Root-supported categories and their morphosyntactic characteristics (Part I)

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1 Introduction

In this talk, I will

- (i) present a common phenomenon across various data in Chinese
- (ii) propose a root-based theory to explain the phenomenon
- (iii) tentatively link my theory to some existing hypotheses

The material is split in two parts: (i) is covered in this handout, (ii)–(iii) are in separate slides.

2 Chinese: Functional items with lexical idiosyncrasy

Keypoint: Chinese functional items are not purely functional, but have a non-trivial lexical side.

- Already mentioned by various authors (i.a. Hu 2015; Huang 2015) for different purposes.
- My aim: investigate this phenomenon for its own sake.
- Data:
 - verbal (light verbs § 2.1.1, auxiliaries § 2.1.2–§ 2.1.4, sentence-final particles § 2.1.5);
 - nominal (classifiers § 2.2.1, pronouns § 2.2.2);
 - prepositional (§ 2.3).

2.1 Verbal domain

2.1.1 Light verbs

Eventuality predicates: DO, CAUSE, BECOME, EXIST, AT, USE, FOR, etc.¹ (Huang 1997; Lin 2001; Feng 2005) **Null** light verbs trigger verb movement and yield *non-canonical objects*.

(1) zhāngsān xiev-v_{USE}-v_{DO} le sān-zhī bǐ (Mandarin) Zhangsan write-USE-DO PERF three-CL pen 'Zhangsan used three pens in writing. (e.g. to finish a letter)' (cf. Lin 2014: 78)

My focus: overt light verbs, as in Table 1 (cf. Feng 2005, 2015; Xie 2008; Huang 2015).

Light verb	Literal meaning	Eventuality	Example
zuò	'do, make'	DO (neutral)	~yóuxì 'DO game; to play games'
dă	'hit, beat'	DO (neutral)	\sim diànhuà 'DO telephone; to telephone'
bàn	'do, handle'	DO (neutral)	\sim $g\bar{o}ngch\check{a}ng$ 'DO factory; to run a factory'
gǎo	'do, make, get'	DO (casual)	~weishēng 'DO cleaning; to clean'
nòng	'fetch, fiddle'	DO (casual)	$\sim ch\bar{\iota}de$ 'DO food; to make food'
zhěng	'tidy, fix'	DO (casual) ²	\sim diǎnr jiǔ 'DO some alcohol; to get some alcohol'
gàn	'do, engage in'	DO (casual)	~shìyè 'DO career; to build a career'
jìnxíng	'proceed'	DO (formal)	\sim căifăng 'DO interview; to interview'
cóngshì	'engage in'	DO (formal)	$\sim g\bar{o}ngzu\hat{o}$ 'DO work; to work'
jĭyǔ	'give, offer'	DO (formal)	\sim kǎol \ddot{u} 'DO consideration; to consider'
jiāyĭ	'inflict upon'	DO (formal)	~fúchí 'DO aid; to aid'

Table 1: Overt DO light verbs in Mandarin Chinese.

Shared lexico-morphological characteristics:

- **≭** All have verbal origin and can still be used as verbs.
- (2) zuò wănfàn 'make dinner', dă wénzi 'beat mosquito', zhěng yá 'fix teeth; go to orthodontics'
 * Mostly productive.
- (3) a. dǎ yú 'DO fish; to catch fish', dǎ hū 'DO snore; to snore', dǎ zì 'DO character; to type'
 - b. *bàn shǒuxù* 'DO procedures; to go through formalities', *bàn zhǎnlǎn* 'DO exhibition; to organize an exhibition', *bàn tānguān* 'DO corrupt official; to punish corrupt officials'

¹ Some of these resemble prepositions – a point I will return to in § 2.3.

² The light verb use of *zhěng* was originally dialectal (Northeastern Mandarin) but quickly entered common Mandarin.

* All have idiosyncratic content and are subject to lexical selectional restrictions.³

- (4) a. dă/*găo diànhuà 'to telephone' vs. *dă/găo wèishēng 'to clean'
 - b. zuò/*dă yóuxì 'to play games' vs. *zuò/dă yóuxì 'to play computer games'
 - c. dă yú 'to catch fish (in batch, from sea/river)' vs. gǎo yú 'to get fish (quantity and source unspecified, e.g. could be one fish bought from the market)'

* Often subject to stylistic/register restrictions.

- (5) a. zuò tóufà (colloquial, neutral) vs. nòng tóufà (casual) 'DO hair; to go to hairdresser's'
 - b. *jìnxíng căifăng* (formal) vs. *zuò căifăng* (neutral) vs. *gǎo căifăng* (casual) 'DO interview; to interview'

So they are different from general-purpose light verbs like Japanese *suru* and Korean *hada*.

- (6) SLA errors from Korean students (Pak 2014)
 - a. *zuò xuéxí 'DO study' (overuse) (correct form: xuéxí; compare: KOR gongbu-hada 'study-DO')
 - b. *dă yùndòng 'DO sports' (wrong combination) (correct form: zuò yùndòng; compare: KOR undong-hada 'sports-DO').

[37] Chinese light verbs are only partly functional. Their lexical idiosyncrasies are still active.

2.1.2 Voice auxiliary

Some examples:

Auxiliary	Literal meaning	Voice	Example
shĭ	'employ, use'	causative	~rén chéngzhǎng 'cause sb. to grow'
ràng	'let'	causative	\sim rén gǎndòng 'cause sb. to be touched'
lìng	'order'	causative	\sim rén xiànmù 'cause sb. to envy'
jiào	'call'	causative (casual)	~rén huáiniàn 'cause sb. to miss'
bèi	'cover'	passive	\sim rén zhuā-le 'by-sb. catch-ASP; be caught'
ràng	'let'	passive	\sim rén mǎi-le 'by-sb. buy-ASP; be bought'
gěi	'give'	passive (casual)	\sim rén piàn-le 'by-sb. deceive-ASP; be deceived'
jiào	'call'	passive (casual)	∼rén dă-le 'by-sb. beaten-ASP; be beaten'

Table 2: Voice auxiliaries in Mandarin Chinese.

³ Butt (2010: 48) makes a similar remark about English: "[light] verbs are clearly not entirely devoid of semantic predicative content either: there is a clear difference between *take a bath* and *give a bath*."

- * Verbal in origin (hence often classified as light verbs) and still have lexical usage.
- (7) **shǐ** kuàizi 'use chopsticks', **ràng** lù 'give way', **bèi**_V nàn 'suffer from disaster'/mián **bèi**_N 'cotton quilt', **jiào** jǐngchá 'call police'
- * One voice may be expressed by several items, and one item (e.g. *ràng*, *jiào*) may express several voice values.
- * Subject to less strict lexical selectional restrictions, though register restriction is still salient.
- (8) a. qiānxū shǐ/ràng/?lìng/?jiào rén jìnbù (formal) modesty CAUSE people progress 'Modesty helps one to make progress.'
 - b. zhè-jiàn shì zhēn ?shǐ/ràng/?lìng/jiào wŏmen yìwài (colloquial) this-CL matter so CAUSE we feel.unexpected 'This matter makes us feel so unexpected!'
- (9) a. táo-fàn zuótiān bèi/?ràng/??gěi/?jiǎo jǐngchá dàibǔ-le (formal) escape-criminal yesterday PASSIVE police arrest-ASP 'The escaped criminal was arrested by the police last night.'
 - b. shăn-kāi, bié ?bèi/ràng/gĕi/jiǎo huŏ shāo-zhe (colloquial)
 dodge-away don't PASSIVE fire burn-ASP
 'Stay away! Don't get burned by the fire!'

There is also a postverbal voice marker (and verbalizer) huà 'change, transform; CAUS/PASS'.

(10) *měi-huà* 'beautiful-V.VOICE; to beautify', *gōngyè-huà* 'industry-V.VOICE; to industrialize', *hànyŭ-huà* 'Chinese-V.VOICE; to chinesize'

It is more 'inflectional' than preverbal auxiliaries but clearly also has a lexical life.

(11) $b\bar{\imath}ng\ hu\dot{a}$ -le 'ice melt-ASP; the ice has melted', $hu\dot{a}$ -chéng $hu\bar{\imath}$ 'transform-become ash; to turn into ash'

2.1.3 Aspect auxiliaries⁴

Aspect auxiliaries can be preverbal or postverbal (suffixal), as in Table 3.⁵ The latter pattern is predominant, presumably due to the productive grammaticalization of resultative complements in Middle Chinese (Shi 2003).

⁴ Again I focus on their lexico-morphology. For their syntax and semantics see i.a. Smith (1994); Huang et al. (2009); Woo (2013); Soh (2014).

⁵ Postverbal aspect auxiliaries mostly belong to the so-called *aktionsart* semantic category. Similar postverbal items abound in other Asian languages. See Song (2016a) for a comparison between Chinese and Japanese.

Auxiliary	Literal meaning	Aspect
yŏu	'to have'	Perfective
zài	'to be at'	Progressive

Table 3a: Aspect auxiliaries in Mandarin Chinese (preverbal).

le	'(<liǎo) end'<="" th=""><th>Perfective/Telic</th></liǎo)>	Perfective/Telic
zhe	'(<zhuó) attach="" th="" touch'<=""><th>Stative imperfective/Telic</th></zhuó)>	Stative imperfective/Telic
guò	'pass'	Experiential
wán	'finish'	Completive
hǎo	'good'	Completive (colloquial)
diào	'drop'	Completive (colloquial, negative)
shàng	'above, ascend'	Completive/Inchoative (colloquial)
qĭ(-lái)	'rise(-come)'	Inchoative
kāi	'open'	Resultative/Inchoative (colloquial)

Table 3b: Aspect auxiliaries in Mandarin Chinese (postverbal).

* All have lexical (mainly verbal) origins and are still have lexical usage.

- (12) a. $t\bar{a}$ yǒu hěn duō qián he have very much money 'He has a lot of money.'
 - b. fēijī zhuó-lù le plane touch-land PERF'The plane has landed.'
 - c. tā xiăng shàng diànshìhe want ascend TV'He wants to be on TV.'

* One item may be used to express several aspects.

- (13) a. $t\bar{a}$ zhèng chī-zhe fàn ne he right eat-STATIVE meal SFP 'He's eating right now.'
 - b. wàimiàn fēng dà, bié dòng-zhe
 outside wind big don't freeze-TELIC
 'The wind is strong outside. Be careful not to catch a cold.'

* One aspect may be expressed by several items, subject to lexical semantic/register restrictions.

- (14) a. $t\bar{a}$ $zu\dot{o}y\dot{e}$ $xi\check{e}$ - $w\acute{a}n/h\check{a}o/??di\grave{a}o$ le (neutral) he homework write-COMPLETIVE SFP 'He has finished his homework.'
 - b. fàng-xué hòu xiān bă zuòyè xiĕ-wán/?hăo/diào (colloquial)
 dismiss-school after first DISP homework write-COMPLETIVE
 'Finish off your homework first after school. (among other activities)'
 - c. fàn zuò-?wán/hǎo/??diào le (positive) meal make-COMPLETIVE SFP 'The meal is ready.'
 - d. *mèimei de bīngqílín bèi māma chī-?wán/??hǎoldiào le* (negative) little sister POSS ice cream PASSIVE mom eat-COMPLETIVE SFP 'The little sister's ice cream was eaten by mom.'

2.1.4 Modal auxiliary

Modal auxiliaries are a disputed category: (i) grammarians like Zhu (1982) treat them as a type of verb; ⁶ (ii) disagreement on classification (cf. Hsieh 2005). Below is a non-exhaustive list.

(15) Dynamic

néng(-gòu) 'can(-suffice); can' huì 'understand; can, know (how to)' 'desire-want; want/wish to' xiǎng/yào/xiǎng-yào ài 'love; love to, tend to (colloquial)' 'wish to, be willing to (colloquial)' yuàn(-yì) 'agree; agree to, be willing to (colloquial)' kěn xĭhuān 'like to (colloquial)' 'glad; be glad to, want to (casual)' lèyì gāo-xìng 'high-spirits; be happy to, want to (casual)' lè-de 'be.glad-get; would gladly, might as well (casual)' 'dare' gǎn 'fear, be afraid to' рà

⁶ Huang et al. (2009) similarly claim Chinese modals are raising/control lexical verbs.

(16) Deontic

 $n\acute{e}ng(-g\grave{o}u)$ 'can(-suffice); can' $k\check{e}(-y\check{t})$ 'may, be permitted to'

xử 'permit; be permitted to, may' zhửn 'allow; be allowed to, may'

(yīng-)gāi '(should-)ought; should, ought to'

(yīng/gāi-)dāng '(should/ought-)should.properly; should, ought to (literary)'

děi 'must; must (colloquial)'

hǎo 'good; can, be alright to, may (colloquial, dialectal)'⁷

 $bi-x\bar{u}$ 'necessary-need; must, have to' $x\bar{u}$ -yào 'need-want; need to, should'

yòng 'use; need to (mostly negative/interrogative)'

(17) Epistemic

huì 'understand; could possibly, would probably'

kěnéng 'may, possibly'

(yīng-)gāi '(should-)ought; should probably'

(yīng/gāi-)dāng '(should/ought-)should.properly; ought to, likely (literary)'

★ Modal auxiliaries also have lexical origin and synchronic lexical usage. Their modal meanings are based on their lexical meanings.

(18) tā **huì** zhōngwén 'he knows Chinese', diàn **néng** 'electric energy', tā **gāi** wǒ qián 'he owes me money'

Some items can also be used as modal adverbs, which is impossible for English modal auxiliaries.

- (19) a. $t\bar{a}$ $x\check{u}$ $zh\bar{\iota}dao$, $y\check{e}-x\check{u}$ $b\grave{u}$ $zh\bar{\iota}$ he perhaps know also-perhaps not know 'Perhaps he knows, and perhaps he doesn't.'
 - b. *tā* **zhǔn** *lái*he definitely come

'He will definitely come.' (Chao 1968: 740–741)

❖ One modal auxiliary may express multiple modalities.⁸

(20) a. wǒ néng chūqù

I can go out

'I can (=am able to) go out.' (dynamic)

'I can (=am allowed to) go out.' (deontic)

⁷ The modal use of *hǎo* is originally from Wu (Chao 1968: 746).

⁸ This is also true for English modal verbs, e.g. *can* (dynamic/deontic/epistemic).

b. tā huì kāi-chē he understand/would probably drive-car 'He knows how to drive a car.' (dynamic) 'He would probably drive the car.' (epistemic) *One modality may be expressed by multiple items, with lexical semantic or register distinctions. (21) a. bù **xǔ** shuōhuà (normal prohibition) not may talk 'Don't talk!' b. bù zhǔn shuōhuà (stronger prohibition) not may talk 'Don't talk!' (22) a. wǒ děi gàosu nǐ yí-jiàn shì (colloquial) I must tell you one-CL thing 'I must tell you something.' b. nǐ bìxū xiān tōngzhī wòmen cái néng gōngbù (formal) then can announce you must first notify us 'You must notify us first before you can announce it.' (cf. Chao 1968: 742-743) * Some synonymous pairs only differ in syllable number, for different prosodic contexts (23). (23) a. nǐ zěnme ?kě/kěyǐ zhèyàng jiǎnghuà (2-syllable) like this speak you how can 'How can you speak like this?' b. nǐ zěn kě/?kěyǐ zhèyàng jiǎnghuà (1-syllable) you how can like this speak 'How can you speak like this?' *Modality may also be encoded postverbally, e.g. -de '(<dé) lit. get, obtain; DYNAMIC/DEONTIC' in (24). Modal suffixes are more 'inflectional' but clearly also have lexical usage, as in (25). (24) a. zhème duō jiǔ nĭ hē de wán (dynamic) ma much alcohol you drink DE finish.RES SFP 'Can you finish drinking so much alcohol?' ⁹ Modal suffixes are further grammaticalizations from aspect suffixes, e.g. modal *de* < resultative *dé* (cf. Lam 2016).

See Song (2016b) for a similar function of le in Northern Mandarin dialects.

- b. zhè huà wǒ shuō-de, nǐ shuō bù dé
 this talk I say DE you say not
 'I can say such words, but you can't.'
- (25) wǒ kǎoshì **dé**-le mǎn-fēn (verb)

 I exam obtain-PERF full-mark

 'I got full marks in the exam.'
- Chinese auxiliaries all have a lexical side beyond their formal grammatical functions.

2.1.5 Sentence-final particles (SFPs)

Express discourse meanings: speaker attitude/emotion, force of assertion, evidentiality, clause type (Simpson 2014); untoned and destressed in Mandarin (Li & Thompson 1981). I focus on their lexico-morphology; see i.a. Li (2006); Sybesma & Li (2007); Paul (2015) for their syntactic positioning and i.a. Tang (2015); Biberauer (2017) for their linearization.

(26) Basic SFPs in Mandarin (cf. Li & Thompson 1981; Zhu 1982; Hu 2003; Simpson 2014; Paul 2015)

le	currently relevant state (CRS)		
ma	yes/no-question	Type I (law, mid in Daul's hierarchy)	
ne	requesting addressee's particular attention	Type I (low∼mid in Paul's hierarchy)	
ba	speaker uncertainty		
a	general-purpose softening		
ou	gentle reminder	Type II (high)	
o^{10}	a softer variant of ou	Type II (high)	
ei	attracting addressee's attention		

*Some SFPs (the Low and Force ones in Paul 2015 and Erlewine 2017) have lexical origin. 11

- (27) Etymology of Mandarin SFPs (cf. Sun 1999)¹²
 - a. SFP le < perfective le < completive/resultative liǎo 'finished' < verb liǎo 'end'
 - b. SFP ma < SFP me (MidC *mua) < sentence-final adverbial *mĭu (= Mandarin wú)

¹⁰ The above-cited works generally do not include *o* as an SFP. I include it here because (i) it clearly exists in historical documents (Sun 1999: 183); (ii) it has become very popular in recent years, especially on the internet (cf. i.a. Chen 2011; Li 2016; Li 2017).

¹¹ The Standard Mandarin SFPs started their life in Tang Dynasty (7-9c. AD) and matured in late Qing Dynasty (19c. AD), with their semantics going through a long process of expansion, fusion, and modification.

¹² MidC and OC pronunciations are based on Wang Li's reconstruction (retrieved from Xiaoxuetang online database http://xiaoxue.iis.sinica.edu.tw).

- 'not' (as in you have it or **not**?)¹³ < verb *mĭu 'not.have'
- c. SFP $ne < \underline{ne} li$ (an affirmative SFP) fusion < truncated adverbial *zaili* (confirming preceding proposition) < VP $z\grave{a}i-l\check{i}$ 'be.at-inside; sth. is inside (surely true)'
- d. \underline{ne} < interrogative ni < OC interrogative SFP *niei (= Mandarin er) < demonstrative adverbial *niei 'like this' < pronoun *niei 'you' (>Mandarin ni)¹⁴
- e. SFP ba < completive/resultative $b\grave{a}$ 'finish/finished' < verb $b\grave{a}$ 'stop'

The lexical sources of these SFPs are still used as content words today.

(28) **liǎo**-le xīnyuàn 'end-ASP wish; realize one's wish', *cóng* WÚ *dào yǒu* 'from not.have to have; grow out of nothing', BÀ *gōng* 'stop work; strike'

★ SFPs without lexical etymology (i.e. Paul's Attitude ones) have interjection origin and can combine with (supra-)segmental features to express subtle emotions (Chao 1968; Hu 2003).

- (29) a. duōme hǎo-kàn **a**how good-looking SFP
 'How beautiful!'
 - b. gěi wǒ diǎn shuǐ hē a+
 give me some water drink SFP

 'Give me some water to drink! (quickly!)' (cf. Hu 2003: 105)
- (30) a. a1, nǐ wèn zhègè gàn má (interjection a)

 INTERJ you ask this do what

 'Ah? Why do you ask about this? (I'm confused)'
 - b. $n\check{\imath}$ $z\grave{a}i$ $ji\bar{a}$ $d\check{e}ng$ -zhe, a†

 you be.at home wait-ASP INTERJ

 'Wait at home! (do it!)' (ibid. p.112)

 \star Type I + Type II = various new SFPs.

- (31) a. shuǐ kāi lou (CRS + reminder) water boiling LE-OU 'Look, the water is boiling.'
 - b. nǐ yào chàng jiù chàng bei (uncertainty + attracting attention)
 you want sing just sing BA-EI
 'Well, sing if you like. (acquiesce)'

¹³ This usage is still preserved in Southern Min today.

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¹⁴ The double paths for *ne* in (27c–d) are based on Sun (1999). See Wang (2004) and Ren (2017) for different views.

Even Type I SFPs could have a decompositional analysis, e.g. le=l-+-e, ma=m-+-a, etc. (Sun 1999; Sybesma & Li 2007). Sun (1999: 184) gives the table below (all combinations attested).

		i-	n-	l-	b-	m-	w-
a	a	ia	na	la	ba	ma	wa
0	o	io	nio	luo	bo	mo	wo
ou	ou	iou	nou	lou	bou	mou	wou
e	e	ie	ne	le	bei	me	wei

Table 4: A decomposition of Mandarin SFPs.

Except *i*- and w-, which are byproducts of contraction (e.g. $n\check{\imath} a \rightarrow n\check{\imath}$ -ia, $h\check{\imath} a \rightarrow hao$ -wa), the column and row headers in Table 4 nicely correspond to Type I and Type II SFPs in (26). Their flexible combination and the further lexicalization thereof (as "span" SFPs, cf. Heim et al. 2016) is presumably a major cause for the taxonomical difficulty.

★ SFPs are not really a closed class: (i) different synchronic/diachronic varieties have different and often etymologically unrelated SFPs; (ii) the internet era has witnessed a rapid growth in the number of SFPs and quasi-SFP elements.

I. Various stylistic innovations.

- The 'cute o' (see note 10), as in (32).
- "Linguage": 15 funny SFP variants gaining popularity online since 2010, as in (33).
- (32) a. fángchănzhèng yào xiě wǒ de míngzi o (cute o) property ownership certificate will write I POSS name SFP 'Remember to write my name on the property ownership! (just kidding!)' (cf. Chen 2011: 41)
 - b. fángchănzhèng yào xiě wǒ de míngzi ou (reminder ou) property ownership certificate will write I POSS name SFP 'Remember to write my name on the property ownership! (don't forget!)'
 - c. fángchănzhèng yào xiĕ wŏ de míngzi a+ (general a) property ownership certificate will write I POSS name SFP 'Remember to write my name on the property ownership! (do it!)'
- (33) a. *míngtiān jiù yào fàng-jià* **le** (standard) tomorrow just will dismiss-vacation LE

 'The vacation will begin tomorrow.'

¹⁵ A collection of distorted expressions (an *anti-language* in the sense of Halliday 1976) which were initially used to mock the famous singer Jolin Tsai but later developed an independent fandom on social networks (cf. Ye 2017).

b. *míngtiān jiù yào fàng-jià* **lu** (funny) tomorrow just will dismiss-vacation LE 'The vacation will begin tomorrow.'

(34) a. wǒ bú rènshi nǐ **a**I not know you A

'But I don't know you.'

b. wŏ bú rènshi nǐ **re**I not know you A
'But I don't know you.'

NB the funny variants only modify Type II SFPs, not Type I, presumably because the latter encode more syntactico-semantic information and hence are less malleable.

II. Various 'visual SFPs' in SMS/internet language.

- Punctuation marks (35)
- Emoji (36)¹⁶

Both have been conventionalized as quasi-SFPs conveying a wide range of subtle attitudes/emotions.

(35) a. wŏmen yìqǐ qù ba! (excited)

we together go BA-PM

'Let's go together! (e.g. to an interesting talk)'

b. wŏmen yìqǐ qù ba... (helpless)
we together go BA-PM
'Let's go together...(e.g. to see the dentist)'

- (36) a. zhè-dào tí wǒ bú huì, nín kěyǐ jiāo wǒ ma↓ (eager) this-CL problem I not understand you.HON can teach me MA-EMOJI 'I don't understand this problem. Could you teach me? (please/I beg you!)'
 - b. xièxie, yǐhòu yǒu wèntí zài xiàng nín qǐngjiào № (hypocritic) thanks afterwards have problem again to you.HON consult EMOJI 'Thanks! I'll ask you again if I have more questions. (no I won't/farewell!)'

NB Visual SFPs also only modify Type II SFPs, not Type I. They are similar to intonation in spoken language, which has been argued to be special suprasegmental SFPs (cf. i.a. Chao 1968; Heim et al. 2016). Call them **Type III** SFPs.

SFPs in Chinese are a $\frac{2}{3}$ -open category rich in idiosyncratic semantic subtleties.

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¹⁶ Thanks to Mengmi Lü for providing the emoji examples and discussing them with me.

2.1.6 Interim summary

Summarizing our discussion of the verbal domain, some shared lexico-morphological characteristics emerge among various functional items in Chinese:

- they are mostly grammaticalized from lexical categories and still have lexical usage;
- there is a many-to-many relationship between functional items and grammatical categories one item may express several categories, ¹⁷ and one category may subsume several items;
- when a single grammatical category subsumes several items, they are subject to lexical semantic and/or register restrictions;
- grammatical categories in Chinese quite readily recruit new members, which makes them somewhat more open than their English counterparts.



Functional items in the Chinese verbal domain systematically have a lexical side.

2.2 Nominal domain

2.2.1 Classifiers

Classifiers in Chinese

- divide mass noun by defining a well-formed portion of a designated shape based on universally/culturally given *semantic* features (Borer 2005; Del Gobbo 2014);
- are a half-functional-half-lexical category par excellence
 - functional as they have a mass-dividing functionality with syntactic significance,
 - lexical as their 'shaping' content is descriptive and idiosyncratic.

Table 5 is a tiny subset of the Mandarin classifiers (cf. Chao 1968, who lists near 300). 18

- * The classifier—noun pairing is complex and often idiosyncratic (Li & Thompson 1981: must be memorized), a situation reminiscent of the light verb—noun pairing (§ 2.1.1).¹⁹
- * Classifiers all have lexical origin and can still be used as content words (37).

¹⁷ That is, non-simultaneously. I set aside span realizations for now.

¹⁸ Since some of Chao's subcategories (e.g. Container) are open classes, the number of classifiers is in theory infinite.

¹⁹ Feng (2012) and Huang (2015) draw a parallelism between classifiers ('light nouns') and light verbs, an idea that dates back to Chao (1948).

Subcategory	Classifier	Literal meaning	Usage sample
	jiàn	'item, article'	clothing, matter, gift
	$zhar{\iota}$	'one of a pair'	fowls, sheep, hand, foot
Individual	duŏ	'flower'	flower, cloud
	tóu	'head'	cattle, donkey, pig, garlic
	gè	'individual'	general-purpose
	qún	'(animate) crowd'	sheep, people, cattle
Carona	duì 'couple'		pigeons, lovers, earrings, twins
Group	shuāng	'pair'	shoes, socks, chopsticks, eyes
	$p\bar{\iota}$	'batch'	goods, students, tourists, medicine
	fèn	'portion, set'	meal, gift, newspaper, contract
Partition	tuán	'lump, mass'	clay, dough, wool, loose hair
Faithtion	$d\bar{\imath}$	'drop'	water, rain, tear, blood
	xiē	'some'	general-purpose
	hé	'(small) box'	match, medicine, rouge, cigarette
Container	xiá	'(small) box'	jewelry, treasure
Container	$b\bar{a}o$	'package'	books, sugar, cigarette, crisps
	pén	'basin, tub, pot'	water, flour, fish, mutton

Table 5: Classifiers in Mandarin Chinese.

- (37) a. jīntiān jì-le sān-gè **jiàn** today send-PERF three-textsccl item 'Today I sent three items (via courier).'
 - b. $t\bar{a}$ $x\bar{i}n$ $ji\dot{a}n$ -le $y\acute{i}$ - $g\grave{e}$ $q\acute{u}n$ he newly establish-PERF one-CL group 'He has newly created a (chatting) group.'

Classifiers can also be used as compounding components,²⁰

- (38) Modificational compounds:
 - a. Classifier as head: àn-jiàn 'case-item; (legal) case', yún-duŏ 'cloud-flower; cloud', niú-qún 'cattle-crowd; herd'
 - b. Classifier as non-head: *jiàn-hào* 'item number', *gè-wèi* 'individual-digit; (math) the unit', *dī-guàn* 'drop-irrigate; drop irrigation'
- (39) Parallel compounds:

zhuāng-zhuāng-jiàn-jiàn 'pile-pile-item-item; chain of events', *shuāng-shuāng-duì-duì* 'pair-pair-couple-couple; in pairs and couples', $p\bar{\imath}$ - $c\hat{\imath}$ 'batch-time; (production) batch'

* They are subject to stylistic/register restrictions.

- (40) a. yí-gè jiāngjun one-CL general 'a general (neutral)'
 - b. yí-wèi jiāngjun one-CL general 'a general (honorific)'
 - c. yì-míng jiāngjunone-CL general'a general (formal)'

(Del Gobbo 2014: 42-43)

(41) a. yì-zhī zhū one-CL pig 'a pig (neutral, e.g. in *Three Little Pigs*)'

b. *yì-tóu* zhū one-CL pig

'a pig (domestic, likely to be eaten)'

(internet²¹)

²⁰ See Loke (1997) and Zhang (2013) for similar remarks, though they only mention modificational compounds and classifiers used as compound heads.

2.2.2 Pronouns

Chinese has normal standard pronouns like wǒ 'I', nǐ 'you', and tā 'he/she/it'. Less mentioned is that there are also various non-standard pronouns, as in Table 6.

Person	Pronoun	Usage
	wŏ	Standard, neutral
	ăn	Colloquial, dialectal (from Northern Mandarin)
	ŏu	Casual, dialectal, internet (cute) ²²
1 . 4	lúnjiā	Casual, internet (cute) 'lit. others (with distorted pronunciation)' 23
1st	zài-xià	Archaic, humble, internet ('lit. be.at-below')
	$S\bar{l}$	Archaic, humble, internet (cautious) 'lit. private'
	zhèn	Archaic (emperor), internet (funny, bossy) ²⁴
	lăo-nà	Archaic (monk), humble, internet (funny) 'lit. old-monk'
	nĭ	Standard, neutral
	nín	Standard, respectful
2nd	$q\bar{\imath}n$	Colloquial, internet (friendly) 'lit. darling' ²⁵
	jūn	Archaic, elegant, literary (respectful) 'lit. monarch'
	$q\bar{\imath}ng$	Archaic, elegant, literary (official or intimate) 'lit. high official'
	tā	Standard, neutral 'lit. other'
3rd	tān	Colloquial, dialectal (respectful)
	yā	Casual, dialectal (pejorative, vulgar) 'lit. (low-status) girl' ²⁶

Table 6: Pronouns in Mandarin Chinese.

☆ Different forms for the same person serve for different registers.

²¹ https://www.zhihu.com/question/51234098/answer/124839355 (retrieved on 27 Apr 2018)

²² A common dialectal variant of wŏ that became popular on the internet (cf. Chen 2009).

²³ This distorted variant is only used as **1st** person, unlike its non-distorted counterpart *rénjiā* (1st/3rd person).

²⁴ Similar items include āi-jiā 'sad-person; I (empress dowager)', běn-gōng 'this-palace; I (high-status concubine)', chén-qiè 'subject-concubine; I (concubine, humble)', etc. The popularity of these royal terms among young people (both online and offline) is due to the wide influence of historical TV dramas in the past decades.

²⁵ Originated on Taobao (shopping website) and quickly got widespread.

 $^{^{26}}$ Both $t\bar{a}n$ and $y\bar{a}$ are from Beijing Mandarin, though the latter is much more widely used.

- b. zŏng yŏu wénzi sāorăo zhèn (bossy)
 always have mosquito annoy I
 'There are always mosquitos annoying me.'
- (43) a. $q\bar{t}n$ kan-kan dua ma (friendly) you look-look correct SFP 'Can you take a look if this is correct?'
 - b. qīng běn yìyuán, nàihé zuò zéi
 you originally senator why DO thief
 'Your are originally a senator, but why have you become a thief?'
- (44) a. $t\bar{a}n$ shi $ji\acute{e}ch\bar{u}de$ $ji\grave{a}nzh\grave{u}$ $d\grave{a}sh\bar{\iota}$ (respectful) he COP distinguished architecture master 'He is a distinguished master architect.'
 - b. $y\bar{a}$ shuō $y\bar{a}$ méi qián (vulgar)

 he say he not.have money

 'He says he has no money.'
- * Many non-standard pronouns have lexical origin and still have content word usage, with their stylistic properties based on their lexical meanings.
- (45) $s\bar{\imath}$ 'I (cautious)' < 'private', e.g. $s\bar{\imath}$ -liáo 'private-chat; chat privately' $q\bar{\imath}n$ 'you (friendly)' < 'intimate', e.g. $q\bar{\imath}n$ -jìn 'intimate-close; be close to' $y\bar{a}$ 'he/she (vulgar)' < '(low-status) girl', e.g. $y\bar{a}$ -huán 'branch-circle; servant girl'
- *NB the non-standard pronouns in Table 6 are distinct from another class of pronominal items known as '(pseudo-)imposters' (Collins & Postal 2012; Wang 2014) in that they have lexically fixed phi-values, whereas imposters get phi-values from the context.
- (46) a. **lǎoshī** kuài yào shī-qù wŏ/tā de nàixìng le (pseudo-imposter) teacher almost going.to lose-go. I/(s)he POSS patience SFP 'Teacher (=I/(s)he) is going to lose my/his/her patience.' (cf. Wang 2014: 175)
 - b. zhèn kuài yào shī-qù wǒ/*tā de nàixìng le (pronoun)

 I.BOSSY almost going.to lose-go. I/(s)he POSS patience SFP

 'I'm almost going to lose my/*his/*her patience.'
- Stylistic pronouns in Chinese are real pronouns with lexical idiosyncrasies.

2.3 Prepositional domain

Chinese prepositions = overt light verbs (cf. Song 2017, also see Aldridge 2012).²⁷

As is clearly shown in Table 7 (a non-exhaustive list based on Chao 1968), prepositions have all the lexico-morphological characteristics we observed for light verbs in § 2.1.1.

* They all have verbal origin and mostly can still be used as verbs.

- (47) a. $t\bar{a}$ **cóng** guờ jūn he join EXP army 'He once joined the army.'
 - b. xiǎo-gǒu jià-chē qīnzì bǎ-zhe fāngxiàng-pán
 small-dog drive-car by oneself hold-STA direction-wheel
 'A puppy drives the car and holds the steering wheel by itself.'
 - c. kuíhuā xiàng-zhe tàiyáng sunflower face-STA sun

 'The sunflower faces the sun.' (cf. Song 2017)
- * One item can express multiple prepositional meanings, e.g. $g\bar{e}n$ 'at, on, in; together with', $g\check{e}i$ 'to, for; DISPOSAL', etc.
- * One prepositional meaning can be expressed by multiple items, subject to lexical semantic and/or register restrictions.
- (48) a. dăbàn yí-xià ?hél★gēn/tóng/??yǔ wŏ zŏu (colloquial) dress up one-CL with me go 'Spruce up and come with me.'
 - b. cĭ shì ?hélgēn/?tóng/★yǔ nǐ yǒu hé xiānggān (written)
 this matter with you have what relevance
 'What has this to do with you?'
- (49) a. wǒ cóng/dǎ/??yóu/?zì zuótiān sān-diǎn yìzhí dǎ hāqiàn (colloquial)

 I since yesterday 3:00 constantly DO yawning
 'I've been yawning constantly since 3:00 yesterday.'
 - b. cóng/?dă/??yóu/★zì nǐ zǒu hòu wǒmen fēicháng xiǎngniàn nǐ (written) since you go afterwards we very miss you 'We have missed you badly since you were gone.'

Prepositions in Chinese can be treated as light verbs and have noticeable idiosyncratic content.

²⁷ Sun (2006: 157) points out that nearly all prepositions in Chinese can function as full-fledged verbs as well, hence their other name *coverbs* (Li & Thompson 1981).

Preposition	Literal meaning	Gloss
zài	'be at'	at, on, in (neutral)
$d\bar{a}i$	'stay'	at, on, in (colloquial)
$\bar{a}i$	'be close to'	at, on, in (colloquial)
gēn	'follow'	at, on, in (casual)
hé	'sum; peace; union; etc.'	together with (neutral)
gēn	'follow'	together with (colloquial)
tóng	'same; common'	together with (formal)
уй	'give; get along'	together with (formal)
dào	'arrive'	to, toward, till (neutral)
shàng	'ascend'	to, toward (colloquial)
wàng	'look over'	to, toward (colloquial)
wăng	'go, pass'	to, toward (colloquial)
xiàng	'face, turn towards'	facing, towards (neutral)
cháo	'face, look'	facing, towards (colloquial)
chòng	'face'	facing, towards (colloquial)
duì	'reply; be directed at'	to, towards
уú	'(OC) go to, surpass'	to, for, than (formal)
gěi	'give'	to, for
cóng	'follow, join'	from (neutral)
dă	'hit'	from, since (colloquial)
yóu	'pass through'	from, by, through (formal)
zì	'(OC) be from'	from, since (formal, literary)
yán	'edge; follow'	along (neutral)
shùn	'obey'	along (colloquial)
yòng	'use'	with, by means of (neutral)
ná	'take, hold'	with, by means of, DISPOSAL (colloquial)
bă	'hold'	DISPOSAL (neutral)
guǎn	'manage, govern'	DISPOSAL (colloquial)
gěi	'give'	DISPOSAL (colloquial)
jiāng	'support, bring'	DISPOSAL (formal, written)

Table 7: Prepositions in Mandarin Chinese.

2.4 Data summary

Chinese data from verbal (light verb, voice/aspect/modal auxiliary), nominal (classifier, pronoun), and prepositional domains all manifest the same phenomenon – *functional items systematically have significant lexical content beyond their syntactic functionality*:

- (i) most functional items have a lexical origin and still have independent lexical usage;
- (ii) the relationship between functional items and grammatical categories is **many-to-many**;
- (iii) the multiple items under a single category are not completely interchangeable but subject to **lexical semantic** or **stylistic/register** restrictions.

[The end of Part I]

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