DERIVED VERBS IN CHINESE: THE UNIVERSAL AND THE UNIQUE[1]

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Introduction. There is a rich literature on Chinese compound verbs formed by a verb and one or more postpositional elements of verbal or adjectival origin, e.g. *song* 'send, give a gift': *songdao* 'send (to)': *songchu* 'send, carry away'. The literature treats (1) the merits of describing complex verbs in a transformational or lexicalist framework,[2] (2) the analysis of compound verbs as a phenomenon of verbal aspect,[3] (3) the classification of derived verbs by formal and semantic criteria,[4] and (4) the writing of pedagogical grammars of compound verbs.[5] Rare are discussions of the changing patterns of derivation through time and space.

The present paper will characterize the distinctive properties of Mandarin compound verbs against the background of verbal derivation in diverse languages; I view the discussion below as a tentative proposal for a typology of verbal derivation. Students of Chinese verb derivation have frequently drawn occasional parallels between Chinese and other languages, but I know of no systematic comparative investigations. Ideally, a comparative investigation should entail a broad sampling of languages of diverse families and structures, but here I will restrict myself primarily to Indo-European and Semitic, though I have also examined Hungarian, and the Indic and Kwa languages.

In West Indo-European languages, the devices available for deriving compound verbs from a simplex verb stem include (a) prefixation (e.g. Russian *čitat'* 'read': *pročitat'* 'read through'), (b) infixation (e.g. French *tousser* 'cough': *toussoter* 'cough slightly', (c) suffixation (e.g. English *eat: eat up*), (d) multiple (usually encircling) derivation, e.g. prefixation and a reflexive/reciprocal pronoun/ postfix (e.g. Russian *govet'* 'fast': *razgovet'sja* 'break the fast'). In the Semitic languages, derivation takes the form of (a) prefixation (e.g. Hebrew *raxac* 'wash': *hitraxec* 'get washed'), (b) infixation and prefixation (e.g. literary Arabic *fa'ila* 'do': *'ifta-*

ˤ*ala* 'counterfeit'), (c) internal consonant/vowel
gemination (e.g. Maltese *kiser* 'break': *kisser*
'break to pieces'), (d) postfixes (e.g. literary
Arabic ʔ*axaδa* 'take': ʔ*axaδa* ˤ*ala* 'blame'). The
inventory of devices could be somewhat expanded if we
included other language families, e.g. Hausa uses tone
patterns, sometimes with segmental changes. Chinese
most resembles the devices found in Germanic languages,
except that its verb particles are homophonous with
verbs and adjectives, while Germanic particles are
homophonous with prepositions and adverbs. In both
Chinese and the West Indo-European languages, infixa-
tion is rarely used (e.g. *kan* 'look': *kanyikan*
'have a look'). Finally, there is also a close parallel
between Chinese and some creoles (e.g. Afrikaans,
Virgin Islands Dutch Creole) where verbal prefixes are
reduced forms of verbs.[6]
 Any comparison of such a variety of languages will
first have to make sense out of a terminological mêlée.
In Western and Soviet linguistic circles, derived verbs
have been called variously "causative", "potential",
"verb-complement compounds", "resultative verbs", com-
pounds", "complex resultative verbs", "quasiresulta-
tives" and "verb-verb constructions", while the deriva-
tional morphemes have been called "converbs", "auxil-
iary verbs", "postpositive verbs", "verb operators",
"semi-affixes", "suffixes", "verb-particles", "func-
tional endings", "verb endings" and "complements".
Terms like "resultative" or "directional" which call
attention to semantic functions are not always appro-
priate, especially in cross-linguistic contexts; terms
such as "serial verbs" or "verb-verb constructions", in
calling attention to formal properties, may be histori-
cally accurate but cannot be recommended for synchronic
studies, since most of the postpositional elements
differ in meanings and tones from the simplex verbs
from which they are derived. For example, the bound
postpositional element *-shang* only occasionally has
the meaning of the free verb *shang* 'go up, to', e.g.
shanglou 'go upstairs' vs. *suoshang* 'lock up',
kaoshang 'pass test'. Hence I prefer to use neutral
terms such as "derived verbs" for the general phenome-
non, and "verb patterns" or "verb particles" for the
postpositional derivational elements.[7]
 Despite the considerable structural differences, de-
rived verbs in Indo-European, Semitic and Chinese share
an impressive number of formal and semantic properties,
which will be discussed below under ten headings. Lack
of space precludes the citation of many non-Chinese ex-
amples.

1. The fit between functions and resources. In Chinese a single verb may express a variety of meanings, and a single meaning may be expressed by a number of verb particles. For example, *-qilai* expresses inchoativity (e.g. *re* 'be hot': *reqilai* 'become hot-[ter]') and ingressivity (e.g. *shuo* 'speak': *shuoqilai* 'begin speaking'--though often there is a change in meaning, e.g. *chao* 'make noise': *chaoqilai* 'quarrel'); *-dao* expresses both successful and unexpected action (e.g. *ban* 'handle': *bandao* 'handle successfully' vs. *meng* 'dream' [noun]: *mengdao* 'dream of something unexpected').[8] Conversely, the opposition 'lock': 'lock up (firmly)' can be expressed by no less than three verb particles, e.g. *suo* 'lock': *suoshang = suoqilai = suozhu* 'lock up (firmly)'. Moreover, derived verbs may be nearly synonymous with simplex verb-noun object constructions, e.g. *shuoqilai* 'begin talking' ~ *kaikou* '(at last) begin talking' (literally 'open' + 'mouth').

An important goal should be to ascertain which semantic functions tend to be expressed by a common verb particle. There are striking similarities among the languages sampled. For example, in Chinese, the features of inchoativity and ingressivity may both be expressed by *-qi(lai)*; in Russsian ingressivity, perfectivity and successive action are all expressable by the prefix *za-*.[9] In addition to shared sets of functions, unrelated languages often agree in the assignment of simplex verbs to parallel derivational patterns. For instance, English *up* with verbs of non-movement may also express the notion of performing an action within a circumscribed area or context. It is striking that not only does Chinese *-qi(lai)* match the two meanings of English *up*, but the non-directional function of *-qi(lai)* and *up* operates on a similar corpus of simplex verbs, e.g. Chinese *suanqilai = count up, guanqilai = close up, xiangqilai = think up*.[10]

Future research should determine to what extent languages agree over the assignment of semantic notions to derived verbs. Consider the notions 'chase' and 'pursue, hunt for': while English now expresses the two notions by lexical means, Old English, like many other languages, expressed the second notion by a derived form of 'chase': *purchacen* 'seek to obtain' ~ French *chasser: pourchasser*, Arabic *ṭarada: ṭārada*. Chinese *zhui: zhuisuo* 'pursue, investigate'.

2. Inconsistent utilization of the resources. Derivational resources are rarely used consistently, i.e. a derivational chain often lacks individual links.

For example, from *tang* 'lie', we can derive *tangxia-(lai)* 'lie down' and a potential compound *tangdexia* 'can lie down (in a certain space)'. But *diao* 'fall' > *diao-xialai, diaoxiaqu* 'fall down' has no intermediate **diaoxia*. Many compounds expressing a potential action lack the non-potential variant, e.g. *yongdezhao* 'can use': **yongzhao*. There are also cases where derived verbs exist in the absence of the underlying complex, see **yu: yudao = yushang = yuzhao = yujian* 'meet'. Frequently, there is no semantic equivalence between positive and negative derived verbs formed with the potential infix, e.g. *xiangqilai* 'think up a solution, recall': *xiangdeqilai* 'can think up a solution, can recall': *xiangbuqilai* 'cannot think up a solution, cannot recall', but the negated potential use of *guandezhao* 'can take care'—*guanbuzhao*— means both 'none of your business' as well as 'cannot manage'. Often the semantic link between a derived verb and its potential form is opaque, e.g. *shuoding* 'agree upon, settle through talking' vs. *shuobuding* 'cannot say for sure, maybe' (***'cannot settle through talking').

Often derived verbs assume unpredicatable (usually non-verbal) functions, e.g. *henbude* 'would that' (literally 'hate' + 'cannot' + 'attain'); occasionally, derived verbs function as nouns, e.g. *banbudaor* 'roly-poly' < 'cannot push over'. Particularly common is the creation of (near) synonyms involving various verb particles and degrees of morphological complexity: (a) single = double verbal particles, e.g. *shuo* 'talk': *shuoqi = shuoqilai* ;'begin to talk'; (b) simplex = complex, e.g. *ti = tiqilai* 'lift up', *tingdong* 'understand what one hears' can be contracted to *dong* 'understand' but not to *ting* 'hear'; (c) a verb may appear with a choice of verb particles, e.g. *pao* 'run': *paokai = paozou* ' run away'; (d) diverse simplexes may use a common verb particle, e.g. *ding* 'decide': *nading = dading (zhuyi)* 'make up (one's mind)'. There are widescale differences in productivity of the verb particles, e.g. *-shang* and *-xia* are very productive in a variety of functions, but *-dong* 'move' or *-de* (used with some verbs of perception) have a low distribution.[11] A number of observers have noted that the simplex member of an opposition does not always enjoy the highest text frequency, see e.g. Dungan.[12] There is evidence that the complex *-qilai* is used more often than simple *-qi*[13]; the potential verb seems to be rarer than the actual,[14] but individual positive potential verbs may be rarer than the corresponding negative potential.[15]

See also the opaque relationship of English *send up*

'put in jail' vs. *send down* 'demote'. In Hebrew the simplex verb has become obsolete and new verbs have to be accommodated in derived verbal patterns.

3. Tautologous expression. Simplex verb stems can optionally attract postpositional elements of similar meaning, resulting in tautologous expression, e.g. *ti* 'carry, lift; mention' + *-qilai* 'raise' > *tiqilai* 'lift (up); mention'. In some cases of tautologous expression, the verb particle is obligatory, e.g. *da-jia xin-li kaishi andunxiaqu/xialai* 'everyone began to calm down'.[16] Tautologous expression also characterizes the use of the potential form, e.g. *xuedehui* 'can learn' (with 'can' expressed by *-de-* ≠ *-hui*), *neng shudedao* 'can count up to' (with 'can' expressed by *neng...-de-*).[17]

See also English *fall* = *fall down; slow up* = *slow down*.

4. Interdialectal and interlingual relationships. Closely related dialects of Chinese often differ in inventory, distribution and functions of postpositional elements. For example, Mandarin *siqu* 'die' (< 'die' + 'go') corresponds to the cognate Amoy phrase *xi-khi*, but there is no Mandarin *huaiqu* for Amoy *phai-khi* 'spoil'. While Cantonese *sai* 'wash' > *saifaan* 'wash again', the Mandarin cognates *xi* 'wash' and *fan* 'return' are not combinable. Speakers of a single dialect frequently disagree over the grammaticality of a verb, e.g. *nianwandeliao* 'can finish studying' was not accepted by all my Mandarin informants.[18] On relative chronologies of complex construction, see section 5 below.

Note Russian *pisat'* = Czech *psat* 'write' but Russian *opisat'* 'describe' vs. Czech *opsat* 'copy, transcribe, circumscribe, paraphrase'; Indian English *speed: overspeed* vs. English *speed: *overspeed*.

5. Coexistence of diverse chronological strata. The fact that Mandarin verbal particles differ widely in (a) productivity and (b) the morphophonemics of tone leads me to suspect the coexistence of disparate chronological strata. For example, compare productive *-dei* vs. unproductive *-de ~ de* 'obtain'.[19] Note also the existence of semantic differences between verb particles and their cognate free forms, e.g. *hao* 'be well' vs. *-hao* 'well; complete, finish; ability' but *huai* = *-huai* 'be bad, spoil'.[20]

The partial obsolescence of the derivational system is suggested by the fact that a number of verb particles can be replaced by a periphrastic construction,

e.g. ingressivity can be expressed by the verb particle
-*qilai* as well as by *kaishi* 'begin' + verb, as in
reqilai = *kaishi rele* 'it has become hot'.
  The study of the changing patterns of derivation is
a desideratum in Chinese, Indo-European and Semitic
linguistics.[21] Egyptian Arabic *'ista-* is rare, while
ta- is extremely productive; Russian *za-* is rare in
the meaning of successive action, but productive as a
mark of perfective action.

  6. **Inverse relationship between morphological and
semantic complexity.** Simplex verbs tend to be broader
in meaning than any derived complex.[22] For example,
zhan can mean 'open up, extend, show', while derived
verbs with *zhan-* express only one of the simplex
meanings, e.g. *zhankai* 'open up', *zhanxian* 'extend
a time limit, postpone', *zhanlan* 'exhibit'. Còmplex
verbs with two verbal particles tend to be less prone
to ambiguous interpretations than simplex verbs with a
single verb particle, e.g. *fangxia* 'put down; accom-
modate' vs. *fangdexia* 'can accommodate' (*'can put
down'), but *kanbuqi* means variously 'cannot afford
to see (movies); look down upon, have a low opinion
of'. Often, the simplex has an unspecified function in
contrast to the corresponding derived verbs, e.g. *gu*
'drum' > *gudong* 'agitate, arouse; agitation'.[23]
  It is imperative to determine whether the present
meanings of simplex verbs predate the meanings of
derived verbs or vice versa.
  In comparing complex verbs with their simplex cog-
nates, we occasionally observe an inability to conju-
gate the former in the imperative, e.g. *kan*!
'look!', *ting*! 'listen!' vs. **kanjian*!, **ting-
dao*![24] In addition, complex verbs cannot occur
with the aspectual marker -*zhe*. On the greater text
frequency of the potential, see above. The verb par-
ticle -*shang* in a complex verb may preclude the
occurrence of an animate subject, e.g. *chuanran*
'infect, be contagious' vs. *chuanranshang* 'be
infected'.
  See Czech *volat* 'shout; summon; telephone' vs.
vyvolat 'shout': *povolat* 'summon': *zavolat*
'telephone'.

  7. **Use of derivational machinery to express diverse
grammatical categories.** Verb particles have a number
of heterogeneous functions in Chinese. They (a) add new
meanings to the simplex or restrict the scope of the
simplex (see section 6 above); (b) convert a noun into
a verb, e.g. *gen* 'root': *genju* 'be based on'; (c)
express verbal aspect, e.g. -*guo* (with neutral tone)

experiential aspect, as in *chiguo* 'have eaten' vs.
-guo(lai) 'pass through, across' as in *paodeguo*
'can run across'.

There are two complications in Chinese which are
absent in Indo-European and Semitic grammars: (a) de-
rived verbs with a simple verb particle are on the sur-
face identical to verbs consisting of two independent
verbs; (b) a derived verb consisting of a complex verb
particle, beginning with *-de-*, is identical in sur-
face structure to the sequence of a verb and a manner
adverb. Disambiguating is done by derivational
patterns. An example of a compound verb is *taolun*
'discuss' < *tao* 'beg for' + *lun* 'discuss'. From
taolun we can derive *taolunwan* 'discuss completely'
but no corresponding potential form, e.g. *taodelun*.
A distinguishing feature of the compound is that V₂,
which tends to retain its original meaning in the com-
pound, is often similar to V₁ in meaning, e.g. *xiu*
'repair' + *zheng* 'correct' > *xiuzheng* 'revise'.
Moreover, compound verbs can be fully reduplicated,
e.g. *taoluntaolun* 'have a talk with', whereas derived
verbs are amenable to partial re-duplication at best,
e.g. *lakai* 'open' > *lalakai* 'open'.

A topic for research is to determine the freedom to
cross over from one type of derivational pattern to the
other. For example, *xiuzheng* 'revise' participates in
the derivational patterns of both derived and compound
verbs, e.g. *xiuzhengdeliao* 'can whittle straight'
(compound verb) ~ *xiudezheng* 'can revise' (derived
potential verb). An example of surface ambiguity is
kandekuai which could mean either 'can read fast' or
'read fast'. The ambiguity is removed by an optional
tone in the potential, e.g. *kandekuai*; there is no
ambiguity in the negative, e.g. *kanbukuai* 'cannot
read fast' vs. *kande bukuai* 'not read fast'.²⁸
Finally, a sequence of two verbs, the second of which
is directional in meaning, may be interpreted either
as a derived verb or as a sequence of two verbs, e.g.
na shu chulai 'carry the books and come out' or
'take out the books'.

See Hebrew *hit-* which expresses reflexivity, reci-
procity and also creates new verbs from nouns and ad-
jectives (see above); in the Slavic languages, prefixes
express perfective aspect in addition to semantic
extensions of the simplex verb.

**8. Agglutination and the merger of existing re-
sources.** Chinese can create new complex verb parti-
cles by combining existing simple verb particles. The
complex verb particles are often semantically no longer
related to the parallel simplex particles. For example,

qi ~ *-qi* 'get up, rise' (as in *tiqi* 'raise, lift up') vs. *-qilai* 'begin' (as in *shuoqilai* 'begin talking') or *-deqi* 'can afford' (as in *maideqi* 'can afford to buy'). The meaning of a complex verb particle is largely predictable only when the first component is the potential marker *-de-/-bu-*, e.g. *nian* 'study': *nianwan* 'finish studying': *niandewan* 'can finish studying'. The number of elements which can appear in the second position of a complex verb particle is far smaller than the number of elements which can serve as a single verb particle.

See Russian *nesti* 'bring': *ponesti* 'bolt (horse); sustain': *nanesti* 'bring a quantity of': *po-* as the second or third verbal prefix denotes exclusively a gradual activity, e.ge. *ponanesti* 'bring alot little by little'; *dumat'* 'think': *zadumat'* 'plan, conceive': *prizadumat'sja* 'become pensive, hesitate': *poprizadumat'sja* 'become somewhat pensive'. Literary Arabic *qaruba* 'be close': *qarraba* 'bring close(r)': *taqarraba* 'approach, go near'. The maximum of agglutinated suffixes in most Slavic languages is commonly three, in Semitic two.

9. Interpretation of derived verbs. We have seen that verbal derivation is a mixed domain of productive and unproductive forms and functions, For example, from *dai* 'carry', we have *daishang (men)* in the unpredictable meaning of 'close (the door)'. Describing the rules governing the formation and interpretation of derived verbs remains an urgent task of Chinese, Slavic and Semitic linguistics. It seems that speakers may be able to interpret derived verbs in two ways: (1) by extracting clues from the meaning of the simplex and (2) by relating each derived verb to the chain of derived verbs in which the simplex participates. For example, if a simplex verb of motion is combined with *-delai*, then the meaning of the derived verb tends to express the potential of the simplex: *dai* 'bring': *dailai* 'bring along (here)': *daidelai* 'can bring along'. If the simplex is not a verb of motion, then *-delai* assumes the meaning of 'potential because' and *-lai* cannot appear without *-de*, e.g. *chi* 'eat': *chilai: chidelai* 'can eat (because the food is tasty)'. If *-qilai* is added to a simplex stative verb, then the meaning of the compound may be inchoative, e.g. *leng* 'be cold': *lengqilai* 'become cold-(er)'; but with simplex verbs expressing a physical action, *-qilai* retains its original directional force, e.g. *zuo* 'sit': *zuoqilai* 'sit up (from, in bed)'--*begin to sit'.[26]

In Hebrew, a derived verb with the *ni-* prefix will

be interpreted as the passive voice of the simplex when
the latter is a transitive verb (e.g. *šamar* 'guard':
nišmar 'be guarded') but as a mediopassive if there
is no corresponding simplex form in use, e.g. *nixna*
'surrender': *kana).

10. Morphological identity of the verb particles.
Chinese differs from Semitic and to some extent from
Indo-European languages in that there are no bound mor-
phemes which cannot serve as free morphemes. It is in-
teresting to speculate whether the morphological iden-
tity of the verb particles/patterns in the three
language families is a function of the relative age of
the device. For example, the Chinese particles of
verbal origin which have ceased to function as in-
dependent verbs, such as *ba* definite object marker
(< *'take') or *bei* passive voice marker (< *'re-
ceive, submit') may be older than the verb particles.

11. Order of the components. A distinctive feature
of Chinese which finds only scant reflection in Germa-
nic languages is the frequent reversability of compo-
nents in derived verbs. Derived verbs differing in com-
ponent order are often similar in meaning, e.g. *kai-
zhang* 'open': *zhangkai* 'separate'; *kaizhan* 'be
openminded, develop': *zhankai* 'open up; launch'.
Examples of pairs which are very dissimilar in meaning
are *haochi* 'be tasty' vs. *chihao* 'finish eating',
fachu 'emit (odor, sound)' vs. *chufa* 'set out (on
the road)'. There seem to be no cases in Chinese where
a change in component order is not marked by a change
in meaning. Of the Indo-European languages that I
examined, freedom of component order is only found
occasionally, see e.g. English *sit out* vs. *outsit,
read out* vs. *outread.*[27] In the Semitic languages
there is no freedom of component order since the deri-
vational devices are exclusively bound morphemes.

12. Scope of derivational pattern. In Chinese,
every verb in principle can become a verbal particle. A
future task is to determine what sort of verbs are most
likely to become verbal particles.
In Indo-European and Semitic languages, there are
restrictions on the use of derivational patterns, e.g.
with non-native stems. In Slavic languages, a number of
foreign verbs, regardless of their time of borrowing and
source, are not freely combinable with verbal prefixes,
except (in some cases) to express the perfective aspect.
e.g. Russian *manevrirovat'* 'manoeuvre' (imperfective
aspect) (< German < French) is only combinable with the
prefix *s-* to form the perfective aspect; Russian verbs

of Church Slavic origin often fail to combine with pre-
fixes altogether, e.g. *ženit'* 'marry off' (biaspec-
tual), *kaznit'* 'put to death, execute' (imperfective
aspect only). On the other hand, Romance verb stems in
English are less likely to appear in phrasal verb
patterns than native stems, see e.g. (native) *bring
down* vs. (Romance) **reduce, diminish* without *down*.
In Semitic languages most verb stems consist of three
consonants; foreign verbs with more than three conso-
nants can only participate in one or two derived verbal
patterns, e.g. English *puncture* > Hebrew *pinčer*
'cause a mishap' > *hitpančer* 'end in a mishap'.

   13. **Variety of derivational patterns.** In Chinese,
the fact that every verb can function as a verb par-
ticle and vice versa means that Chinese has a far rich-
er inventory of derivational devices than Indo-European
and Semitic languages. However, students of Chinese do
not agree over the number of verb particles in the
language. Cartier (1972) posts over 100 (of varying
productivity), but most writers envisage a far more
reduced corpus, e.g. less than three dozen. Chinese
monolingual and bilingual dictionaries never strive for
a complete listing of derived verbs. For example, the
compendious *Han ying ci dian* (1978) lists *fangxia*
in the single meaning 'lay down' but omits *fangdexia*
'can find room for'; negative potentials are listed
without their positive counterparts, e.g. *xiabulai*
'refuse to come down (e.g. temperature); cannot be
built; feel embarrassed' but there is no mention of
xiadelai. Among bilingual dictionaries, Kotov 1974
stands out for his relatively detailed listing of verb
particles. In principle, derived verbs whose formation
and/or meaning can be predicted from the meanings of
the components need not be glossed in the dictionary,
but the corpus of such verbs needs to be determined.

   Conclusions. The ten principles outlined above
prove not to be unique to derived verbs in Chinese;
parallels in principle and even in details of inventory
and distribution exist in a great many languages, both
related and unrelated--Germanic, Romance, Semitic,
Slavic, Hungarian, Indic and Kwa--despite the divergent
structure of these languages and the heterogeneous
origins of their derivational machinery. The scope of
the derivational systems varies widely from language to
language: Semitic languages have relatively few deriva-
tional patterns, e.g. Modern Hebrew has only four pro-
ductive patterns and Arabic dialects use under ten.
The Germanic languages have roughly two dozen verbal
prefixes in common use (compared to a small number of

infixes); a Slavic language, Ukrainian, has forty-odd
verbal prefixes.[2e] Chinese easily has the most elabo-
rate system. Verbal prefixes in Indo-European languages
are derived from prepositions and adverbs, but not
every member of these two word classes serves as a
verbal prefix; not every verbal prefix can also be a
preposition or adverb.

However, the similarites among these languages in
the formal parameters of the derivational morphemes are
paralleled by some significant dissimilarities on the
semantic plane, e.g. in the types of functions which
coexist in a single affix. These dissimilarities con-
stitute no less an interesting field for cross-
linguistic investigation than the similarities. Con-
sider the parallels between Ukrainian *pid(i)(o)-*
'under', English *up* and Chinese *-qi(lai)*--all of
which express a direction as well as completion within
a circumscribed space, of a specified goal, e.g.
Ukrainian *pidšukaty* 'think up, of; find suitable',
pidraxuvaty 'count up' ~ Chinese *suanqilai* 'count
up', *jiaqilai* 'add up', *xiangqi* 'think up'; Chinese
suoqilai has an English equivalent in 'lock up', but
there is no Ukrainian parallel. Note that Russian
frequently uses *pod-* 'under' to denote illegal
activity, e.g. *slušat'* 'hear': *podslušat'* 'overhear'
--corresponding to the rare use of English *over-*!
Such a development of an original spatial prefix has no
parallel in Chinese, though a derived pattern in Arabic
expressing illegal activity operates on a similar
corpus of simplex verbs.

The immediate goal of Chinese linguistics should be
to motivate the phenomena catalogued above and to trace
their historical evolution; the *more distant* goal--
extending beyond the confines of Chinese--should be to
determine the types of paths along which semantic
notions may develop, and the reasons for a similar dis-
tribution across languages.

[1] I am grateful to Chen Chung-Yu for her many help-
ful suggestions regarding the Chinese data.

[2] See Yue-Hashimoto 1965, Li and Thompson 1973,
Thompson 1973 and Tai and Chou 1974.

[3] See Jaxontov 1957:41, 92, 167, Dragunov 1960:122,
129ff, Korotkov 1968:370ff, Spencer 1970, Cartier
1972:75, 124ff, Young 1975, Lin 1979. Slavic-speaking
sinologists frequently equate the Chinese simplex verb
with a Slavic imperfective verb and the Chinese com-
pound verb with the perfective counterpart (see

Kalouskov 1964:142 and Imazov 1977:81-2.).

⁴ See Cartier 1972, Lu 1972, 1973a, 1973b, 1976, 1977, Thompson 1974. Useful remarks are also found in Chao 1948:43ff, 140, 153-4, 161, 167, 175-6, 184, 196, 202, 227-8 and Coyaud and Paris 1976:99-109, 174-82.

⁵ See Thompson 1972, Lee 1976, Lu 1976, Liu 1978. In the native Chinese writing system, derived verbs are not distinguished orthographically from sequences of morphemes. However, in Soviet Dungan, a form of Mandarin spoken by about 50,000 in Soviet Tadjikistan and Kazaxstan, written in a modified Cyrillic script, the components of derived verbs, unlike verb-noun compounds, are written together as one word, e.g. *fynkě* 'separate', *boshong* 'wrap up' (Imazov 1977:81-2, 98ff, 131-67).

⁶ Derivational patterns may also be accompanied by optional morphological changes, e.g. Russian *lit'* 'pour' (with an accusative object): *nalit'* 'pour a quantity of' (with an accusative or genitive object).

⁷ For a summary of the nomenclature, see Kalouskov 1964:27, note 4 and Cartier 1972: section #9.33.

⁸ But *kandao* can mean both 'succeed in seeing' and 'see unexpectedly' (see discussion in Thompson 1973: 376).

⁹ For example, Russian *cvesti* 'bloom': *zacvesti* 'begin to bloom'; *pit'* 'drink': *zapit'* 'drink down (after)'; *tormozit'* (imperfective aspect): *za-tormozit'* (perfective aspect) 'put on the brakes'.

¹⁰ But English *save up* differs from Chinese *cun-xialai* < *-xialai* 'down'. Russian widely uses *pod-* '(up from) under' in the translation equivalents, e.g. *ščitat'* 'count': *podščitat'* 'count up'--but *pod-* is not used with the simplex verbs 'lock, wrap, close (up)'. Compare English *think up* (i.e. 'select from among existing possibilities') ~ Chinese *xianqi* (also means 'remember someone') ~ Russian *vspomnit'* < *vs-* 'up' + *pomnit'* 'remember').

¹¹ For example, *-de* is restricted to verbs of perception, as in *juede* 'feel', *jide* 'remember', *rende* 'recognize'.

¹² Imazov 1977:81.

[13]   Chao 1968:111.

[14]   Spencer 1970:57.

[15]   Chao 1968:457.

[16]   Kalousková 1964:116.

[17]   The examples are cited ibid. 115.

[18]   On disagreement among speakers in forming and
interpreting derived verbs, see Chao 1968:437, note
42, Cartier 1972:18 and Teng 1977:8.

[19]   Dragunov 1960:122 notes that verb particles with
directional meanings tend to have no stress or tone,
while non-directional meanings retain their tone, e.g.
nálai vs. *niànwán*. The relative chronologies need
to be studied.

[20]   Compare *haochi* 'good to eat, be tasty' vs.
chihao 'finish eating'. See also section 11 below.

[21]   On the relative chronology of verb particles in
Chinese, see Jaxontov 1957:100, Li 1958:313, Coyaud
and Paris 1976:107. Korotkov argues that the change of
(-)*qilai* 'arise' into -*qilai* 'begin' passed
through the intermediate stage of expressing 'appear'
and that all three functions of *qilai* coexist in
contemporary Chinese (1968:233).

[22]   Greenberg 1966: chapters 3-4.

[23]   The notion that verb particles can lose their
lexical functions and become "empty" aspectual markers,
popular among Soviet and Chinese sinologists, is dis-
cussed by Chao 1968:453-4 and Cartier 1972:51, 56ff.

[24]   There is some tendency in English to use phrasal
verbs with multiple particles more freely in imperative
sentences (see Bolinger 1971:133, note 1).

[25]   See also Cartier 1972:79. For other syntactic
differences, see Coyaud and Paris 1976:181. On the
stressability of -*de*-, see Chen 1979:48.

[26]   See also Korotkov 1968:233 and discussion of
wan in Lu 1973a.

[27]   Bolinger 1971:49.

²⁰ Wexler 1985.

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Abbreviations: *JCL—Journal of Chinese Linguistics;
JCLTA—Journal of the Chinese Language Teachers'
Association;* PhD—Unpublished PhD

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