BIBLIOGRAPHY


(i) "Spatial N" -de N

wuli-de ren  people in the room
屋裏的人
shanshang-de shu  trees on the mountain
山上的樹
lungjung-de nyau  bird in the cage
籠中的鳥
jwodzisya-de di  floor under the table
桌子底下的地

(ii) "Temporal N" -de N

dzauchen-de taiyang  sun in the morning
早晨的太陽
szji-de yishang  dresses for the year round
四季的衣裳
jouno-de dyanying  movies at weekends
週末的電影
sandyan-de hwoche  3 o'clock train
三點的火車

9 Here ke yikau-de (可依靠的) is taken to be ungrammatical in the sense of ke kau-de (可靠的). Independently, ke yikau-de, if acceptable, has a different meaning.
The parenthesized de in (4)-(7) is generally deletable. But see Chao (1968 : 287-8) for critical cases where the presence or absence of de may cause a contrast in meaning.

If one tries to impose an analysis on the items in (8), some of them may be viewed, at best, as compounds of synonymous bound morphemes, while others may yield only unrelated meanings.

Chao actually has seven types of "X de X" constructions. I have omitted his types "N de A", as in (i), and "N de V", as in (ii), because I take the A and V as nominalizations. Hence, "N de A" or "N de V", on the whole, is nondistinguishable from "N de N".

(i) wode chyung  我的窮
   my being poor
(ii) tade shwohwang  他的說謊
       his telling lies

Most of the examples given here are Chao's, but some are mine.

With monosyllables, things are different. Some may directly occur in "A de N", as in (i), but others can occur only in expanded forms, as in (ii). Cf. (iii).

(i) shende shwei  深的水
    deep water
(ii) binglyangde shou  冰涼的手
       ice-cold hand
(iii) ?lyangde shou  涼的手
       cold hand

The auxiliaries used in the examples of (iii) are based on Chao's (1968 : 735-48) listing.

Here we, of course, have not included items of "spatial-temporal N" plus -de, such as (i) and (ii), where it seems difficult to discover any "possessive" meaning.
much more restricted.

(i) *Spatial-temporal N + Ving*

- day-flying
- earth-wandering
- night-blooming
- night-flying

(ii) *Pronoun + Ving*

- all-binding
- all-blessing
- all-embracing

(iii) *Adj/Adv + Ving*

- easy-going
- good-looking
- far-reaching
- hard-working

(iv) *N + Ven*

- man-made
- frost-bitten
- home-bred
- earth-bound
- poverty-stricken

(v) *Adj/Adv + Ven*

- clean-shaven
- deep-seated
- far-fetched
- foreign-built

NOTES TO PART III.

¹The *shr* (是) in Chinese is quite a different word from the English *be*. Except for special cases, the two are far from equivalent to each other.
NOTES TO PART I.

1 This study was partially supported by a research grant (1977-78) from the National Science Council.

2 The phonetic notation used to transcribe the Chinese examples in this study will be that of the Yale system. The tone markings are omitted, for the lexical meanings are, in general, recoverable from the English glosses given along.

NOTES TO PART II.

1 Some of the adjectives in this group do occur in pred- cate position, but only with a different meaning. For example,

(i) The president is late.
(ii) The King is present.

2 The same is true, of course, not only with adjectives but also nouns, verbs, and adverbs. That is, one can also, to a greater or lesser extent, rely on derivational suffixation to identify these other parts of speech.

3 This naturally has to do with the Romance influence on English morphology. Large numbers of derived adjectives in English were taken from Latin without a change in form. As a result, in numerous cases, a certain adjective is available in English simply because Latin has supplied it.

4 Except for a few cases (e.g. creative, occasional, excessive), the two groups (34) and (35) completely coincide; that is, they would both reject either the predicative position or intensification/comparison.

5 Among Levi’s arguments are, significantly, ‘nonpredicativeness’ and “non-degreteness” of such adjectives. Thus they can meet Quirk et al’s criterion (a) only.

6 The following types discussed in Marchand (1969) seem
A final remark to be made is about the multiple duty played by the particle ",-de" in signaling a number of "case" relations which must be expressed by a variety of different devices in English. Compare (6) and (7).

(6) a. hwa tu de ren ("agent") 畫圖的人
draw pct. person
b. hwa tu de yungjiyu ("instrumental") 畫圖的用具
draw pct. tool
c. hwa tu de fangjiyan ("locative") 畫圖的房間
draw pct. room
d. yung shou hwa de tu ("patient") 用手畫的圖
use hand draw pct.

(7) a. person who draws pictures
b. tools to draw pictures with
c. room where one draws pictures
d. picture drawn by hand

The nonuse of distinct markers for the various "case" relations in -de constructions may be comparable to the absence of plural endings on Chinese nouns. English, in this respect, displays a heavier use of redundancy rules than Chinese does.
example, the word order of "N+Ving" compounds such as (1) must have derived from underlying structures containing the sequence "V+N", as shown in (2).

(1) a. degree-conferring
   b. freedom-loving
   c. God-fearing

(2) a. (NP Aux) confer degrees
   b. (NP Aux) love freedom
   c. (NP Aux) fear God

It is this order change of "Verb + Object" into "Object + Verb", combined with the suffix -ing, that generates the "compact" feeling of the "N+Ving" group as a single lexical unit—a compound adjective rather than a loosely constructed phrase.

On the Chinese side, we have observed that the most important device for producing adjective-functioning units is by means of -de constructions. Of the seven types of -de constructions given in part III, except "N de N" and "A de N", all the others are built around a verb head. In terms of underlying structure, these are very similar to the English "N+Ving" or "Ving" type of adjectives. In Chinese, however, the surface forms are of a much looser frame. And more significantly, a -de construction in Chinese may freely begin with an auxiliary verb while an English auxiliary verb never can occur in a compound adjective. We have demonstrated this by presenting (on 30) a deletion rule for Chinese to the effect that it may delete any term except "V" in the basic sentence pattern (3) in order to derive a V-centered -de construction.

(3) Subj + Aux + V + O

Take sentence (4) for example. By applying the above deletion rule, one can automatically derive all the -de constructions in
d. ? ke-hwaiyi-de fendz
可懷疑的份子

e. *ke-dzengwu-de tyanchi
可憎惡的天氣

f. *ke-jyupa-de jingsyang
可懼怕的景象

Thus, as far as such morphological characteristics are concerned, type (G) forms would be closer to type (B)—genuine adjectives—than to type (C), (D), or (F).

IV. CONCLUSION

Grammarians talk about adjectives for both English and Chinese, yet it should not be taken for granted that there are any systematic correspondences between English and Chinese adjectives either in definition or formation. As a matter of fate, there are almost no formally defined adjectives in Chinese. English adjectives generally correspond to either verbs or clause-based-de constructions in Chinese, and there are large numbers of cases where an English adjective can be equated only to a noun in Chinese.

At the outset of this study, we posed the question: How is it that English seems to have a greater stock of adjectives than Chinese? Now, as a result of our investigation, it is found that one of the fundamental reasons is that, in many cases, English has to use a certain adjective instead of a noun in the “Adj + N” construction (e.g. mechanical engineer vs. *machine engineer) simply because such an adjective is available in the lexicon. And most such adjectives in English owe their existence directly to Romance morphology.

As a secondary factor, the relative richness in adjectives in the English lexicon may be attributed to the greater structural compactness in the formation of compound adjectives. For
b. [wo bu chyu]-de liyou  [我不去]的理由
I not go reason
"the reason why I don't go"

(44) a. wo dyau yu  
I hook fish
"I go fishing."
b. [wo dyau yu]-de didyan  [我釣魚]的地點
I hook fish place
"the place where I go fishing"

However, holding this view would entail that all attributive -de constructions of the types (C), (D), and (F) above be treated as clauses, or at least, elliptical clauses. Which of the two views will ultimately prove more plausible, considering the over-all structure of Chinese, will certainly need further research, and I would rather leave this question open in this study.

One final observation to make is concerning the type (G) constructions given in (32). Earlier we have pointed out that the auxiliary ké (可) here does not seem to be the same morpheme as keyi (可以). Another characteristic to note is that there seems to be a certain severe constraint on the generation of this construction, and therefore most forms of this type appear more or less fossilized and not readily subject to substitutions. For example, the verbs that are permitted in type (G) are normally restricted to monosyllabics. Dissyllabic verbs, though semantically equivalent, cannot be freely substituted in this frame, as evidenced by:

(45) a. *ke-lyanmin-de shenghwo
可憐憫的生活
b. *ke-yikau-de ren⁹
可靠的人
c. *ke-syiai-de dungwn
可喜愛的動物
say which is more complex: to derive a phrase (as in the
Chinese case) or to derive a clause (as in the English case).
What is of interest here is that in Chinese one needs only one
simple deletion rule to the effect that it may delete any term
except V in the basic sentence structure (39)—to account for
all the different -de constructions of (40). On this point,
Chinese is certainly simpler than English.

(39) Subj Aux V 0
(40) a. Ø Aux V 0 -de (type F)
     b. Ø Aux V Ø -de (type F)
     c. Ø Ø V 0 -de (type D)
     d. Ø Ø V Ø -de (type C)

An alternative proposal to account for the constructions in
(40) may take the particle -de as a kind of relativizer in view
of the fact that one may change any sentence into a relative
clause by attaching -de to the end, as is shown below.

(41) a. wo sye syin  
     I write letter
     “I write letters.”
     b. [wo sye syin ]-de jr  
     I write letter paper
     “the paper I write letters with”

(42) a. wo hwa tu  
     I draw picture
     “I draw pictures.”
     b. [wo hwa tu ]-de yungju  
     I draw picture tool
     “the tools I draw pictures with”

(43) a. wo bu chyu  
     I not go
     “I do not go.”
All the other types share the common characteristic that they all involve a verb in the construction. In this connection we have observed that the "V-de" constructions of type (C) are quite analogous to the "Ving/en" type of adjectives in English and that the "VO-de" of type (D) at least syntactically corresponds to the "N-Ving" compound adjectives of English although the lexicalization rules of the two languages do not always match.

Now with reference to type (F), we find an important difference between English and Chinese. That is, while Chinese may freely begin a noun-modifying -de construction with an auxiliary verb, in English, as far as I can see, there is nothing parallel, for the auxiliary verbs of English never can occur in constructions other than a clause or sentence—i.e. without an explicit subject of its own. For example, the Chinese auxiliary hwei (會) is regularly equated to English can in a clause/sentence structure such as (33).

(33) jetyau yu hwei fei 這條魚會飛
this fish can fly

(34) This fish can fly.
However, when we have a -de construction like (33), English would have only to say something like (36) or simply (37), but never anything like (38).

(35) hwei-fei-de yu 會飛的魚
can fly fish

(36) fish capable of flying
(37) fish which/that can fly
(38) a. *can-flying fish
    b. *fish can-flying

In many cases, English has the only recourse to the relative clause construction, as can be seen in the examples of (31). In terms of transformational procedure, it may be hard to
On closer examination of the internal structure of the various types of -de constructions, one finds that only type (B) items (i.e. weidade "great" (偉大的), mafande "troublesome" (麻煩的), etc.) may be called genuine adjectives, for the pre-de parts of this group, though consisting of two syllables, generally do not permit further analysis without losing the original meaning. It is true that the forms preceding -de may be used as abstract nouns, yet out of a proper context, they are still readily identifiable as adjectives.

Type (A) consists of a pure noun plus the particle -de. This is the standard and only device of making a "possessive" out of a noun (and even pronoun) in Chinese. In contrast, notice the two different devices for making "possessives" in English—some by suffixation and others by prepositional constructions. In this sector of grammar, Chinese is simpler than English.

The "SP-de" of type (E), unquestionably, must be accepted as relative clauses, since each contains a subject and a predicate of its own. One thing that is worth noting is the variedness of the grammatical (or better, "case") relations that the modified N bears to the relative clause though the adjunctive device by means of the particle -de remains the same. For example, in (30a), the modified N syin "letter" (信) bears "objective" case relation to the relative clause while the word wan "bowl" (碗) of (30b) bears "instrumental" case relation to the modifying clause. Also, we find that the fangdz "house" (房子) of (30c), the chwang "bed" (床) of (30f), and the didyan "place" (地點) of (30h) all bear "locative" case relation to their respective relative clause. But in English, the corresponding "case" relations must be handled either by different relative pronouns or by various prepositions. (Cf. the English translations given along.)
Finally, there is a whole batch of forms consisting of "ke V. de", where the *ke (可) does not seem to be a shortened form of *keyi (可以). (This can be seen from ungrammaticalities such as *keyi lyande (可以憐的).) Forms of this category, in most cases, may be rendered with -able words in English.

(6) KeV-de N. — Examples follow.

(62) kelyande shenghwo miserable life
kejingde syingwei respectable deeds
kekaude ren dependable person
keai de dungwu lovable animal
kesyaude tswowu laughable mistake
keyide fendz questionable element
kewude tyan chi abominable weather
keshirde syingwei shameful act
kepade jingsyang frightening scene
c. yau chrrende yangdz  fierce look on the face
要 吃人的 樣子

d. syang fatsaide syinli intention for making money
想 發財的心理

e. ai chrtangde ren person with a sweet tooth
愛 吃糖的人

f. ywanyi chyude ren person willing to go
願意去的人

g. leyi jywankwande ren person pleased to contribute
樂意捐款的人

h. syihwan chweinyoude ren person fond of bluffing
喜歡吹牛的人

i. gausyin shwohwade shrhou time when one is glad to talk
高興 說話的時候

j. ken hwachyande ren person willing to spend money
肯花錢的人

k. keyi chouyande difang place where smoking is permitted
可以抽 烟的地方

l. bu yinggai shweijyaude shrhou time when one should not sleep
不 應該 睡覺的時候

m. bu syu jinrude fangjyan room nobody is permitted to enter
不 許 進入的 房間

n. bisyu dachengde renwu mission that must be carried out
必須達成的任務

o. bu gan hweijyāde haidz child who dare not go home
不敢回家的孩子

p. pa jyanshengrende haidz child who is afraid of strangers
怕見生人的孩子

q. jrde kande dyanying movie worth seeing
值得看的電影

r. lande dzwode shrching job one doesn't care to do
懶得做的事情
and a predicate.

(30) a. wo syede syin
    我寫的信
    the letter I wrote

b. ta hetangde wan
    吃湯的碗
    the bowl he eats soup with

c. women jude fangdz
    女們住的房子
    the house we live in

d. tamen kaide dyan
    他們開的店
    the store they run

e. wo kande shu
    我看的書
    the book I read

f. ni shweide chwang
    你睡的床
    the bed you sleep in

g. wo buehpyude liyou
    我不去的理由
    the reason I refuse to go

h. ta dyauyude didyan
    他釣魚的地點
    the place where he fishes

i. wo hwatude yungjyu
    我畫圖的用具
    tools I draw pictures with

j. wo syesyinde shriyan
    我寫信的時間
    time when I write letters

In addition to the (A)-(E) types above, there seems to be one more highly productive type of -de construction, such as hweifeide yu "fish capable of flying" (會飛的魚), which consists of an auxiliary followed by a verb, as may be expressed by the following formula (to use Chao's symbolization Vx for "auxiliary"):

(F) VxV-de N. — Examples abound."

(31) a. heng hejyoude ren
    能喝酒的人
    person with a capacity for wine

b. hwei shwohwade nyau
    會說話的鳥
    bird capable of talking
VO-de N.—This type generally corresponds to the "N-Ving" compound adjectives of English. The translations are rather literal in order to bring out the morphemic relations within the Chinese constructions.

(225) syede de written characters

chingde keren invited guests

(D) VO-de N.—This type generally corresponds to the "N-Ving" compound adjectives of English. The translations are rather literal in order to bring out the morphemic relations within the Chinese constructions.

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(D) VO-de N.—This type generally corresponds to the "N-Ving" compound adjectives of English. The translations are rather literal in order to bring out the morphemic relations within the Chinese constructions.

(225) syede de written characters

chingde keren invited guests

(D) VO-de N.—This type generally corresponds to the "N-Ving" compound adjectives of English. The translations are rather literal in order to bring out the morphemic relations within the Chinese constructions.
(B) A-de N.—As Chao observes, this is a very productive type. It seems that all polysyllabic adjectival forms can freely occur in this construction.6

(7) weidade lingsyou great leader
偉大的 領袖

mafande shrching troublesome business
麻煩的 事情

tsunmingde sywesheng clever student
聰明的 學生

tebyede chingsying special case
特別的 情形

syinkude gungren hard workmen
辛苦的 工人

ganjingde yifu clean clothes
乾淨的 衣服

(C) V-de N.—This type is more or less comparable to the participial adjectives in English. But the translations, of course, do not always reveal this.

(8) jinlaide ren man coming in
進來的人

hweichyude chwan boat going back
回去的 船

chrde dungsyi things to eat
吃的 東 西

kaiede shwei boiling water
開着的 水

dzwode yidz chair to sit in
坐的 椅子
Semantically, the -de in case (a) of each pair marks the phrase as adjectival whereas the -de in case (b) marks the phrase (consisting of the same morphemes) as possessive. Compare the English translations for (a) and (b). Some Southern dialects use a different pronunciation for the -de in case (b) (hence the different character 底 that is sometimes used to indicate the distinction), but in Mandarin both sound the same (Chao 1968: 253-54).

According to Chao (1968: 289-300), all nominal constructions containing the particle -de may be classified into five structural types of the generalized formula “X de N”. The examples include the modified N just to make sure that the expressions are natural.

(A) N-de N—The -de of this type clearly signals “possessiveness”.

24 syangde bidz          elephant’s trunk
    象 底 鼻子
rende shendz          man’s body
    人底 身子
jwodzde twel          legs of a table
    桌 子 底 腿
dungsyide waibya          appearance of things
    東 西 底 外表
meiyou difang *wu dzaujin* No place is *noiseless*.

nage ren meiyou *jya* ? Who is *homeless* ?

jeige ren hau *sz chigai* This man is *beggarly*.

jeige nyuren hau *sz nanren* This woman is *mannish*.

jeige aumi bu *ke jyeshr* This mystery is not *explainable*.

jeige ren hen *kekau* This man is very *dependable*.

Another reason may be the fact that the particle -*de* practically marks more than one kind of relationships—which often makes it hard to decide, without second thought, whether a -*de* construction is adjectival or non-adjectival in nature. Consider the pairs:

(2) a. *chenggungde yanchu* successful performance

b. *chenggungde tyaujyan* conditions of success

(2) a. *kesywede yanjyou* scientific research

b. *kesywede lingyu* realm of science

(2) a. *jingjide fangfa* economical methods

b. *jingjide chengjang* growth of economy
dependence, dependable
kejìng-de respectable
leiren-de tiresome
hefa-de lawful
dwoshan-de mountainous
dowyun-de cloudy
dworou-de fleshy

An obvious reason for the general practice of not treating (9)–(15) as adjectives—a part of speech—is that all the pre-de portions are readily analyzable into meaningful parts or syntactic constituents, and each constituent can easily be assigned a transformational source. For example, given an appropriate NP as subject, most of the pre-de sequences can be used as the VP to form a grammatical sentence.

(10) ta héng you mingchì He is very famous.
他很有名氣

(11) ta héng you syinsyin He is very confident.
他很有信心

(12) jeibén shu héng you jiýesyíng 这本书很有教育性

This book is very instructive.

(13) yousyé shweigwo you jiýesyíng Some fruits are
有些水果有季节性 seasonal.
Yet, as far as I know, no Chinese grammarian has seriously considered as adjectives (simple or complex) expressions such as (9)-(15) in spite of the fact that they are used to serve the same purpose as their English counterparts in communication.

(9) you-mingchi-de famous
有名氣的

you-syinsyin-de confident
有信心的

you-syitung-de systematic
有系統的

(10) you-sywandzesying-de selective
有選擇性的

you-jyauyusying-de instructive
有教育性的

you-jijyesying-de seasonal
有季節性的

(11) wu-dzauyin-de noiseless
無噪音的

wu-jyegwo-de fruitless
無結果的

meiyou-jya-de homeless
沒有家的

(12) sz-chigai-de beggarly
似乞丐的

sz-nanren-de mannish
似男人的

haidz-sz-de childlike
孩子似的

(13) ke-jyeshr-de explainable
可解釋的
a brief look at some disyllabic items (not counting de) that are commonly recognized as simple adjectives in Chinese grammars.

Although most grammar books give chiefly monosyllables like hung “red” (紅) and da “big” (大) as illustrations of Chinese adjectives, occasionally they also include some disyllabic items, such as (8), which are more or less unanalyzable wholes in terms of morphemic structure.³

(8) gausying
delighted
tsongming
intelligent
yuben
stupid
kwaile
happy
ganjing
clean
hutu
muddled
weida
great
jengchi
neat
pyaulyang
pretty
meili
beautiful
shrmau
fashionable
chingchu
clear
(3) tade shrching dwo 他的事情多
his work-to-do much/many
He has lots of work to do.
(He is busy.)

Furthermore, Chinese adjectives can easily combine with
standard verb suffixes such as -je marking "progressive aspect"
(着), as in houje lyan "to be being brazen-faced" (厚著臉),
and -le marking "perfective aspect" (了), as in hungle
lyan "to have a reddened face" (紅了臉). Even the criterion
of intensification by hen "very" (很) would fail as an exclusive
test for adjectives because it also applies to certain quality
verbs such as the ai in hen ai tsai "love money very much"
(很愛財). Hence Chao (1968) puts Chinese adjectives in the
same class as verbs and calls them intransitive quality verbs.

While linguists tend to emphasize the verbal behavior of
Chinese adjectives in predicative position, naive speakers of
Chinese seem to look to the prenominal attributive position
for the identification of adjectives. That is to say, we rec-
ognize, say, hung "red" (紅), da "big / large" (大), chang
"long" (長), and hau "good" (好) as adjectives because they
may occur in NPs such as the following:

(4) hung (de) hwa 紅(的)花
   red flower
(5) da (de) syigwa 大(的)西瓜
   big watermelon
(6) chang (de) dengdz 長(的)凳子
   long bench
(7) hau (de) jyou 好(的)酒
   good wine

Naturally, this will lead to the problem of the analysis of
polysyllabic expressions like those we presented in (3) of Part
I. However, before going further, let us first take
lexicon. This is certainly not true of all English adjectives, as can be seen from the contrasting pairs in (56) - (59).

(56) a. *That man talks.
    b. That man is tall.

(57) a. *That mountain highens.
    b. That mountain is high.

(58) a. *John goods to her.
    b. John is good to her.

(59) a. *John kinds to you.
    b. John is kind to you.

Thus it seems justifiable to advance the observation that, in sentences like (45) - (55), English can express the same idea either with a verb or an adjective just in those cases where such a corresponding verb-adjective pair exists in the lexicon. If this is true, it will constitute another language-specific principle about English adjectives, and consequently it will not be surprising to find nothing parallel in a language such as Chinese, which hardly makes a distinction in morphology or syntax between verb and adjective in predicate position (Cf. the illustrations (1) of Part I).

III. ADJECTIVES IN CHINESE

Chinese adjectives differ markedly from English adjectives in that the former can serve the function of a predicate without the aid of something like the English verb be.1 Examples are:

(1) tade liyan hou
    his face thick
    He is brazen-faced.

(2) tade pichi hau
    his temper good
    He is good-tempered.
Lakoff (1970) proposes to treat English adjectives and verbs as members of a single lexical category—VERB. The evidence used to support his proposal includes the pairs of sentences in (45)–(55), where, in each pair, the corresponding adjective (in b) and verb (in a) are assumed to be understood in the same way or simply to be the same lexical item (pp. 115–6).

(45) a. I regret that.
   b. I am sorry about that.

(46) a. I like jazz.
   b. I am fond of jazz.

(47) a. I forgot that fact.
   b. I was oblivious of that fact.

(48) a. I know about that.
   b. I am aware of that.

(49) a. I desire that.
   b. I am desirous of that.

(50) a. John hopes that peace will come soon.
   b. John is hopeful that peace will come soon.

(51) a. I fear that the Dodgers will win.
   b. I am fearful that the Dodgers will win.

(52) a. John considers Mary's feelings.
   b. John is considerate of Mary's feelings.

(53) a. That will please John.
   b. That will be pleasing to John.

(54) a. That excites me.
   b. That is exciting to me.

(55) a. Cigarettes harm people.
   b. Cigarettes are harmful to people.

What is remarkable here is that each of the adjectives in the 'b-sentences has a corresponding synonymous verb in the
<table>
<thead>
<tr>
<th>English</th>
<th>Pinyin</th>
</tr>
</thead>
<tbody>
<tr>
<td>air-minded</td>
<td>shouyu sywewei de</td>
</tr>
<tr>
<td>bow-legged</td>
<td>aihau dzyou de</td>
</tr>
<tr>
<td>canary-colored</td>
<td>tsz syin de</td>
</tr>
<tr>
<td>chicken-hearted</td>
<td>chr jyau de</td>
</tr>
<tr>
<td>cock-eyed</td>
<td>erdwo chang de</td>
</tr>
<tr>
<td>cone-shaped</td>
<td>syin syung syajai de</td>
</tr>
<tr>
<td>pot-bellied</td>
<td>dwo fangmyan de</td>
</tr>
<tr>
<td>ring-necked</td>
<td>two bei de</td>
</tr>
<tr>
<td>shovel-hatted</td>
<td>ywan jwei sying de</td>
</tr>
<tr>
<td></td>
<td>syang jinshu byan de</td>
</tr>
</tbody>
</table>

Were we to try to find Chinese equivalents to some of the compound adjectives in (41) - (43), we might get approximations like (44), none of which can be properly called an adjective.

(44) a. degree-conferring
b. freedom-loving
c. heart-piercing
d. bare-footed
e. long-eared
f. narrow-minded
g. many-sided
h. hunch-backed
i. cone-shaped
j. metal-edged
tional morphology.

As a matter of fact, the ramifications of English morphological system do not end here. Marchand (1969) identifies three highly productive types of adjective formation in a section on compound adjectives in English. All of the compound items given by him are indiscriminately called adjectives in English, but, for the same concepts, Chinese has the only recourse to phrasal expressions formed with the general modifier-marking morpheme *de*. Here are Marchand's examples grouped under the three highly productive formation types.\(^6\)

\((4)\) **Object + Ving** (Marchand 1969: 91)

- awe-inspiring
- breath-taking
- degree-conferring
- earth-shaking
- fact-finding
- freedom-loving

- God-fearing
- heart-breaking
- life-giving
- mind-filling
- soul-stirring
- painstaking

\((5)\) **Adj + Ned** (Marchand 1969: 266)

- bare-footed
- black-haired
- broad-limbed
- hard-fisted
- hard-headed
- high-handed
- high-spirited
- hollowed-eyed
- hot-blooded
- kind-hearted
- long-eared
- low-browed

- one-eyed
- two-forked
- three-legged
- four-footed
- nine-cornered
- twelve-gated
- many-sided
- narrow-minded
- pale-faced
- short-sighted
- single-handed

\((6)\) **N + Ned** (Marchand 1969: 266-7)

- hunch-backed
- gold-laced
Take a sample pair like the NP electrical engineer, which is made up of Adj + N, and the NP mining engineer, made up of N + N. Levi's (1973: 334) claim is that the two types of NPs are derived from very similar underlying logical structures, say,

(38) a. SPECIALIZE ( engineer, electricity )
   b. SPECIALIZE ( engineer, mining )

and their derivations are precisely parallel up to the point where certain compound-initial nouns (e.g., electricity in *electricity engineer) are converted into derived surface adjectives (e.g., electrical). In other words, such compound-initial nouns are converted into adjectives just in those cases where an adjective is available in the English lexicon. Where no derived adjective exists, as is the case for mining, seagull, harbor, divorce, and the others in (38), the surface morphology of the compound continues to reflect the two nouns it is ultimately derived from. Hence our conclusion: In certain "Adj + N" phrases like (38), that the first word is required to assume the form of an adjective rather than a plain noun, as testified in (37), is entirely a language-specific phenomenon peculiar to English. This requirement does not exist even in some other European languages. For instance, corresponding to some "Adj + N." phrases of English, German has plain "N + N" compounds:

(40) Adj + N ( English )  N + N ( German )
   municipal office  Stadtamt
   urban district  Stadtkreis
   civil rights  Stadtrecht
   local letter  Stadtbrieß

Consequently, no wonder about the contrast between English and Chinese which we observed in (2) of part I, for Chinese is a well-known example which exhibits little or no deriv-
Doubtful "N+N" Compounds

a. *electricity engineer
b. ? sound research
c. *crime lawyer
d. *logic fallacy
e. *Canada explorer
f. *digestion system
g. *electricity service
h. *matrimony service
i. *doctor association
j. *body damage
k. *mind disease
l. ? industry unrest
m. ? industry psychologist
n. (country policeman)
o. (underground explorer)

Unquestionable "N+N" Compounds

a. mining engineer
b. seagull research
c. divorce lawyer
d. ......
e. Yukon explorer
f. communications system
g. water service
h. matchmaking service
i. bar association
j. brain damage
k. kidney disease
l. student unrest
m. school psychologist
n. harbor policeman
o. jungle explorer
* very consular  
* very documentary  
* very homeless  
* very collegiate  
* very woolen  
* very existent  
* very preventive  
* very receivable  
* very prohibitory  
* very polar  
* very nameless  
* very seedless  
* very earthen  
* very expectant  
* very possessive  
* very allowable  
* very payable  
* very molten

At this point, it is interesting to note that Levi (1973) presents five arguments to justify her claim that certain denominal adjectives that occur in "Adj + N" constructions in English are merely adjectives in form. In grammatical behavior, these adjectives still exhibit several of the syntactic semantic characteristics of nouns. Levi (1973: 334) cites the following examples:

(*8) "Adj + N" Phrases

a. electrical engineer
b. acoustic research
c. criminal lawyer
d. logical fallacy
e. Canadian explorer
f. digestive system
g. electrical service
h. matrimonial service
i. medical association
j. bodily damage
k. mental disease
l. industrial unrest
m. industrial psychologist
n. rural policeman
o. subterranean explorer
prohibitory (prohibit)
promissory (promise)
conciliatory (conciliate)

(32) V-en: molten (melt)
    shrunken (shrink)
    swollen (swell)

(33) V-ing: surprising (surprise)
    interesting (interest)
    exciting (excite)

Due to the relatively abundant derivational morphology, a large number of defective adjectives crop up in the English language. As a matter of fact, many of these adjectives cannot occur in predicative position, as shown in (34); others seem to resist intensification (by very) or comparison, as exemplified in (35).

(34) a. *That city is coastal.
    b. *That relation is causal.
    c. *That meet is athletic.
    d. *That section is consular.
    e. *That theory is molecular.
    f. *That scholar is linguistic.
    g. *Those days were collegiate.
    h. *That policeman is rural.
    i. *That appointment is dental.
    j. *That power is creative.
    k. *That case is possessive. (?)
    l. *That visitor is occasional.
    m. *The weight is excessive.
    n. *Those studiess are oceanic.

(35) *very coastal
*very optional
*very metric
*very nebular

* very causal
* very cubic
* very volcanic
* very molecular
(24) N-ate: collegiate (college)  
    fortunate (fortune)  
    affectionate (affection)  
    compassionate (compassion)

(25) N-en: wooden (wood)  
    earthen (earth)  
    golden (gold)

(26) N-ed: skilled (skill)  
    ragged (rag)  
    wretched (wretch)  
    wooded (wood)

(27) V-ent: confident (confide)  
    observant (observe)  
    excellent (excel)  
    urgent (urge)  
    expectant (expect)  
    recurrent (recur)

(28) V-ive: creative (create)  
    selective (select)  
    collective (collect)  
    excessive (exceed)  
    imitative (imitate)  
    expectant (expect)

(29) V-able: allowable (allow)  
    defendable (defend)  
    readable (read)  
    perishable (perish)  
    agreeable (agree)  
    payable (pay)

(30) V-some: meddlesome (meddle)  
    venturesome (venture)  
    loathsome (loathe)  
    irksome (irk)  
    winsome (win)  
    tiresome (tire)

(31) V-ory: congratulatory (congratulate)  
    regulatory (regulate)
pompous (pomp) nervous (nerve)
odorous (odor) spacious (space)
vaporous (vapor) gracious (grace)
virtuous (virtue) religious (religion)

(8) N-ic: angelic (angel) historic (history)
cubic (cube) dogmatic (dogma)
metric (meter) syntactic (syntax)
sulphuric (sulphur) athletic (athlete)
volcanic (volcano) rhythmic (rhythm)

(10) N-ar: nebular (nebula) globular (globe)
spectacular (spectacle)
molecular (molecule) consular (consul)
muscular (muscle) polar (pole)

(20) N-ary: visionary (vision)
fragmentary (fragment)
rudimentary (rudiment)
momentary (moment)
documentary (document)
complimentary (compliment)

(21) N-ful: peaceful (peace) faithful (faith)
healthful (health) wrathful (wrath)
plentiful (plenty) lawful (law)
beautiful (beauty) joyful (joy)
powerful (power) careful (care)

(22) N-less: faithless (faith) noiseless (noise)
lawless (law) seedless (seed)
ageless (age) needless (need)
homeless (home) fruitless (fruit)
nameless (name) faultless (fault)

(23) N-like: lifelike (life) warlike (war)
ladylike (lady) workmanlike (workman)
childlike (child)
This analysis of English adjectives is certainly valid and satisfactory from the investigator's point of view. In fact, native speakers of English, in numerous cases, may just rely on a still more apparent clue for the identification of adjectives—namely, the formal features in the adjectives themselves as a result of derivational suffixation.² According to Fries’ survey (1952: 126-30), there are altogether twenty-one derivational suffixes which serve as formal marks of English adjectives. Of the total number, fourteen derive adjectives from noun bases, as shown in (13)-(26), and seven derive adjectives from verb bases, as exemplified in (27)-(33).

(13) N-ly: baggy (bag) rainy (rain)
    cloudy (cloud) snowy (snow)
    dirty (dirt) streaky (streak)
    dusty (dust) messy (mess)
    funny (fun) nervous (nerve)

(14) N-ly: beastly (beast) shapely (shape)
    friendly (friend) manly (man)
    costly (cost) beggarly (beggar)
    lovely (love) maidenly (maiden)
    timely (time) princely (prince)

(15) N-ish: bookish (book) foolish (fool)
    childish (child) feverish (fever)
    mannish (man) clannish (clan)
    freakish (freak) selfish (self)
    sheepish (sheep) snobbish (snob)

(16) N-al: accidental (accident) personal (person)
    brutal (brute) regional (region)
    coastal (coast) seasonal (season)
    optional (option) emotional (emotion)
    causal (cause) natural (nature)

(17) N-ous: famous (fame) joyous (joy)
(9) Group B—those satisfying only criteria (a) and (b):

- tight
- stupid
- loose
- clever
- true
- infinite
- void
- right
- round
- open
- dead
- equal
- unique

(10) Group C—those satisfying criterion (a) only:

- late (president)
- close (friend)
- former (husband)
- present (king)
- sole (agent)
- whole (thing)
- utter (fool)
- only (son)
- sheer (nonsense)

(11) Group D—those satisfying criteria (b), (c), and (d). Some adjectives of this group generally take complementational material.

- afraid (of, that)
- aware (of, that)
- averse (to, from)
- fond (of)
- alive (to)
- awake
- asleep

(12) Group E—those satisfying criterion (b) only. Some members of this group can also take complementation.

- ablaze
- afloat
- alone
- tantamount (to)
- subject (to)
- present (at)
self puts it (1952:73), “A part of speech in English, like the strike in baseball, is a functioning pattern. It cannot be defined by means of a simple statement.” To remedy the weaknesses of the previous approaches, Quirk et al. (1972:232-33) construct a battery of five criteria for the identification of English adjectives.

(7) a. The item can function in attributive position: the ...N.
   b. The item can function in predicative position following the intensive verb SEEM: The N seemed ...
   c. The item can be premodified by the intensifier very.
   d. The item can accept comparison, i.e., the comparative and superlative forms, whether inflected or periphrastic.
   e. The item can function as direct object—a negative test.

With this multiple test program, words like stone, mud, would be expelled by criteria (c) and (d) in spite of the fact that they can fulfill criteria (a) and (b). Criterion (e) actually introduces a characteristic of nouns, which is included here as a negative test for adjectives since there are certain adjectives (e.g., infinite) which normally are also rejected by criteria (c) and (d). In this case, criterion (e) applies; any item that can pass test (e) is a noun; otherwise, it is an adjective. Thus English adjectives fall into the following groups.

(8) Group A—those satisfying criteria (a)–(d):

   big            small
   long           short
   high           low
   hard           soft
   heavy          light
   good           bad
   wide           narrow
   new            old
defined as "a word that modifies a noun or a pronoun." Thus the words italicized in the expressions in (1) must be adjectives because they are used to modify nouns. This definition is of course unworkable because nouns can also be used as modifiers of other nouns, as shown in (2).

(1) a. an old salesman
   b. a muddy road
   c. a large committee

(2) a. a book salesman
   b. a country road
   c. a budget committee

Fries (1952: 82) attempts to separate noun modifiers from adjective modifiers by requiring that adjectives fill both the attributive and the predicate positions of the test frame in (3). Thus we get the contrasts between (4) and (5).

(3) The _____ (noun) is _____.
   a. The old salesman is old.
   b. The muddy road is muddy.
   c. The large committee is large.

   b. *The country road is country.
   c. *The budget committee is budget.

However, this solution still leaves us in doubt about the status of words like stone, mud, which seem to fit the frame (3) but must be excluded from the form class of adjectives.

(5) a. The stone fence is stone.
   b. The mud road is mud.
   c. The gold watch is gold.

This difficulty, of course, can be readily resolved by applying the inflectional criterion, since we have older, oldest; larger, largest; but no *stoner, *stonest; *mudder, *muddest. The crux of the matter may be just as Fries him-
The purpose of this paper is to explore the linguistic factors that have contributed to the relative richness in adjectives in the English lexicon. On the other hand, we will also be concerned with the problem of the formal status of polysyllabic adjectivelike forms such as (3) in Chinese.

(3) a. youchyande

have-money-DE
"rich, wealthy"

b. ke-aide

can-(be)-loved-DE
"lovable, lovely"

c. hweifeide

can-fly-DE
"capable of flying"

d. shrroude

eat-flesh-DE
"flesh-eating, carnivorous"

e. dandade

gall-big-DE
"reckless"

f. kaisyinde

open-heart-DE
"joyful"

In part II, we will first look at the definition and formation of adjectives in English grammar.

II. ADJECTIVES IN ENGLISH

In traditional English grammars, an adjective is most often
ENGLISH ADJECTIVES AND THEIR CHINESE EQUIVALENTS: A CONTRASTIVE ANALYSIS

Yi-Chin Fu (傅一動)

1. INTRODUCTION

Of the eight word classes (or parts of speech) of English, prepositions, as is well-known, make the most distinct differences between English and Chinese. Next come the adjectives, probably. English adjectives seem to cover a much wider range of the meanings of syntactic categories. For example, there are a number of English adjectives which can be equated only to verbs in Chinese.

(1) Adjective in English

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese Equivalent (Verb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>afraid</td>
<td>kungpa</td>
</tr>
<tr>
<td>aware</td>
<td>jrsyau</td>
</tr>
<tr>
<td>eager</td>
<td>kewang</td>
</tr>
<tr>
<td>fond</td>
<td>syihwan</td>
</tr>
<tr>
<td>avese</td>
<td>yanwu</td>
</tr>
<tr>
<td>tantamount</td>
<td>dengyu</td>
</tr>
</tbody>
</table>

In the meantime, there are large numbers of "Adj + N" expressions in English which convey exactly the same meanings as "N + N" compounds in Chinese. For example,

(2) "Adj+N" in English

<table>
<thead>
<tr>
<th>English</th>
<th>&quot;N+N&quot; in Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>mechanical engineer</td>
<td>jisye gungcheng shr</td>
</tr>
<tr>
<td>dramatic criticism</td>
<td>syijyu piping</td>
</tr>
<tr>
<td>educational psychology</td>
<td>jyauyu syinlisywe</td>
</tr>
<tr>
<td>medical conference</td>
<td>yisywe hweiyi</td>
</tr>
</tbody>
</table>