

Nouns and Verbs

Evolution of Grammatical Forms

Shen Jiakuan

Institute of Linguistics, Chinese
Academy of Social Sciences

Full Words and Empty Words

Ma's Grammar 1898

Xiandai Hanyu Cidian A Dictionary of Contemporary
Chinese, 5th edition, 2005

Shi zi 实字 Full word

Xu zi 虚字 Empty word

A Dream of Red Mansions, or The Story of a Stone, by Cao Xueqin
in the 17th century

The themes for poems on chrysanthemums

- 忆菊 Yi Ju Thinking of the Chrysanthemum
- 访菊 Fang Ju Visiting the Chrysanthemum
- 种菊 Zhong Ju Planting the Chrysanthemum
- 对菊 Dui Ju Facing the Chrysanthemums
- 供菊 Gong Ju Displaying the Chrysanthemum
- 咏菊 Yong Ju Writing about the Chrysanthemum
- 画菊 Hua Ju Painting the Chrysanthemum
- 问菊 Wen Ju Questioning the Chrysanthemum
- 簪菊 Zan Ju Wearing the Chrysanthemum
- 菊影 Ju Ying The Chrysanthemum's shadow
- 菊梦 Ju Meng A Dream of Chrysanthemums
- 残菊 Can Ju The Withered Chrysanthemum

Concepts	Englishi Syntactic category	Chinese Semantic category
Chrysanthemum	Noun	Full word
Shadow dream		Empty word
to think to plant to question	Verb	

Regulated Verse

Originating in the Tang dynasty around the 7th century

The third and fourth lines and the fifth and sixth lines forming two antithetical couplets. In a couplet, a full word should match a full one and an empty word an empty one.

《忆菊》：空篱旧圃秋无迹，冷月清霜梦有知。

Thinking of the Chrysanthemum

No sign is there of autumn by the bare fence round my plot,
Yet I dream of attenuated blooms in the frost.

秋无迹 qiu wu ji 'autumn has no **sign**'

梦有知 meng you zhi 'dream has **aware**(ness)'

《访菊》：霜前月下谁家种？槛外篱边何处秋？

Visiting the Chrysanthemum

Who has planted this flower before the frost under the
moonlight?

Whence springs this autumn glory by balustrade and fence?

谁家种 shuijia zhong ‘who **planted** (it)’

何处秋 hechu qiu ‘where (is) **autumn**’

The full-empty division is a matter of degree.

《访菊》：蜡屐远来情得得，冷吟不尽兴悠悠。

Visiting the Chrysanthemum

Waxed sandals patter, come gaily from far away,
In soaring spirits he chants endless poems.

蜡屐 la ji 'waxed **sandals**'

冷吟 leng yin 'cold **chant(ing)**'

《种菊》：昨夜不期经雨活，今朝犹喜带霜开。

Planting the Chrysanthemum

An unexpected rain last night revived them,
How good to see them flower in this morning's frost.

不期活 bu qi huo 'not expect (its) **revive**(revival)'
犹喜开 you xi kai 'still like (its) **come**(ing) **into bloom**'

The ABC of Chinese-English Difference

(Shen 2007,2009, 2010a,b)

Difference A

他 开 飞机。

Ta kai feiji

he fly plane

He flies a plane.

**He fly a plane.*

Difference B

他 开 飞机。

Ta kai feiji。

he fly plane

He flies a plane.

**He flies plane.*

Difference C

开飞机容易。

Kai feiji rongyi。

fly plane easy

Flying a plane is easy.

**Fly a plane is easy.*

Rhetorical usage, when nouns surface as verbs

我又飞机一次。

Wo you feiji yici。

I again plane once

I'll too take/fly/repair..... a plane for once.

“Contextuals” as defined by Clark & Clark (1979).

Also Langacker (1987:299) and Shen (2010a)

The conclusion

In Chinese all the verbs are verbal nouns, or, the nouns in Chinese constitute a super-noun category which includes the verb.

More examples for A and B

老虎是危险动物。（类指）

Laohu shi weixian dongwu.

Tiger be dangerous animal

Tigers are dangerous animals.

The tiger is a dangerous animal.

(Laohu is a **generic** reference)

老虎笼子里睡觉呢。（定指）

Laohu longzi-li shuijiao ne.

Tiger cage-inside sleep PTCL

The tiger is/was sleeping in the cage.

The tigers are/were sleeping in the cage.

(Laohu is a **definite** reference)

他昨天终于看见老虎了。（定指/不定指/类指）

Ta zuotian zhongyu kanjian *laohu* le.

he yesterday finally see tiger PTCL

He saw the tiger(s)/a tiger/ tigers at last yesterday.

（The object is a **definite, indefinite, specific, or generic** reference）

来老虎了。（不定指）

Lai laohu le

Come tiger PTCL

There comes *a tiger*. / There come *some tigers*. (indefinite)

老虎来了。（定指）

Laohu lai le

Laohu come PTCL

The tiger has come. / The tigers have come. (definite)

他带回来（了）两张戏票。

He has brought back two theatre tickets. (The perfective *le* is optional.)

他一边吃（着）饭一边看书。

He was reading a book while eating a meal. (The progressive *zhuo* is optional.)

他曾经开（过）飞机出海。

He once flew a plane out to the sea. (The experiential *guo* is optional.)

More examples for C

哭没用。 *Cry* is useless. (Crying is useless.)

我怕抓。 I fear *scratch*. (I fear being scratched.)

你听见爆炸了? You hear *explode*? (Did you hear the explosion?)

眼见为实。 *See* is real. (Seeing is believing.)

Coordinate NPs

罪与罚 (sin and punish)

时间与忙 (time and busy)

吃与营养 (eat and nutrition)

人与贪 (man and greedy)

婚姻与孤独 (marriage and lonely)

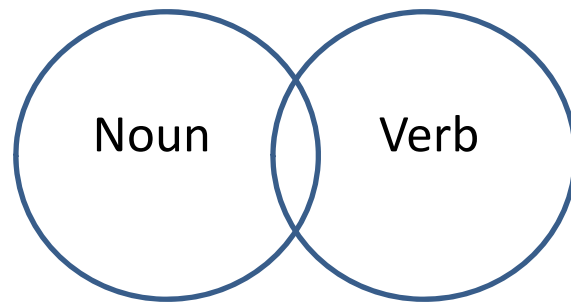
傲慢与偏见 (proud and prejudice)

Events and activities **are** entities, so nominalization is unnecessary.

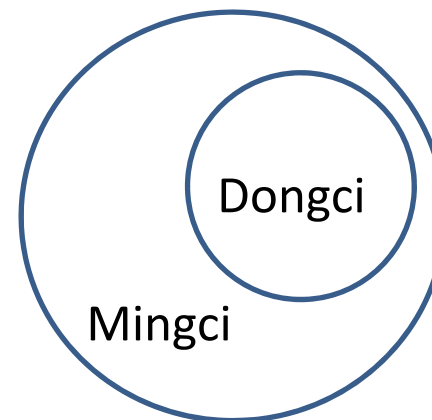
Jakobson (1932, 1939): Two types of “privative” opposition in morphology

The *male-female* type is a **rigid** opposition.

The *man-woman* is a **flexible** opposition.



English



Chinese

A Cognitive Perspective

Realizational metaphor vs. Constitutive metaphor

While realizational metaphors are used to help us explain or realize abstract concepts, in constitutive metaphors a concrete concept itself constitutes the abstract one which cannot be expressed or understood without the former.

computer VIRUS

The state-and-family relation

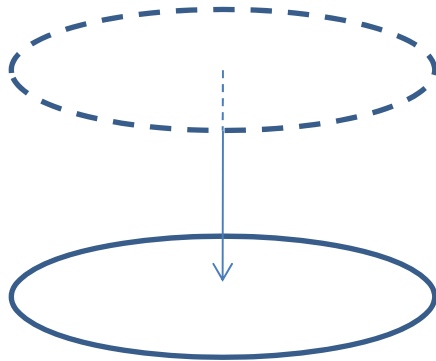
In the West is a realizational one, and state affairs are not family affairs.

In China on the other hand, the relation is a constitutive one, and state affairs **are** family affairs.

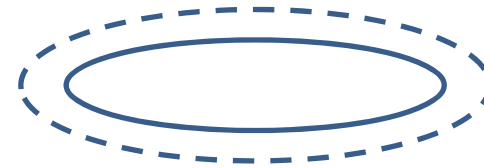
A compound *guo-jia* 国家 “state-family”

A compound for “thing”: *shi-wu* 事物 “event-thing”

Syntactic categories (abstract): Noun, Verb
Pragmatic categories (concrete): Reference, Predication



The realizational relation



The constitutive relation

A systematic difference

Sentence - Utterance	Subject - Topic	Noun/Verb – Reference/ Predication	
Realizational	Realizational	Realizational	(English)
Constitutive	Constitutive	Constitutive	(Chinese)

Lakoff and Johnson (1980: 30), Ontological metaphors

EXPLOSION IS AN ENTITY

THINKING IS AN ENTITY

HOSTILITY IS AN ENTITY

HAPPINESS IS AN ENTITY

EXPLODE IS AN ENTITY

THINK IS AN ENTITY

HOSTILE IS AN ENTITY

HAPPY IS AN ENTITY

A Philosophical Perspective

In a way, the realizational vs. constitutive distinction can also be regarded as the distinction between “to have” vs. “to be”.

Su: Realizational relation, “to have”. In poetry there is painting; in painting there is poetry. 诗中有画，画中有诗

Zhou: Constitutive relation, “to be”. Poetry is painting; painting is poetry. 诗就是画，画就是诗

色不异空，空不异色；色即是空，空即是色。

（《般若波罗蜜多心经》）

Form does not differ from emptiness; emptiness does not differ from form. Form itself is emptiness; emptiness itself is form.

- The Heart of Prajna Paramita Sutra

Chao Yuan Ren (1955)

[In Chinese] There is no “there is”; there is only “has”. “There is a man” is rendered by *Yeou ren*, literally, “Has man”. Incidentally, because both “there is” and “has” are covered by the same word, *you*, which has nothing to do with the word *shi*, “is”, in the sense of “is a”, the consequence is that “the problem of being” in Western Philosophy is very difficult to make intelligible Chinese sense unless it is specially dissociated from *shi* and associated with *yeou*.



Concepts	English	Chinese
be	<i>is</i>	<i>shi</i>
there be		<i>yeou</i>
have	<i>has</i>	

The verb *yeou* in Chinese represents both “has” and “there is”.

他有没有钱？

Ta *you-not-you* money?

“Does he have money?”

他手上有没有钱？

(In) his hands *you-not-you* money?

“Does he have money on hand?” (literally, “Is there money in his hands?”)

Lao Tzu, a Chinese philosopher in the Spring and Autumn Period
(700-476 BC)

In Chinese philosophy, *to yeou* or *not to yeou*, that is the question, and the problem of “being” does not exist at all.

有无相生。

Yeou and *wu* interdepend in growth. (*Lao Tzu*, Ch.2)

天下万物生于有，有生于无。

The things of this world come from *yeou*, and *yeou* (comes) from *wu*. (*Lao Tzu*, Ch.40)

有之以为利，无之以为用。

By *yeou* we profit, and by *wu* we are served. (*Lao Tzu*, Ch.11)

Nouns in Chinese are not subject to negation. To deny the existence or possession of an entity we negate the verb *yeou* “there is/has”.

他没(有)去

Ta mei (yeou) qu “he not has go” (He didn’t go.)

他没(有)车

Ta mei (yeou) che “he not has car” (He doesn’t have a car.)

Normal in Chinese: a loose subject-predicate relation

我是日本太太。

Wo shi riban taitai.

I am Japanese wife

“My wife is a Japanese.”

人家是丰年。

Renjia shi fengnian.

They are bumper harvest

“They have a bumper harvest.”

Language and Science

The Chinese language and its writing system were made the scapegoat for China's lagging behind the times.

Perspectives of Typology and Grammaticalization

Is the distinction of nouns and verbs a universal language phenomenon? (Vogel & Comrie 2000)

We need to separate the two questions of “is there such distinction” and “how to define such distinction”.

The distinction is a universal, but the ways of distinction may be language-specific.

The *rigid* male-female type opposition

Verbs [+V] , Nouns [+N]

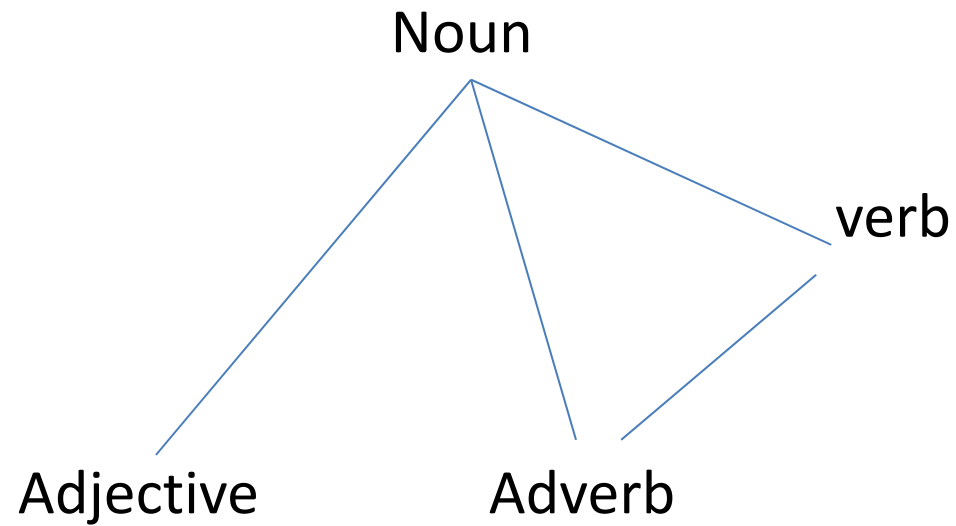
The *flexible* man-woman type opposition

Verbs [+V] , Nouns [-V]

- The evolution of grammatical forms can be deemed as a process of grammaticalization.
- The grammaticalization theory relies on regularities in the evolution of linguistic forms, especially on the unidirectionality principle and implications it has for the reconstruction of earlier language states.

(Traugott & Heine 1991, Claudi & Hunnemeyer 1991, Hopper & Traugott 1993)

Verbs evolve from nouns. (Heine & Kuteva 2002)



Some salient paths of categorial shift in grammaticalizaion

Ungrammaticalized vs. grammaticalized word classes

Broschart (1977), Vogel (2000)

Tongan, a type-token language

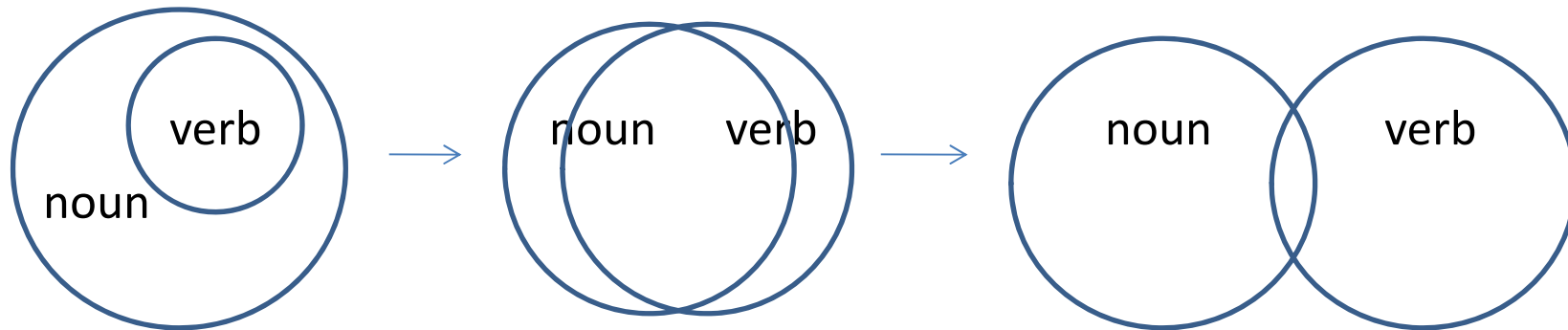
e tangatá
ART.SPEC man.DEF
“the man”

e 'alu
ART.SPEC go
“the going”

na'e kata (e tangatá)
PAST laugh ART.SPEC man.DEF
“(The man) laughed.”

'e 'uha
FUT rain
“It's going to rain.”

What about Chinese?



Grammaticalization of word classes

Are the lexemes assigned to mutually exclusive syntactic slots, NP and VP?

German: Most of the lexemes are so.

Tongan: Only a few lexemes are so.

Chinese: No lexemes are so.

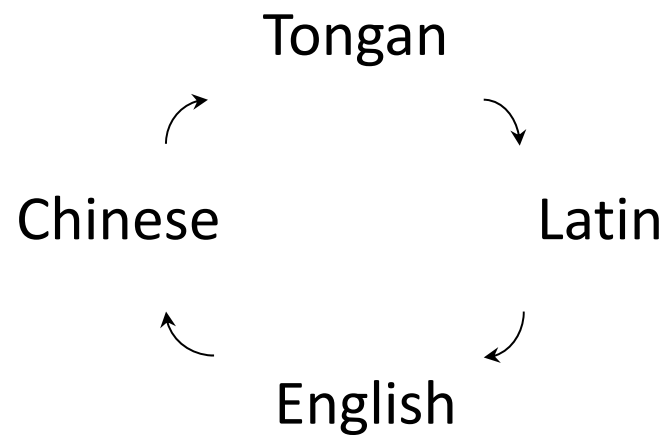
Marking the feature [+Predication]

Chinese: Not part of word forms, not obligatory on the syntactic level.

Tongan: Not part of word forms, but obligatory on the syntactic level.

German: Part of word forms (and obligatory).

A cyclic change



Implications for Experimental Studies

Two psychological experiments on noun-verb acquisition by children:

Imai *et al.* (2008)

Chan *et al.* (2011)

Both use the lexical matching method.

Imai's conclusion: "Noun bias" is more prominent in Chinese than in English and Japanese.

Chan's conclusion: Chinese children are more "verb friendly" rather than "noun friendly".

Both experiments are designed and conducted on the basis of noun-verb opposition. The *man-woman* pattern provides a possible solution to the apparent contradiction. Chinese has a verb advantage from one perspective and a noun advantage from another perspective.

Chan's experiment has a "habituation" stage which is absent in Imai's. Through habituation children have got familiar with the sound labels which are different for acts and things. At the test stage, Chan was really testing children's sensitivity to the switch of labels.

fMRI experiments on neural representation of nouns and verbs by Li et al.(2004) and Yang et al. (2011)

In English and other languages, verbs are represented in the frontal region and nouns in the posterior regions.

In Chinese nouns and verbs activate wide range of areas, including both frontal and posterior regions.

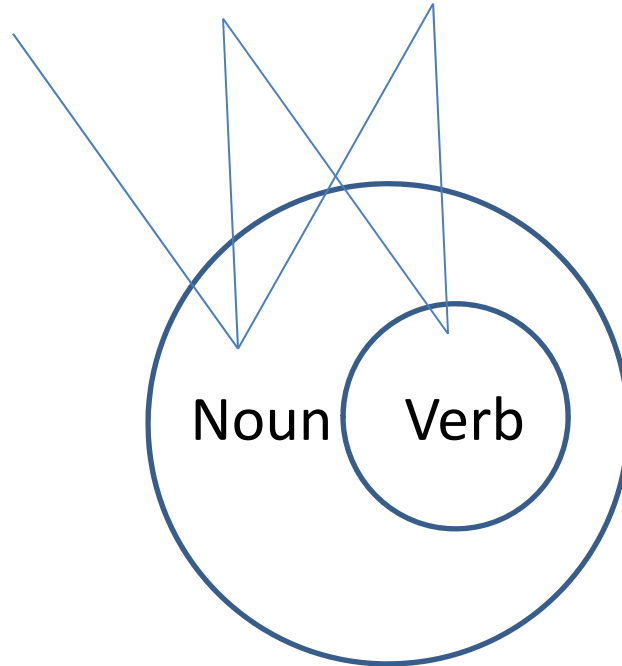
The caudate nucleus is the only area where nouns are significantly more activated.

Explanation: The specific feature of the Chinese grammar.

Verbs can be freely used as subject and object, and nouns can be freely used as predicate.

A better interpretation can be achieved with the *man-woman* modal and a division of representation and processing.

caudate frontal posterior
nucleus region regions



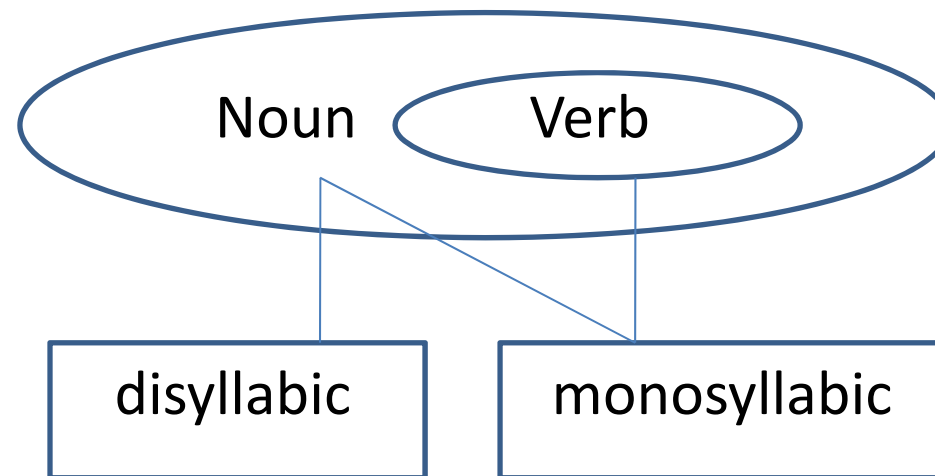
What distinction is important in Chinese?

The monosyllabic vs. disyllabic distinction

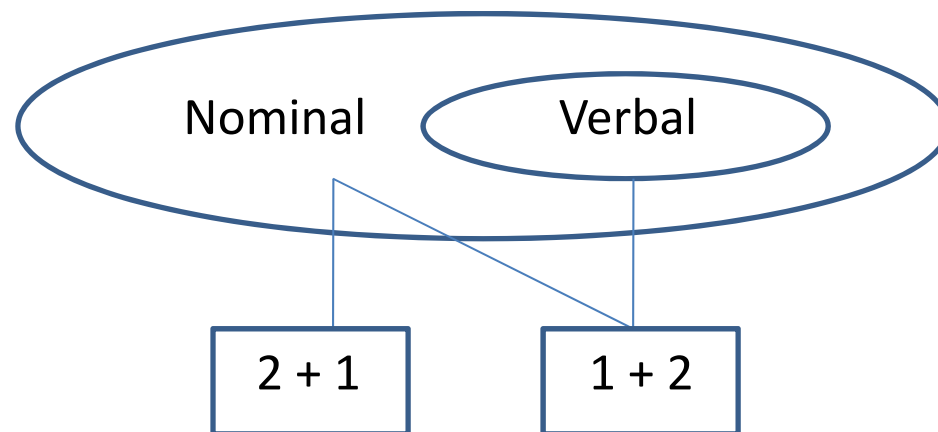
Each syllable (called *zi*) has a tone, a fixed meaning and independence.

The prosodic distinction has both syntactic and semantic functions.

The sound-meaning correspondences is in a “skewed relation”
(Chao 1968)



The ways of syllable composition distinguish nominal compounds and verbal phrase



[2+1] Common nominal compounds:

美洲|虎, 养殖|虾, 三级|跳, 欧洲|游

North-America tiger (jaguar), cultivate shrimp, triple jump,
Europe trip

Few verbal phrase:

研究|鬼, 喜欢|钱

to study ghost, to like money

[1+2] common verbal phrase:

*养殖|虾, *进行|查, *购买|粮, *商谈|租
养|对虾, 搞|调查, 买粮|食, 谈|出租

to cultivate shrimps, to do surveys, to buy food, to talk hire-out

Also common nominal compounds:

纸|老虎, 铁|娘子, 假|批判, 烤|白薯

paper tiger, iron lady, false criticism, baked potatoes

Regulations of grammaticalization

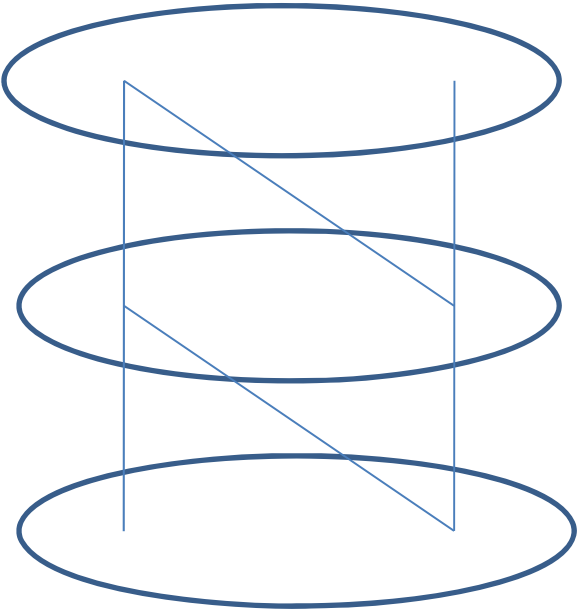
The change of form always lags behind the change of meaning.

(Form lives longer than meaning.)

The original meaning persists in the changed form.

The Chinese brain may be no less or even more sensitive to the mono-vs.-disyllabic distinction than to the N-V distinction

	Monosyllabic	Disyllabic
Noun	qiang枪 “gun”	jiqiang 机枪 “machine gun”
Verb	she射 “to fire”	saoshe 扫射 “to strife”



Chinese is pragmatic language and it works.

Even the recursive property is pragmatic in Chinese.

(Evans & Levinson 2009)

狗叫。邮差跑。

The dog barks. The postman runs away.

“If the dog barks, the postman may run away.”

“Because the dog barked, the postman ran away.”

“Since the dog will bark, the postman will run away.”

Coevolution of cognition and culture

(Levinson & Jaisson 2006)

Chinese philosophy and Chinese grammar

To have or not to have, that is the question in Chinese philosophy. This is closely connected with the man-woman modal of N-V relation in Chinese grammar.

Richard Larson (2009)
Chinese as a Reverse *Ezafe* Language

Chinese is like many Iranian languages with its nouns constituting a super-noun category which includes verbs and adjectives.

木的马

mu de ma

wood de horse

“wood horse”

死的马

si de ma

die de horse

“dead horse”

白的马

bai de ma

white de horse

“white horse”

De has the unified function of Case Checking.

Wood, *die*, and *white* belong to the same category.