN  
 "Piano keys-cause-hammers-move; hammers-hit-strings; strings-produce-sound" (cf. (25)).

(c) Instruments like vehicles, trains, ships, airplanes, and so forth, whose operation requires such constant human supervision and control that such Instruments apparently get identified "as" rather than "vs." their Agent utilizers:

- (50) CHETZ DAA-DAO LE DIANNSHIANGAAM LE  
 "car" "telephone pole"  
 "The car knocked down the telephone pole."

II. Non-quasi-Agentive NPI'S. Nouns that can be used as this type of NPI include rocks, trees, implements, furniture and other immobilia; in general, anything capable of being Instrumental in an "accidental" or "passive" way. Non-Quasi-Agentive NPI's usually end up as the subject of the Proposition:

- (51) NEY PIANN BOLI CHIEH SHANG LE WOO DE JEAU LE  
 "that-piece-glass-cut-injure-ASP-I-SUB-foot-FP"  
 "That piece of glass injured my foot."  
 (52) NEYBIAL DE NEY JY SHUHGEN BANN DAO LE MAU JUUSHYI LE  
 "over there-SUB-that-AN-tree root-ensnare-overturn-ASP-Mao-chairman-FP"  
 "That tree root over there tripped Chairman Mao."  
 (53) SHYRTOUR PENQ POH LE WOOMEN DE DAANGFENGBOLI LE  
 "rock-collide with-break-ASP-we-SUB-windshield-FP"  
 "The rock broke through our windshield."

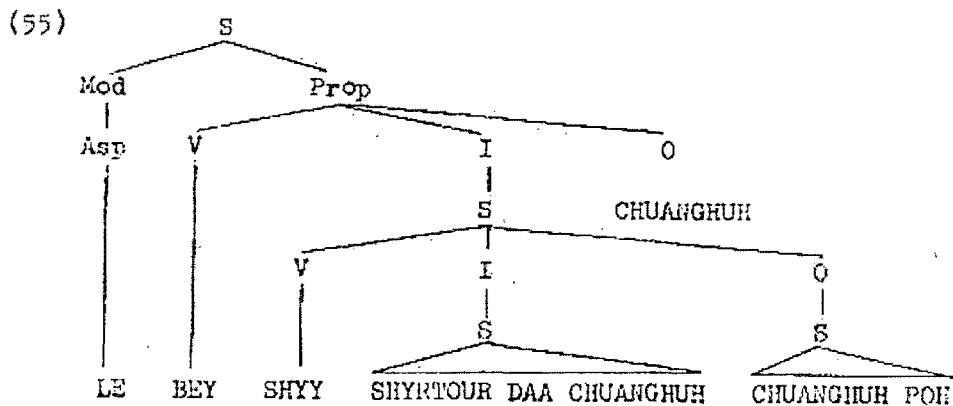
Things get more complex when we try to use nouns like SHYRTOUR as non-quasi-Agentive NPI's with verbs like DAA 'hit' and TUEI 'push'. Apparently DAA and Tuei require at least a conceptual Agent where the associated Instrument does not imply one strongly enough. In any case, sentences like

- (54) \*SHYRTOUR DAA LE CHUANGHUH LE  
 \*SHYRTOUR DAA POH LE CHUANGHUH LE

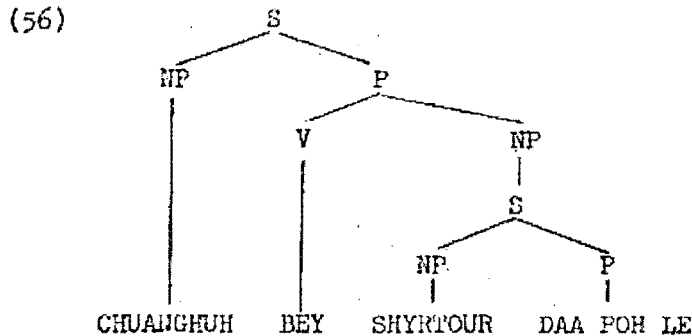
are unacceptable. This does not mean that we cannot express the desired relationship between SHYRTOUR as an NPI and, say, DAA POH; rather, we use a different construction. The string SHYRTOUR DAA POH CHUANGHUH is simply embedded as the Instrument node of a higher verb, BEY, which takes as its syntactically required Object of the

appropriate lower verb. Sentences with BEY are often translated into English with the passive.

The deep structure for BEY sentences is as follows:



Transformations operating on (55) include the RCC-forming rules: CHUANGHUH in lower Object node is collapsed with CHUANGHUH in the lower Instrument node; lower I and O nodes and SHYY are then deleted. Next, CHUANGHUH as Object of DAA POH is collapsed with CHUANGHUH as Object of BEY. After an obligatory fronting rule has applied to CHUANGHUH, the following surface structure is reached:



Or:

- (57) CHUANGHUH BEY SHYRTOUR DAA POH LE  
 "The window was broken by a rock."

What we are saying in (57) is that the rock was not an Instrument totally through natural causes (as in (53)), but that some Agent threw it.<sup>13</sup> On the other hand, we are leaving open the question of

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<sup>13</sup>A comparison between (57) and (53) brings out one semantic difference between 'hit' and DAA: 'hit' can be used to imply an accidental collision, whereas in Mandarin, PENQ, not DAA, must be used. Note, however, that if SHYRTOUR is somehow involved in an automatic process (cf. (49)), DAA can still occur.

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in what way the action was pre-meditated: the Agent may have meant the rock for a different window, or perhaps not even a window at all. In any case, the overwhelming emphasis in (57) is still on the Instrument of breakage rather than on the Agent. If we wish (in the same Proposition) to say that an Agent used a rock specifically for breaking a particular window, a different construction must be used.<sup>14</sup>

<sup>14</sup>This is one reason why the Instrument in (57) should be translated with 'by' rather than with 'with'. To me, at least, 'with' would imply that the action was purposefully directed against the window in question.

It should be further noted that the BEY construction can optionally apply to sentences with surfaced Agents, type I NPI's, and type II NVI's (with verbs as in (51)-(53)), e.g.

- (58) CHUANGHUH BEY MAU TZERDONG DAA POH LE  
"The window was broken by Mao Tse-tung."
- (59) WOO DE JEAU BEY NEY PIANN BOLI CHIEH SHANG LE  
"My foot got injured by that piece of glass."
- (60) SHUH BEY LEIDIANN DAA DAO LE  
"The tree was knocked down by lightning."

The transformations applying to (58)-(60) are basically the same as for (57). Finally, some speakers of Mandarin omit the surfaced Agent or Instrument in BEY sentences where they are understood:

- (61) WOO DE JEAU BEY CHIEH SHANG LE (cf. (59); BOLI  
is understood)

Compare this with the somewhat similar deletion of the 'by' phrase in the English equivalent 'My foot got injured'.<sup>15</sup>

<sup>15</sup>One minor restriction in the use of the BEY construction with RCC's is that the identical elements of the Instrument sentence and the Object sentence must both be Objects (the majority of RCC's in fact follow this pattern). Occasionally it is the case that the Agent of the Instrument sentence and the Object of the Object sentence qualify as identical elements, e.g.:

- (i) TAMEN CHY BAO LE FANN LE  
"they-eat-fill-ASP-rice-FP"  
"They ate their fill of rice."

where TAMEN CHY FANN 'They eat rice' is the Instrument sentence and TAMEN BAO 'They get full' is the Object sentence. In such cases, the BEY construction cannot apply:

- (ii) \*FANN BEY TAMEN CHY BAO LE

We now turn to Propositions in which an Instrument is involved premeditatively. This means that the Object of the Proposition is part of a goal which has definitely been pre-defined by an Agent,<sup>16</sup>

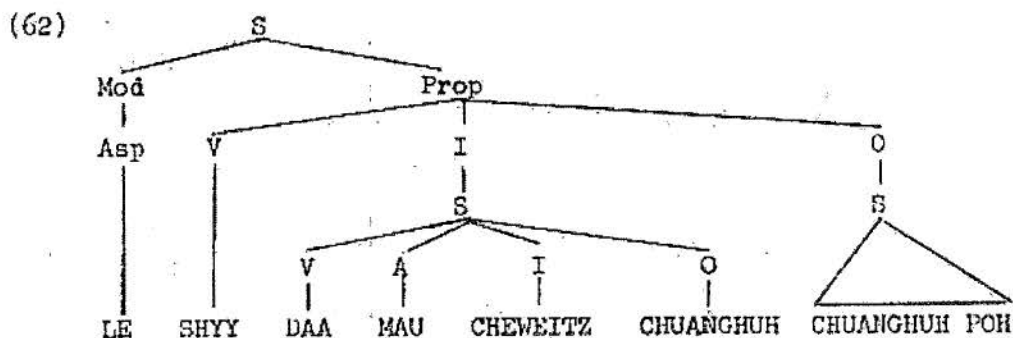
<sup>16</sup> Contrast this with (57), where the resultant-event may or may not coincide with the goal-event intended by the Agent.

and that the Instrument in question has selected by the Agent specifically for the achievement of this goal. The preceding restrictions are reflected in the surface realization of the Proposition in the following manner: (a) The conceptually obligatory Agent must surface either 1) directly, as the sentence subject, and/or 2) indirectly, through an auxiliary verb at the sentence head, which always implies an Agent when the Instrument has been tagged with YONQ.<sup>17</sup>

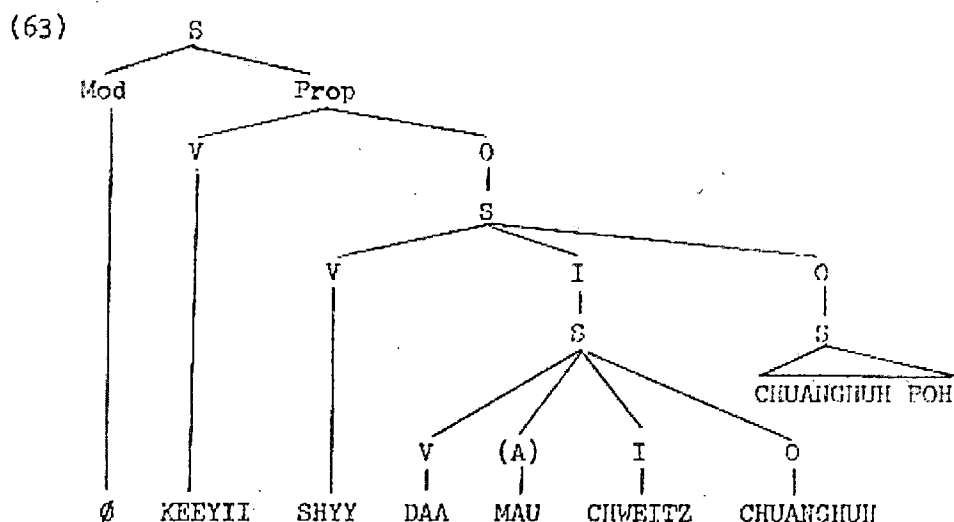
<sup>17</sup> Some typical auxiliary verbs include KEEYII 'can, may', INGGAI 'ought to', NENGGOW 'be able to; be possible to', DEEI 'must'. In cases where these verbs appear in the sentence head position with no subject, the closest English equivalent is either (a) a modal with the neutral pronoun 'one' as subject (e.g. 'one can', 'one must', etc.) or (b) 'it' + a modal adjective (e.g. 'it is possible to', 'it is necessary to', etc.).

In any case, the sentence can never be embedded as the Instrument node of a BEY construction.

The following deep structures represent possible sentences with premeditative Instruments:







Transformations much like those which produce RCC's, along with a YONQ insertion rule, will apply to (62) to yield

- (64) MAU TZERDONG YONQ CHWEITZ DAA POH LE CHUANGHUH LE  
 "hammer"  
 "Mao Tse-tung used a hammer to break the window."

and to (63) to yield

- (65) KEEYII YONQ CHWEITZ DAA POH CHUANGHUH  
 "can"  
 "One can break the window with a hammer."  
 "It is possible to break the window with a hammer."

or if Agent is opted for,

- (66) MAU TZERDONG KEEYII YONQ CHWEITZ DAA POH CHUANGHUH  
 "Mao Tse-tung can break the window with a hammer."

As with (46)-(47) (although the fact was not noted there), the subject-fronting rule must move the Agent to before the auxiliary; there is no (67).

- (67) \*KEEYII MAU TZERDONG YONQ CHWEITZ DAA POH CHUANGHUH

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