A Statistical Study Of Special Adjectives

Deng Xiaoyong  Wang Qilong
Central University of Nationalities
Li  Jian
Guiyang Medical College

0. Brief Introduction
As we know, adjectives in Chinese generally can be used as attribute and predicate. But some of them can’t be predicates, such as dài xíng<大型>, chū bù<初步>, etc.; some of them can’t be attributes (even if de<的> is added) such as hǎo yì sī<好意思>, duō<多>, etc. The former is called non-predicative adjective and the latter non-attribute adjective. Both of which might be adverbal and/or complement. And we call them special adjectives (the subsidiary part of adjectives).

About special adjectives, there have been lots of works which have done much beneficial exploration, but most of them are illustrated with wishful examples. As to the problems such as what proportion they occupy in Chinese adjectives, what words they are in details, and what grammatical characteristics they bear in themselves, and so on, no one has done thoroughly in a certain amount of random collection of adjectives. It’s inconvenient for the teaching of Chinese as a foreign language and the research in computational linguistics.

So we write the humble piece of writing based on the thorough analyses of 2008 adjectives. It’s necessary to state that the sub-classification of adjectives and their terms used here somewhat differ from the other scholars, but for the convenience of writing, we’ve to adopt it.

(1) The adjectives analyzed in this paper are mainly extracted from the concerned papers & books at home and abroad. At first, we collected all the words marked as adj. (2500 in all), then according to language habit or perception, we cancelled those which are obviously not adjectives, such as 快速, 乎乎, 谅解, 普及, 熟悉, 泰然, 无数, 档劣, 原先, etc. from Hanyu Shuiping Cihui yu Hanzi Dengji Dagang (《汉语水平词汇与汉字等级大纲》, Press of Beijing Languages’ Institute, 1992); 口口声声, 凑情, 依稀, 尊严, 眼睁睁, 许久, 久险, etc. from Xinbian Hanyu Duogongneng Cidian (《新编汉语多功能词典》, International Culture Press, 1989) chief-edited by 邵志纯, 周行健; and 英雄 from Xingrongci Yongfa Cidian (《形容词用法词典》, Hunan Publishing House, 1992) by 郑怀德 and 孟庆海.
of which the general frame is like this:

<table>
<thead>
<tr>
<th>Adj.</th>
<th>Pure Adj., e.g. dò &lt;大&gt;, hóng &lt;红&gt;, gào xìng &lt;高兴&gt;, rènzhēn &lt;认真&gt;, duō &lt;多&gt;, kē kū &lt;刻苦&gt;...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-pure Adj., e.g. bìlò &lt;碧绿, AB&gt;, rèhūhū &lt;热乎乎, ABB&gt;, yōuyōu &lt;悠悠, AA&gt;, hònghònglìlì èlēlè &lt;轰轰烈烈, AABB&gt;...</td>
</tr>
<tr>
<td></td>
<td>Non-predicative Adj., e.g. dò xìng &lt;大型&gt;, ruònxìng &lt;软性&gt;...</td>
</tr>
<tr>
<td></td>
<td>Non-attributive Adj., e.g. tuò &lt;妥&gt;, ānxīn &lt;安心&gt;...</td>
</tr>
</tbody>
</table>

Besides, this paper aims at making a thorough investigation of a certain amount of random adjectives (2098), in order to find out what proportion they occupy, list them in details and make a brief introduction of their grammatical characteristics: but not to or could not make a meticulous description of very word (of special adjectives) because of the limited space here.

1. Non-predicative Adjectives
1.1 As to non-predicative adjectives, Mr. Lu shuxiang has written a monographic paper which contains so much materials and so excellent description that no one really has caught up with it later. In his paper, 407 non-predicative adjectives have been listed and their seven syntactical features have been stated in details: (1) modify nouns directly; (2) most can be followed by de <的> while modifying nouns; (3) most can follow shì <是> or be used as a noun equivalent when they are followed by de <的>; (4) generally can't be subject and object; (5) cannot be predicative; (6) can't follow hěn <很> and (7) not bù <不> but fēi <非> is needed in negative form. Just like what Mr. Lu has said, the non-predicative adjectives have a tendency to change gradually into common adjectives.

Perhaps because of the variation of meaning, some words Mr. Lu listed in the 407 words of his paper have changed now in meaning, and don't accord with the demands as non-predicative, such as dījí <低级, elementary>, dùtè <独特, distinctive>, gāoji <高级, high-grade>, jīmǐ <机密, confidential>...
It is thus clear that non-predicative adjectives expressing property and category are emerging and changing gradually all the time, and the tendency is to change into common adjectives. But sometimes one meaning of certain words has changed but the other has not. For example, gàojí <高级> will still be listed in non-predicative adjectives in the following, but it has a small 1 on its upper right, which states that as non-predicative adjective, gàoji means “senior” or “higher-ranking”; but as common adjective it expresses the other meanings.

Besides, the words such as hàn yǐng <汉字: 词典>, jīng guǎng <京广: 铁路> and so on, will be regarded as abbreviation in this paper and not as non-predicative as Mr. Lu did in his paper.

In order to run through his definition of adjectives (words which can be both attribute and predicate), Mr. Zhu Dexi cut off the non-predicative adjectives which generally can’t follow hén <很> and can be only attribute from predicative word wèicí <谓词 in Chinese>, and put them into the kind of words called nominal word tīcí <体词 in Chinese> and then give them a new name distinctive words qūbié <区别词 in Chinese>. What’s different is that, Mr. Zhu discussed the mono-syllables such as jīn <金>, yín <银>, nán <男>, nǚ <女>, etc. together with the disyllables or polysyllables; but Mr. Lu didn’t list the mono-syllables in the glossary of non-predicative adjectives, and just briefly discussed them in the fourth part of his paper. Maybe this is because of the different classification, since Mr. Zhu put his distinctive word qūbié into nominal word tīcí, of course it would include nán <男>, nǚ <女>, jīn <金>, yín <银>, etc. which contain much more nominal quality than disyllabic or polysyllabic non-predicative adjectives; while Mr. Lu regarded the non-predicative adjectives as the subsidiary of adjectives, in which the words such as nán <男>, nǚ <女>, jīn <金>, yín <银> don’t have so much adjectival quality as the disyllabic or polysyllabic ones, because they can be nouns by themselves.

We adopt the term “non-predicative adjective” introduced by Mr. Lu, but equally put mono-syllabic words such as nán <男>, nǚ <女>, jīn <金>.

(3) see Zhu Dexi (朱德熙), Yufa Jangyi (《语法讲义》, Commercial Press, 1984), pp. 52–54.
yín<银> and the disyllabic or polysyllabic ones together in classification discussion. The reasons are the following: (1) some monosyllabic non-predicative adjectives can't be used as noun directly (not including the situation in Archaic Chinese; idiomatic expression or symmetrical style). E.g. cf<雌.female>, xióng<雄.male>, etc. which only can modify nouns of animals: xiónglù<熊鹿.male deer> , cínǐ<雌鸟.female bird>; (2) As to nán<男>, nú<女>, etc. which are in our opinion of two kinds of usage: used to be nouns, they correspond to the sexual distinctive words: "man" and "woman" in English; when used to be non-predicatives, they state which sex they belong to, and correspond to the English words "male" and "female". Jīn<金> is "gold" in English, a kind of metal, when it's a noun; but it corresponds to "golden" or "of gold" when it's non-predicative, and so on.

1.2. The non-predicative adjectives Mr. Lu collected are very plentiful (407) and the investigation is quite perfect in his paper. Though the ones in 2088 adjectives we're discussing here are not so many, yet we've to adopt the latter in calculating the proportion of non-predicative adjectives. By the way, Mr. Lu regarded jīnhuáng<金黄> as a non-predicate, but we think it to be non-pure adjective of the common adjectives, some grammar books regard xǔduō<许多>, hǎoxiē<好些> as numeral-classifier compounds, but we list them to be adjectives. In this paper, we just deal with the usages of non-predictive adjectives in Modern Chinese. As to the other usages, we just give some indication if they have to be talked about.

In 2088 adjectives there are only 200 non-predicative ones which occupies about 10%. They will be listed in two groups, monosyllabic (1.2.1) and disyllabic (1.2.2) and briefly illustrated in the part of 1.2.3 in the following.

1.2.1. Monosyllabic Words (31):

àn 暗, hidden, secret
dān 单, one, single
fèi 废, waste
fù 副, deputy
gōng 公, male(of animal), horizontal
huī 灰, grey
háng 良, fine(~药)
nán 男, male
pánɡ 旁, other, else
shùn 顺, in the same direction as (~时针)
xiónɡ 凶, ominous
yín 阴, south of hill or north of a river (archaic): open
yín 阴, north of hill or south of a river (archaic): hidden

14 绝 is a non-predicative adjective which means "unable to go through", "being cut off"; 绝 is a common adjective which means: "unique", "that no one catch up" and can be both attribute (绝活儿) and predicate (他那手活儿绝).
1.2.2. Disyllabic or Polysyllabic Words (169):

běnlái 本来, original
bitóu 笔头, in written form
bìrán 必然, inevitable
biáoshàng 辩证, dialectical
biáomiàn 表面, superficial
bùfá 不法, lawless
bùguīzé 不规则, irregular
cányú 残余, remaining
chángqì 长期, long-term
chāojí 超级, super
chǐpǐn 赤贫, in abject poverty
dàiɡài 概率, general
dàbāi 大批, large numbers of
dàxìnɡ 大型, large-scale
dàndú 单独, independent
diǎn 滴 a bit of
dǐnɡshènɡ 鼎盛, of great prosperity
dúlì 独立, independent
duōniánshènɡ 多年生, perennial, extra
èxìnɡ 恶性, vicious
fǎdìnɡ 法定, legal
fánfù 反复, repeated
fǎnmìan 反面, back, opposite
fēichánɡ 非常, illegal
fēnɡshuo 丰硕, rich and great
fǔjìn 附近, nearby
ɡǎodènɡ 高等, higher
ɡāoji ɡāoji ɡāoji 高级1, senior, high-level
gèbié 个别, individual
gònɡfèi 公费, at state expense
gōnɡtónɡ 共同, common
ɡuóchán 国产, made in motherland
hàoxiè 好些, a good deal of
hónɡsè ɡōu 红, of red (colour)
jiǎdìng 机动, motorized
jiǎxíng 畸形, lopsided
ejījié 间接, indirect (opposite to 直接)
jīnɡdài 经典, classical
lǐxìnɡ 理性, reasonable
lièdènɡ 夺等, low-grade
lìxìnɡ 烈性, spirited, strong
línshí 临时, temporary
luòdì 落地, being placed on the floor
(mínɡyù 名誉, honorary

(～灯, light lamp; ～窗, French window)
mòdà 大, greatest, unmost
nèizài 内在, inherent, internal (～规律)
qǐmǎ 起码, minimum; at least
qín’ài 亲爱, +deer; beloved
qínshènɡ 亲生, one’s own (parents, children)
qúnshù 全部, whole; total
quánfù 全副, complete
rēxiāo热销, C, best-sold
rénjūn 人均, of each person
rénzào 人造, man-made
rènyl 任意, arbitrary, free (～常数, ～方向)
ríchánɡ 日常, daily; everyday
rìyònɡ 日用, daily; of everyday use
shānɡdènɡ 上等, first-class; superior
shèwài 涉外, concerning foreign affairs
shānwù 上述, above-mentioned
shíxīn 实心, solid (～球)
shǒuxǐ 首席, chief (～代表)
shuāngchóng 双重, double; twofold;
(dual (～标准/国标)
siēn 小小, the slightest
suì wèi 所谓, so called
tè dìng 特定, specific; given
tóngchàng 通常, general; usual
(～情况)
tóngyàng 同样, +, same; similar
tuántuán 团团, (～雾气)
wànnéng 万能, omnipotent; universal
wǎngwō 忘我 C, selfless
wéixīng 微型, miniature; mini-(～汽车)
weilái 未来, coming; future
wúdī 无敌, unmatched
wǔshàng 无上, supreme (～的权力)
wǔxíng 无形, invisible; xìaliè 下列, listed below (opposite to 上述)
xīánxìng 先行, beforehead; in advance
xiàncéng 现成, ready-made (～衣服)
xiàndài 现代, modern
xiāngdāng 相当 C, suitable; fit
xiǎngduì 相对 C, relative (～高度)
xīaoxīng 小型, small-sized; scaled
xīnshí 新式, of latest style; modern
xīnxíng 新型, new type
xiùzhēn 秀珍 C, pocket-sized (～字典)
yèyú 业余, sparetime (～学校)
yīlǐ 一律 +, same; all
yínàn 难难, difficult; knotty (～问题/病症)
yìwù 义务, compulsory; voluntary
yìngxīng 硬性, rigid (～条框)
yóuzhì 优质, high quality
yōu jī 有机, organic (opposite to 无机)
yuánlái 原来 +, original; former
(～的想法/地方/面貌)
zǎnshí 暂时, temporary; transient (～现象)
zhēngzhēng 真正 +, genuine; true (～的朋友/英雄)
zhěngmiàn 整整, whole; full (～五十页)
zhī c 直接, direct; immediate
(opposite to 间接; ～原因)
zhòngxìng 中型, medium-sized
zhòngdiǎn 重点, key
zhìyáo 主要, main
zhòng 自动, automatic
zhīfèi 自费, at one’s own expense
shílǐng 适龄, of the right age
shóuyào 首要, of the first importance
shuǐpíng 水平, horizontal (～位置/方向)
suǒshǔ 所属, what one belongsto
suǒyǒu 所有, all
tiānrán 天然, natural
tóngbù 同步, synchronous (～卫星/加速器)
tóngdēng 同等 C, of the same rank
tōudēng 头等, first-class
wài zài 外在, external (～因素)
wěi yī 唯一, — only; sole
wúcháng 无偿, free
wù jī 无机, inorganic
wú xiàn 无限, infinite, boundless
wǔ xiàn 无限, infinite, boundless
xiānchéng 现成, ready-made (～衣服)
xiàn xíng 现行, currently in effect
(政策/法令)
xiāng hù 相互, mutual (～关系)
xīnshēng 新生, new (ly)-born
xīnshēng 新兴, new and developing
xǔduō 许多, many; much
yēshēng 野生, wild (～植物)
yōu guān 有关, related; concerned
yǔ qī 预期, desired (～效果)
yuánshǐ 原始, primitive; primeval
(～公社/森林/社会)
zhān xīn 新新, brand-new; complete-
zhēngzhēng 真正 +, genuine; true (～的朋友/英雄)
tōng yí 新新, brand-new; complete-
zhěngmiàn 整整, whole; full (～五十页)
zhǔ dēng 中等, medium (~ sized)
zhōngxin 衷心 C, cordial
zhòng xīng 重型, heavy (~ duty)
zhūn mén 专门, special (ized)
zhī fèi 自发, spontaneous

1.2.3. Brief Illustration:
(1) There are only 31 monosyllabic words which are much fewer and
occupy about 16% of the non-predicative adjectives; on the contrary, there are 169 disyllabic and polysyllabic words which are much more and occupy 84% or so.

(2) Monosyllabic words are more fixed in practical use, less productive in word-building and change very little while the disyllabic or polysyllabic ones are much freer and more productive in word-building or construction, such as the words formed in the suffix “-级” are countless in practical use: tèjí <特级>, yījí <一级>, èrjí <二级>, sānjí <三级>... N. - jí <n. 级> of which only few (e.g. chǎojí 超级, gāojí 高级, etc.) have been collected here because of the limited space. And this kind of most productive suffix are so many such as “-式”, “-等”, “-号”, “-性”, “-型” and so that we can never list them all.

(3) Monosyllabic words can modify nouns directly without de <的>, and when some of them (such as 名) modify a monosyllabic noun, another solid word will be formed, e.g. mingren <名人>, mingxing <名星>, etc. Absolute majority of the disyllabic or polysyllabic adjectives don’t need de <的> either when they modify nouns, but the words with a small plus sign+ on the right side often use de <的> if they are attributes.

(4) Absolute majority of all the non-predicative adjectives can be used in the sentence pattern “shi<是>... de<的>”, e.g.

Zhèbǐ shòurù shì éwài de. 这笔收入是额外的.
Nàzuò shuǐkù shì xiǎoxīng de. 那座水库是小型的.

But some others can’t be used this way. They are míng<名>、néng <能>、shùn<顺>、hàoxiě<好些>、xǔduō<许多>、quánfù<全副>、shìgǎngshè <上述>、xīaliè<下列>、shè<所属>、suǒwèi<所谓>、tuántuán<团团>、zhěngzhěng<整整齐齐> and so on.

(5) The uses of some disyllabic or polysyllabic words are not so fixed or regular that they have a tendency to change into common adjectives because they can follow hén <很> and /or be predicate (directly) sometimes. This kind of words have been marked a capital C on the right side in the words listed above. However, the changing adjectives (from non-predicate to common) are not so many as the newly-constructed non-predicative adjectives in style such as -型, -性, -号, etc. which will certainly be getting more and more in future with the development of the society the prosperity of economics and progress of science and technology. In another word, the amount of non-predicative adjectives as a whole will become larger and larger, but not smaller.

(6) Most non-predicative adjectives can’t be reduplicated except few words which in the listed words have been marked a small c on the left side.

2. Non-attributive Adjectives

2.1. Term and Definition

It is Prof. Hu Mingyang who firstly advanced the term non-attributive adjective (非定形容词 in Chinese) indicating the adjectives which
can't be attribute directly (but predicate only). Then Mr. Ye Chang-
ying call them predicate-only adjectives which differs a little from non-attributive adjectives and is more limited in scope: the adjectives that can never be attribute, nor can they even if de <的> is added.

We adopt the term "non-attributive adjective" advanced by Prof. Hu, but with certain limits:

(1) absolute non-attributive adjectives (绝对非形容词 in Chinese) = Mr. Ye’s predicate-only adjectives, which can never be attribute, such as 定, 奉, 蛮, 好意思, etc. e.g.  
  tūō<事> tūō de shì 很事的事 shì tūō tuō de shì 很事的事 shì tūō tuō de shì 事儿了.

(2) conditioned non-attributive adjectives: adjectives which can be attribute only in the form: hēn<很> + adj. + de<的>, such as "多":  
  dūōqián 多钱 dūō de qián 多的钱 hēndūō de qián 很多的钱
But we can’t say all the adjectives which can be attribute in "hēn<很> + adj. + de<的>" form are conditioned non-attributive adjectives. For instance, piaoliang<漂亮> can be used in this form, but we can never say it's a conditioned non-attributive adjective, because the latter can be an attribute only in one form, but piaoliang can be an attribute in three forms: piaoliang yīfú 漂亮衣服 piaoliang de yīfú 漂亮的衣服 hēn piaoliang de yīfú 很漂亮的衣服

(3) non-attributive is related to non-predicative. If a word is a non-attributive adjective, it is certainly able to be a predicate. If not, this word isn’t an adjective, but other part of speech.

2.2. In 2098 adjectives, the words which accord with the demands listed above are 123 words which occupy only 6% of the whole of adjectives. They will be listed in two groups in the following (2.2.1. monosyllabic and 2.2.2. disyllabic or polysyllabic) and briefly illustrated in the part of 2.2.3.

2.2.1. Monosyllabic Words (84):

ào 殷, proud, haughty  bāo 饱, full
bó 薄, slight, meagre (differs from báo 瘦, thin)  cáo 草, carless
chén 深, heavy  chóng 稳, vigorous  diào 刺, tricky, sly
dìng 定, calm, stable  duì 对, correct  duō c多, many
e 饿, hungry  fàn 繁, numerous, manifold  fān 烦, vexed
fú 浮, superficial  gòu 够, enough  guǎng 广, extensive, numerous
guì 贵, expensive  hēn hēn, ruthless  huǎnc 缓, slow

6 Ye Changying (叶长萌), "About the Predicate-only Adjectives," in Beifang Lun cong (《北方论丛》), 1984/3.
huáng 慌, flurried  hūn 昏, losing consciousness
huó 活, active, quick jīn 坚, steadfast, resolute jīn 奸, wicked
jīn 稀, low-priced; humble jiāng 僵, stiff jīn 紧, tight
(jīng 骨 is a solid word) jīng 精, perfect; excellent jīn 久, (for a) long time
jiǔ 津, thirty kūn 困, sleepy
lǎi 来, (of smell or taste) strong lǎi 联, shameless
liàng 亮, loud and clear; enlightened lǎo 老, firm
lè 乐, happy línɡ 灵, clever lónɡ 聋, deaf
má 麻, tingle(腿～了) mān 窘, rough; reckless mì 密, close, dense
mù 目, numb nǎo 闹, noisy lài 累, tired
piān 偏, slanting pínɡ 平, flat qí 齐, neat; all present
qín 勤, diligent rèn 人, moist shào 少, few, little
shèng 盛, rigorous; energetic(火势很～) shuāi 衰, decline; wane
shuài 帅, graceful; smart sōng 松, loose suān 酸, tired
suān 酸, 3, acid ténɡ 疼, ache tōnɡ 通, open; through
tònɡ 痛, ache tōu 透, proper wánɡ 旺, prosperous
wēnci 稳, steady; firm xī 巷, rare xián 险, dangerous
xiǎn 显, apparent xiǎnɡ 响, noisy, loud xiànɡ 像, alike
xíng 行, capable xǐ 虚, empty xiū 蹲, shy
xuán 奚, unreliable yán 严, strict; severe yàn 艳, colourful
yǎnɡ 养, training yōu 优, excellent yún 云, even
zāo 桌, rotten; poor zhōnɡ 忠, loyal zhuànɡ 壮, strong
zhùn 准, standard zú 足, sufficient

2.2.2. Disyllabic or Polysyllabic Words (39):

ānxīn 安心, relieved biěmen 愁闷, fell oppressed
bùbiàn 不便, inconvenient bùcuò 不错, correct
bùděng 不等, different bùduī 不对, incorrect
bùfànɡ 不妨, of no harm bùgōu 不苟, scrupulous
bùgōu 不够, insufficient bùrán 不然, not so
bùshàn 不善, bad, ill bùyī 不一, different
chìxiāng 吃香, popular; well-liked dānhán 胆寒, terrified
dōngxīn 动心, mind-perturbed ěrbèi 耳背, hard of hearing
ěrshēnɡ 耳生, unfamiliar to the ear ěrshú 耳熟, familiar to the ear
gēnī 名, clear gèbié 各别, odd, different
guòliánɡ 过量, excessive; over hānchánɡ 醉畅, merry and lively
hǎoyì 好意, have the never (used in theoretical question)
huànxìn 欢欣, elated jiéshǔ 节省, economic
jiéshěnɡ 节省, economic jìéyù 节约, thrifty
kěyì 可以, pretty good kēkù 刻苦, simple and frugal
kuài yì 快意, pleased lǎolèi 劳累, tired; over-worked
lǎozi 劳碌, working hard qìjìn 起劲, vigorous

7 As to suan 酸, we have 酸 1, 2, 4 differently classified because of the different meaning items. And we regard 酸 2 (sad) as an absolute non-attributive adjective so that we'll not discuss it here.
wúcháng 无常, variable  yǒngyùè 跃跃, enthusiastic
yǒufāng 有方, with the proper method  zhuānxìnc 专心, absorbed
zírán 自然, natural

2.2.3. Brief Illustrations:
(1) The words listed above generally can not be attribute but predicate only, e.g. tōng <通>, Zhège jūzi tōng. 这个句子～.
   - Zhège tōng jūzi. 这个～句子.
   chén <沉>, Nàgexiāngzi chén. 那个箱子～.
   - Nàge chén xiāngzi 那个～箱子.
   bùgòu <不够>, Cǎiliào bùgòu. 材料～.  bùgōude cǎiliào ～的材料
(2) They can be modified by adverbs such as hěn <很>, tài <太>, bù <不>, etc. of which the abilities of combination are different: bù <不> is more productive than hěn <很>, the latter is more productive than tài <太>.
(3) They can be followed by zhe <着>, le <了>, qǐlái <起来>, of which the combinative ability is quite different: le <了> is more constructive than qǐlái <起来> and the latter is more constructive than zhe <着>.
(4) Contrary to the non-predicative adjectives which is increasing in quantity, the general trend of the non-attributive adjectives are gradually decreasing in quantity.
(5) Some of them can be reduplicated, but all the reduplications will vary in meaning and can be used as attribute (with de <的>). The reduplicative style of monosyllabic words is AA, but that of the disyllabic words is AABB. The words which can be reduplicated have been marked a small c on the left side in the listed words above.
(6) The underlined words are conditioned non-attributive adjectives.

Main References:
1990 Lu Shuxiang Wenji (II). Beijing, Commercial Press.