

MANDARIN COMPOUND VERBS

This is a study of the structure and properties of compound verbs in Mandarin Chinese.

By excluding separable structures such as Verb-Object phrases and resultative and directional constructions, we are able to establish that verbs, like nouns, are invariably right-headed, i.e. modifiers always precede what they modify; and also that compound verbs with relatively few exceptions are disyllabic.

Compound verbs are divided into subordinate, coordinate, embedded, and other miscellaneous compound verb types, based on the contextual part of speech of the component morphemes and their relationship with each other. Subordinate compound verbs are found to exhibit an extensive system of verbal prefixation, contradicting the popular idea that there are few examples of affixation in Mandarin. Different relative position in a coordinate compound verb sometimes distinguishes different senses of the same morpheme. Included among embedded compound verbs we find lexical aspectual, passive, and causative structures. Many of the compound verb types in the "other types" category, such as resultative compounds and transitive VO compounds, mirror other structural types; a few are foreign imports. While most of the examples given in this study are established lexical items, new analogical formations continue to be created.

In short, separability serves as a clear criterion of what is and is not a compound verb in Mandarin. And in general, Mandarin compound verbs are found to strictly follow rules very similar to those of Mandarin syntax, with word order the most important guiding principle.

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史嘉琳



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TERMINOLOGY AND TECHNICAL CONVENTIONS

I. Terminology: terms and definitions

The following are working definitions intended for use in the specific context of this study.

action verb: A verb expressing an action; action verbs may be transitive or intransitive; verbs of perception and feeling are a subtype of action verbs.

additive aspect: A type of inceptive aspect expressing additional action after the original action is completed.

adjectival: The adjective form of **adjective**; having the properties or function of an adjective, or used with adjectives, e.g. *-like* is an adjectival ending.

adjective: A modifier of a noun; the same term is used both in syntactic and in morphosyntactic relationships.

adjunct: Jespersen's term for secondary rank words in junction relationships; see **rank**.

adnex: Jespersen's term for secondary rank words in nexus relationships; see **rank**.

adverb: A modifier of a verb, adjective, other adverb, or entire phrase or sentence; the same term is used both in syntactic and in morphosyntactic relationships.

adverbial: The adjective form of **adverb**.

affix: A prefix, suffix, infix, or circumfix; a morpheme added to a **base** to create a new **formation**. According to Bauer's (2004:13) definition, an **affix** is "a type of obligatorily bound morph"; however, since few Mandarin morphemes are truly bound, this restriction is not included in the definition of **affix** used in this study.

ambisyllabic: A segment (vowel or consonant) which forms the coda of the first and onset of the second of two adjacent syllables, e.g. the /l/ in English *melon* is ambisyllabic.

analytic: In this study, **analytic** is used to describe a construction in which individual elements are in a syntactic rather than lexical or morphological relationship with each other.

archetype: A type that represents key syntactic or morphosyntactic patterns in a language.

argument: The nouns, noun phrases or pronouns, either expressed or implied, that have a grammatical role to play in a given verb: the subject, direct object, indirect object, oblique object.

aspect: A grammatical category associated with verbs that express a temporal view of the event or state expressed by the verb, e.g. the beginning, stopping, continuation, or repetition of an action without reference to its position in time. Bauer (2004:18) defines **aspect** as “a morphological category (usually marked on the verb) which provides information on the internal temporal make-up of the action denoted by that verb.”

aspectual compound verb: A compound verb consisting of an aspectual matrix verb and a verb complement, e.g. 開拍 *kai¹pai¹* ‘to begin filming, shooting (a movie)’; 停收 *ting²shou¹* ‘to stop collecting’.

aspectual verb: A verb which expresses the starting, stopping, or continuing of an action, or a changing from one action to another.

attributive: Describes a qualifying adjective or adjectival expression which in Chinese occurs before the noun or noun expression it modifies; contrasts with **predicative**; e.g. 漂亮 *piao⁴liang⁴* ‘pretty’ in 一位漂亮小姐 *yi¹⁽²⁾wei⁴piao⁴liang⁴xiao³⁽²⁾jie³* ‘a pretty young woman’ is attributive; in 那位小姐很漂亮 *na⁴wei⁴xiao³⁽²⁾jie³hen³piao⁴liang⁴* ‘That young woman is pretty’, it is predicative.

base: Refers to that part of a morphologically complex word to which derivational morphemes are added; in the context of Mandarin resultatives and directionals, it is the verb in initial position of the construction; contrasts

with **satellite**; e.g. 走 *zou*³ ‘to walk’ is the **base** the resultative construction 走進去 *zou*³*jin*⁴*qu*⁴ ‘to walk in(to)’, 進去 *jin*⁴*qu*⁴ is the **satellite**.

binary subsystem: A subsystem within a larger system in which there are two polar possibilities for each item, e.g. 增多 *zeng*¹*duo*¹ ‘to increase’ and 減少 *jian*³⁽²⁾*shao*³ ‘to reduce, decrease’ are one pair of semantic polar opposites in the degree-changing deadjectival compound verb subtype of resultative compound verbs; thus they comprise a binary subsystem of resultative compound verbs; see Ch. V.

binome: In Mandarin, a disyllabic expression.

bisyllabic: Alternate form of **disyllabic**, ‘having two syllables’.

bivalent: Having two arguments, e.g. *to read* is bivalent, in that it takes a subject and an object.

bleached: Having lost part of an original meaning or grammatical function.

canonical form: The most usual, typical, representative, and unmarked form.

causative: A verb which indicates that the subject has caused an action to be carried out; e.g. *made* is a causative verb in *She made him come*.

Chinese character: The written Chinese symbol corresponding to a single syllable in the spoken Chinese language.

Chinese: Alternate term for **Mandarin, standard Chinese**.

Classical Chinese: A general term for the language of canonical literature and formal documents in China before the May Fourth (1919) Vernacular Literature movement.

collocation: Alternate term for **expression**; a sequence of morphemes with strong semantic and/or grammatical cohesion; an idiom is an example of a collocation; resultative and directional constructions are examples of collocations in Mandarin; compounds are a subtype of collocation, but collocations are often not compounds; alternate terms: **construction, expression, formation, structure**.

commutative aspect: A type of aspect expressing a change from one action to another; in Mandarin, lexical commutative aspect can be expressed in compound verbs with embedding which have morphemes like 改 *gai*³ ‘to change’, 換 *huan*⁴ ‘to change’, and 轉 *zhuan*³ ‘to transfer’ as an initial element.

complement: A verb morpheme or phrase that functions as an object of a matrix verb, or the resultative or directional outcome that comes after a base verb, which is also referred to as the **satellite**; in the aspectual compound verb 發笑 *fa*¹*xiao*⁴ ‘to break out laughing’, 笑 *xiao*⁴ ‘to laugh’ is the complement of the inceptive aspectual verb 發 *fa*¹ ‘to emit, begin’.

complex verb: Any verb, not necessarily a compound, consisting of more than one syllable; the following are examples of Mandarin complex verbs: 商討 *shang*¹*tao*³ ‘to deliberate over’, 閒逛 *xian*²*guang*⁴ ‘to wander about idly’, 在乎 *zai*⁴*hu*¹ ‘to care about’, 電子化 *dian*⁴*zi*³*hua*⁴ ‘to electronify’, 買下來 *mai*³*xia*⁴*lai*² ‘to buy, take ownership of’.

compound verb: A complex verb consisting of inseparable elements; the term **verb compound** is used freely as a synonym of **compound verb**.

component: In the context of this work, a Mandarin monosyllable used in the formation of a polysyllabic expression; alternate terms: **formative**, **element**.

concatenation: Any sequence of related morphemes considered as a unit, or the putting together of such units into a structure.

conjunctive: Refers to a relationship in which morphemes or phrases are linked by the concept of *and*.

conjunctive subordinate compound verb: A type of subordinate compound verb consisting of two full verb morphemes that refer to two concurrent actions, of which the one in initial position is backgrounded against the one in final position, e.g. 跪拜 *gui*⁴*bai*⁴ [to kneel + to show veneration] ‘to kneel down in obeisance, to offer veneration while kneeling’; contrasts with adverbially **prefixed subordinate compounds**, in which the initial element is a simple adverbial modifier of the final verb element.

construction: Any sequence of morphemes that are semantically and syntactically or morphosyntactically related and which belong to a coherent whole; alternate terms: **collocation**, **expression**, **formation**, **structure**.

content morpheme: Morpheme with concrete meaning rather than grammatical function; e.g. 人 *ren*² ‘person’ is a content morpheme; 與 *yu*³ ‘and’ is a grammatical function morpheme.

contextual form-class: The part of speech of a morpheme in a specific context, e.g. the contextual part of speech of the noun *book* in *bookcase* is adjective; alternate term for **contextual part of speech**, **contextual grammatical category**.

contextual grammatical category: The part of speech of a morpheme in a specific context, e.g. the contextual part of speech of the noun *book* in *bookcase* is adjective; alternate term for **contextual part of speech**, **contextual form-class**.

contextual part of speech: The part of speech of a morpheme in a specific context, e.g. the contextual part of speech of the noun *book* in *bookcase* is adjective. Alternate terms: **contextual grammatical category**, **contextual form-class**.

continuative aspect: A type of aspect expressing unbroken, ongoing action.

conventionalized: Established by common usage rather than adherence to grammatical rules.

coordinate: Referring to two or more morphemes which belong to the same part of speech and with equal syntactic or morphosyntactic standing; contrasts with **subordinate**.

coordinate compound verb: A compound verb type in which all components of the compound belong to the same part of speech and have with equal morphosyntactic status; none is subordinate to another; this compound verb type is thus headless.

correlative morphemes: Morphemes which often do not have clear independent meaning and which can only occur together; this term was coined

on the analogy of *correlative conjunctions*, such as the English *neither...nor*. An example is 徘徊 *pai²huai²* ‘to walk to and fro’; it is composed of the two correlative morphemes 徘 *pai²* and 徊 *huai²*; though normally neither component can occur alone outside of this compound, each contributes meaning to the whole in the way that *to* and *fro* each contributes meaning to the English expression *to and fro*.

coverb: An object-taking verb that is not the main verb of the sentence. Most coverbs are etymologically derived from full verbs, and a full verb usage of a given word may continue to be in use alongside its derived coverb; examples: 爲 *wei⁴* ‘to do; for, for the sake of’, 給 *gei³* ‘to give; for, to’, 在 *zai⁴* ‘to be (at); at’.

deadjectival: Being derived from an adjective; *to pretty oneself up* is a deadjectival verb in English.

deadverbial: Being derived from an adverb; *however* is a deadverbial verb in English in *he howevers all the time*.

default form-class: The part of speech most typically or most often assigned to a morpheme; unmarked part of speech assignment of a morpheme; alternate term for **default part of speech** or **default grammatical category**.

default grammatical category: The part of speech most typically or most often assigned to a morpheme; unmarked part of speech assignment of a morpheme; alternate term for **default part of speech** or **default form-class**.

default part of speech: The part of speech most typically or most often assigned to a morpheme; unmarked part of speech assignment of a morpheme; alternate terms: **default grammatical category** and **default form-class**.

denominal: Being derived from a noun; *to baby* and *to saddle* are denominal verbs in English.

dependent: The dependent of a phrase is any element in a phrase that does not refer to the same entity that the whole phrase refers to.

derivation: A morphological operation by which new words are formed by adding an affix to a base; e.g. the verb *to speak* can be made into a noun by adding the affix *-er* to form *speaker*.

deverbal: Being derived from a verb; *read* in *a good read* is a deverbal noun.

directional: A separable verb construction in Mandarin consisting of a verb **base** and a **complement** or **satellite** indicating direction of the action, either concrete or metaphorical; it is similar in many properties to resultatives; examples: 走進去 *zou³jin⁴qu⁴* ‘to walk into’, 跳下來 *tiao⁴xia⁴lai²* ‘to jump down’.

disyllabic: Having two syllables; alternate form: **bisyllabic**.

disyllabic template: An established structure of two syllables that applies to many members of a set, e.g. Mandarin compound verbs.

durative: Extending over a period of time; a type of aspect.

element: In the context of this work, a Mandarin monosyllable used in the formation of a polysyllabic expression; alternate terms: **component**, **element**.

embedded verb: A compound verb consisting of a matrix verb and complement; the matrix verb may, for example, be an aspectual verb, or a passive- or causative-marking verb.

emissive compound verb: A type of passive-causative embedded compound verb which expresses the idea of ‘bringing something to a person or place to have an action performed on it.’

empty morpheme: A morpheme with grammatical function rather than concrete reference; alternate term for **function** or **functional morpheme**, **structural morpheme**.

exocentric: A compound in which the semantic head of the compound does not appear in the compound, e.g. *rotgut* is ‘liquor’ that ‘rots’ one’s ‘gut’ because it is of such poor quality; the compound refers to a kind of liquor, but the head ‘liquor’ does not appear in the compound; contrasts with *endocentric*; also known by the Sanskrit term *bahuvrihi*.

expression: Any sequence of morphemes that are semantically and syntactically or morphosyntactically related and which belong to a coherent whole; alternate terms: **construction, formation, structure, collocation**.

formation: Any sequence of morphemes that are semantically and syntactically or morphosyntactically related and which belong to a coherent whole; alternate terms: **collocation, construction, expression, structure**.

formative: In the context of this work, a Chinese monosyllable used to form a polysyllabic expression; alternate terms: **element, component**.

form-class: Bloomfield's term for **part of speech**; alternate term: **grammatical category**.

frozen: Set in form, no longer necessarily following the syntactic rules of non-frozen formations.

full morpheme: A morpheme that is not phonologically reduced.

function or **functional morpheme:** A morpheme with grammatical function rather than concrete reference; alternate term for **empty morpheme, structural morpheme**.

general verb: A verb that indicates a type of action without providing much detail regarding it, e.g. as to the manner in which it is done, or with what instrument it is carried out; e.g. *to move* is a general verb; *to shake, to vibrate*, and *to wave* are more specific verbs; alternate term: **(semantically) general verb, generic verb**.

generic verb: See **general verb**.

Google: Internet search engine available in many languages; Google Taiwan, with the added specification that it search only sites in traditional Chinese characters (Big5), was used in this study as a supplementary corpus, in particular to check marginal usages of forms not found in the Sinica Corpus.

grammatical category: **Part of speech**; alternate term: **form-class**.

grammaticalization: The process by which a linguistic form loses some of its original semantic and/or grammatical content and assumes a new grammatical function, e.g. 給 *gei*³ as a full verb means ‘to give’; it has also been grammaticalized into a preposition-like coverb (meaning ‘to’) in the phrase 我打電話給他 *wo*³ *da*³ *dian*⁴ *hua*⁴ *gei*³ *ta*¹ ‘I’ll call him on the phone.’

Hanyu Pinyin (Romanization): The official Romanization system of the PRC; the Romanization system used in this work.

head: In this work, the element(s) of a formation which is or are ultimately modified, e.g. 診 *zhen*³ ‘to diagnose’ is the head of the subordinate compound verb 誤診 *wu*⁴ *zhen*³ ‘to misdiagnose’. This definition of **head** may be referred to in other works as “morphological head” to distinguish it from “syntactic head” as used particularly in studies in formalist syntax. The concept of “syntactic head” plays no role in the current study.

headless: Having no head or modified element, e.g. coordinate compounds like 檢查 *jian*³ *cha*² ‘to examine’ are morphosyntactically headless since the two morphemes this compound consists of belong to the same part of speech and are morphosyntactically equal, that is, neither modifies or is modified by the other.

heavy verb: A verb with relatively specific semantic content, as opposed to a **light verb**; it is sometimes placed between double quotes: “heavy verb”, since it is a back-formation based on **light verb**.

implied information: Refers to the implied or assumed semantic and syntactic structure of a linguistic form, especially an abbreviated one, which is not always visibly reflected in the surface structure; it includes the argument structure, and implied but unexpressed elements of the formation; e.g. the compound 請辭 *qing*³ *ci*² ‘to request to be transferred’ includes an implied verb ‘to permit’: one ‘asks to be permitted to be transferred’; arguments of this compound include the agent of V1 which is concurrently the patient of the unexpressed verb ‘to permit’ and also the agent of V2; and the agent of the unexpressed verb ‘to permit’ which is concurrently the patient of V1; i.e. A asks B, B permits (or doesn’t permit) A; A resigns (or doesn’t resign); see Ch. IV.

inceptive aspect: A type of **initiatory aspect** (as opposed to **realization aspect**) expressing the intentional or purposeful launching or starting of an action.

inchoative aspect: Any kind of aspect, either **initiatory aspect** or **realization aspect**, which expresses the idea of ‘beginning’ an action.

incorporated: Being part of a compound and thus inseparable.

incorporated object: An object in a ([n] inseparable) verb compound, e.g. 蹤 *zong*¹ in 追蹤 *zhui*¹*zong*¹ ‘to track down’.

initiatory aspect: An expression of the intentioned undertaking of a beginning, ending, continuation, or changing of an action; in Chinese compound verbs, it occurs in the initial position of an embedded aspectual verb compound, and is followed by a verb complement that describes the specific action referred to, e.g. 起舞 *qi*³⁽²⁾*wu*³ ‘to begin dancing’; it contrasts with **realization aspect**, which is expressed in resultative and directional constructions in Mandarin, e.g. 想起來 *xiang*³⁽²⁾*qi*³*lai*² ‘to think of, for something to come to mind’.

inseparable: Used to describe an expression in which the individual morphemes cannot be separated by other morphemes without changing the meaning or violating the integrity of the expression; for example, the particle 了 *le* cannot be inserted between the elements of the compound verb 解決 *jie*³*jue*² ‘to solve’; for the purpose of this study, the construction X 不 *bu*⁴ XY is not considered to have bearing on the separability status of a formation, first, since it does not strictly speaking involve separation, and also because it is rapidly spreading in modern Mandarin into formations where it was previously not allowed, e.g. to otherwise inseparable compounds such as 正視 *zheng*⁴*shi*⁴ ‘to face squarely’: 正不正視 *zheng*⁴ *bu*⁴⁽²⁾ *zheng*⁴*shi*⁴ ‘to face up to squarely or not’ may on occasion occur.

integral verb: An inseparable verb.

intensificatory: In Mandarin, used to describe the function of the light verb morpheme 打 *da*³ ‘to strike’ in an embedded compound verb in which it is the first element, and is followed by a more specific action verb; e.g. 打算 *da*³*suan*⁴ ‘to plan, make plans’ and 打扮 *da*³*ban*⁴ ‘to dress up’; 打 *da*³

expresses a greater intentionality of the action referred to by its verb complement, and is thus called intensificatory.

intransitive verb: A verb that does not take an object.

iterative: A type of aspect expressing repeated or habitual action.

junction: A relationship of a modifier or modifiers with its/their head.

left-headed: Occurrence of a morphological head before its modifier(s); English example: *proof positive*.

lexical: An item which is fixed in form, that is, it cannot necessarily be generated in its exact correct form based on syntactic rules alone; and which thus requires listing in the lexicon. In almost all cases, Chinese lexical items do not violate the rules of general Chinese syntax, but the specific morphemes chosen to be used in each lexical form may follow established convention rather being open to the discretion of the individual user; for this reason such items must be included in the lexicon.

lexical abbreviation: This term is used to refer to compound verbs with embedding, such as lexical causatives and passive-causatives, which imply information and grammatical relations not explicit in the surface form; the two verb morphemes in such compounds may take differing agents, patients, and/or recipients; these relations are made explicit for some example compounds in this study in tree form.

lexical passive: A type of embedded compound verb with a passive-marking verb in initial position which takes a complement in final position; as with syntactic passives, the original object, patient or recipient of the construction is raised to subject, also, the number of arguments is decreased by one, from three to two in the case of trivalent verbs, and from two to one in the case of monovalent verbs; examples: 獲頒 *huo⁴ban¹* ‘to be awarded’ and 獲釋 *huo⁴shi⁴* ‘to be released’.

lexical passive-causative: A type of embedded compound verb in which the subject causes an action to be done by someone else; the subjects of the two component verb morphemes must be different; e.g. 付印 *fu⁴yin⁴* ‘to send s.t. to be printed, to have printed’, 送修 *song⁴xiu¹* ‘to send s.t. to be repaired’.

LFG = Lexical Functional Grammar.

light verb: A verb with a very general meaning, such as *to do*, *to make*, *to take*, commonly used in combination with an element(s) which has/have more specific semantic content, e.g. *to take notes*, *to make haste*, *to do the dishes*; Chinese examples of light verbs are 打 *da*³ ‘to strike’ and 作 *zuo*⁴ ‘to do’; contrasts with **heavy verb** (or “**heavy verb**”).

light verb compound: A compound verb formed with a light verb in initial position, e.g. 打算 *da*³*suan*⁴ ‘to plan’, 造訪 *zao*⁴*fang*³ ‘to go and visit’.

Mandarin: See **standard Chinese**.

matrix verb: A verb that can take a verb complement, e.g. aspectual verbs like *to begin* can be matrix verbs; in *to begin to understand*, *to begin* is the matrix verb, *to understand* is the verbal complement; alternate terms: higher verb, controlling verb.

modal verb: An auxiliary or helping verb that expresses ability, permission, desire and so forth, and that takes or implies a verb complement; examples of compound modal verbs: 能夠 *neng*²*gou*⁴, 可以 *ke*³⁽²⁾*yi*³ ‘may’.

modern Chinese: See **standard Chinese**.

modification: The relationship between a **head** and a **modifier**, e.g. *barking* modifies *dog* in *the barking dog*.

modifier: A morpheme or linguistic formation which limits or qualifies a head.

modular: Constructed with standardized units or dimensions allowing flexibility and variety in use; Chinese morphemes are modular in that they can be used in their original form, without phonetic or other modification, to create complex linguistic forms such as compounds.

monosyllable: In this study, the single-syllable units of which Mandarin Chinese is composed.

monosyllabic: Having exactly one syllable.

morphological: In this study, morphological refers to the grammatical relationships of the elements within lexical items, and their structure and function, rather than of independent constituents to each other; **morphosyntactic** is used to mean about the same thing, but with a stronger emphasis on the grammatical aspect of the relationships of the elements within a lexical item; contrasts with **syntactic**. This definition is specifically tailored for use with Mandarin Chinese, mostly due to the general absence of overt morphological marking in Chinese.

morphological head: The **structural head** of a compound; contrasts with **semantic head**, which can occur in **headless** coordinate compounds. In this study, the term **head** is used as an abbreviation of **morphological head** (for compounds) or **structural head** (for both phrases and compounds); where **semantic head** is referred to, that term will be used in full.

morphosyllable: Term coined by John DeFrancis; refers to a monosyllable in Chinese which corresponds to exactly one morpheme, a situation that applies to the vast majority of monosyllables in Mandarin.

morphosyntactic: Refers to the grammatical relations within lexical items.

multisyllabic: Having more than one syllable; alternate term for **polysyllabic**.

nexus: Jespersen's term for **predication**.

nominal: Being a noun, having the properties of a noun, or being used with nouns, e.g. 老 *lao*³ is a nominal prefix in 老師 *lao*³*shi*¹ 'teacher'.

noun incorporation: The inclusion of a noun in an inseparable compound, e.g. 瓜 *gua*¹ 'melon' in the subordinate compound 瓜分 *gua*¹*fen*¹ 'to cut like a melon', or 陸 *lu*⁴ 'land' in the VO compound 登陸 *deng*¹*lu*⁴ 'to land'.

oblique object: An object that is not a direct object, e.g. the object of a preposition.

origo: The point from which an action originates; e.g. the origo of the expression 下來 *xia*⁴*lai*² 'to come down' is a place higher than the position achieved after the action referred to in the verb is completed.

o.s.: Oneself.

part of speech: Grammatical word class or category, including nouns, verbs, adjectives, adverbs, particles, and so on; alternate term: **grammatical category, form-class**.

passive-marked compound verb: A type of embedded compound verb in which the patient or recipient of the action expressed in the verb complement becomes the grammatical subject of the compound as a whole; example: 獲頒 *huo⁴ban¹* ‘to be awarded’.

perception verb: See **verb of perception and feeling**; Alternate term: **psych verb**.

phrase: A sequence of related morphemes considered as a unit.

Pinyin Romanization: Official Romanization system of the PRC, and the system used in this study; alternate term: **Hanyu Pinyin Romanization** 漢語拼音 *Han⁴yu³pin¹yin¹*.

polarity: A term referring to one or the other of the two possible ends of the scale in paired semantic polar opposites such as 加長 *jiā¹cháng²* ‘to lengthen’ and 減短 *jiǎn³⁽²⁾duǎn³* ‘to shorten’ in the context of compound verbs; ‘lengthen’ refers to the ‘large’ end or pole, ‘shorten’ refers to the ‘small’ end or pole; see Ch. V.

polysyllabic: Having more than one syllable; alternate term: **multisyllabic**.

predicate: The part of a sentence or phrase that says something about the subject; the part of the sentence or phrase that is left when the subject is removed.

predication: Having or including a **predicate**.

predicative: Serving in the function of a predicate, e.g. **stative verbs** are **predicative**.

predicative adjective: In Mandarin = **stative verb**.

prefix: A morpheme in a compound which occurs in initial position and attaches to and modifies a **base**. In Mandarin a prefix may be a bound, semibound, or free morpheme.

prefixed subordinate verb: In this study, an adverbial modifier plus a verb head in a subordinate compound verb, e.g. 複印 *fù yìn*⁴ [again + to print] ‘to photocopy’; contrasts with **conjunctive subordinate compound verb**, in which the initial element is a full verb referring to a separate action that is backgrounded against the primary action referred to by the final verb element, e.g. 坐視 *zuò shì*⁴ [to sit + to watch] ‘to watch s.t. sitting down/passively’.

progressive aspect: A type of aspect which expresses ongoing action.

psych verb: Alternate term for **perception verb, verb of perception and feeling**.

punctual: Occurring at a specific point in time; an event of short duration with a distinct beginning and ending.

pure verb: An expression with a verbal head; VO phrases such as 唸書 *nian shu*¹ ‘to study [books]’ do not have heads and are not pure verbs.

quantal: Going in discrete jumps from one quantity or state to another; contrasts with “continuum”.

rank: A theory of Otto Jespersen similar to the notion of headedness; the ultimately modified element belongs to the primary rank (e.g. *the barking dog*); an element(s) that modifies (modify) first rank elements are secondary rank (e.g. *the barking dog*); elements that modify secondary rank elements are tertiary rank; these are always adverbial (e.g. *a furiously barking dog*). According to Jespersen, verbs are never assigned the primary rank, but can only be secondary rank; he concludes this based on the relationship of *barking* and *barks* in the two phrases *the barking dog* and *the dog barks*. Jespersen’s primary rank thus is not the same as a Bloomfieldian head; verbs can be heads under the Bloomfieldian definition, but predicative or **nexus** relations do not involve headedness relations; a head is restricted solely to relations of modification and not predication under the Bloomfieldian definition adhered to in this work.

realization aspect: The natural outcome of an action, appearing after the **base** verb in a **resultative** or **directional** construction; contrasts with **initiatory aspect**, which appears before the main action verb, and expresses an intentionally executed action.

resultative: A construction in Mandarin consisting of a verb and a complement which describe a telic outcome of the verb, e.g. 擦乾 *ca¹gan¹* ‘to wipe dry’. Resultatives are separable and thus syntactic constructions and not compounds.

resumptive aspect: A subtype of continuative aspect which refers to the restarting of an activity which had previously stopped.

right-headed: Occurrence of morphosyntactic and syntactic heads in final position of a compound or other structure.

sandhi: Assimilation at word boundaries; in Mandarin, allophonic variations of tones in certain phonological environments, e.g. the shape of a third tone (low falling) changes to the shape of a second tone (mid-rising) when it occurs before another third-tone syllable, unless separated by a *cæsura*.

satellite: The complement portion of a resultative or directional construction, e.g. 進去 *jin⁴qu⁴* is the satellite of 走 *zou³* ‘to walk’ in the directional construction 走進去 *zou³jin⁴qu⁴* ‘to walk in(to)”; 走 *zou³* is the **base**; alternate term for satellite: **complement**.

s.b. = Somebody.

semantically cognate: Refers to linguistic forms that have core meanings with shared features, e.g. 加 *jia¹* ‘to add’ is semantically cognate with 長 *chang²* ‘long’, just as 減 *jian³* ‘to decrease’ is semantically cognate with the adjective 短 *duan³* ‘short’; thus a semantically cognate verb is matched to each respective adjective in degree-changing deadjektiv verbs such as 加長 *jia¹chang²* ‘to lengthen’ and 減短 *jian³⁽²⁾duan³* ‘to shorten’.

semantic field: A semantic field is an area of meaning which can be delimited from others in a language, e.g. food, emotion, actions that can be done with the hands.

semantically general verb: See **general verb**.

semantic head: In some coordinate compound verbs, a more specific verb occurs in initial position and a more general verb in final position; the verb in final position is said to be a semantic head since it is to some extent qualified or made more specific by the verb in initial position, though both verbs have equal standing and the compound is morphosyntactically **headless**.

separable: Any formation of two morphemes or more that can be syntactically separated, e.g. 吃飯 *chi¹fan⁴* is a separable phrase, since it is possible to say 吃過飯 *chi¹guo⁴fan⁴* ‘has eaten (rice)’; 飲食 *yin³shi²* ‘to eat and drink’, on the other hand, is inseparable.

simplex verb: Any monosyllabic verb, e.g. 吃 *chi¹* ‘to eat’, 站 *zhan⁴* ‘to stand’, 挖 *wa¹* ‘to dig’, 是 *shi⁴* ‘to be’.

Sinica Corpus: Balanced, tagged, five million-word online corpus of Chinese created and maintained by the Academia Sinica, Taipei, accessible at: <http://www.sinica.edu.tw/ftms-bin/kiwi.sh>.

s.o. = Someone.

s.t. = Something.

standard Chinese: The variety of northern Chinese based on the speech of Beijing and used as the standard national language in both the PRC and Taiwan, and as one of the official languages of Singapore; it is referred to as 國語 *Guo²yu³* in Taiwan, 普通話 *Pu³tong¹hua⁴* in the PRC, and 華語 *Hua²yu³* in South East Asia, though these usually refer to the spoken language; the written language is referred to simply as 中文 *Zhong¹wen²*, or occasionally 華文 *Hua²wen²*; or if referring to literature and composition, sometimes as 國文 *Guo²wen²* ‘the National Written Language’.

state of being verb: A verb of existence, e.g. 存在 *cun²zai⁴* ‘to exist’, 殘留 *can²liu²* ‘to be left over’.

stative verb: In Chinese, an adjective used predicatively, e.g. 輕鬆 *qing¹song¹* ‘to be easy to do, relaxed’, 光滑 *guang¹hua²* ‘smooth’, 可口 *ke³⁽²⁾kou³* ‘delicious’ when it follows a subject as a predicate complement.

structural morpheme: A morpheme with grammatical function rather than concrete reference; alternate term for **empty morpheme**, **function** or **functional morpheme**.

structural head: A general term for both the syntactic head of a phrase or the morphosyntactic head of a compound; contrasts with **semantic head**, which can occur in **headless** coordinate compounds.

structure: Any sequence of morphemes that are semantically and syntactically or morphosyntactically related and which belong to a coherent whole; alternate terms: **collocation**, **construction**, **expression**, **formation**.

subordinate: A morpheme which modifies, qualifies, or limits a **head**.

subordinate compound verb: A compound verb containing a modifier and its head.

subordination: Refers to a relationship of modification or junction; the modifier is subordinate, the modified element is superordinate and called the **head**.

suffix: In Chinese, a productive morpheme or affix which appears in final position in a compound to produce a new derivational form of a linguistic form; an especially productive example is 化 *hua*⁴ ‘to change’, which can be added to an almost unlimited range of nouns, verbs and adjectives to form a verb of “making” or “becoming” e.g. 現代化 *xian*⁴*dai*⁴*hua*⁴ ‘to modernize’ (i.e. *to make modern* or *to become modern*); 化 *hua*⁴ is a conscious translation of the English *-ize*, *-ify*, *-ate*, or *-en* verbal suffixes, as in *industrialize*, *simplify*, *animate* and *harden*.

supplemental aspect: A subtype of inceptive aspect marked in Mandarin with the verb morpheme 補 *bu*³ ‘to make up for, to do something after a deadline’.

syllabic: Having to do with the syllable as a unit of linguistic analysis.

syllabic harmony: The matching of the syllable count of one part of compound or phrase to another, e.g. the reflexive compound form of the monosyllabic verb morpheme 欺 *qi*¹ ‘to deceive’ is 自欺 *zi*⁴*qi*¹ ‘to deceive

oneself’; of the disyllabic 欺骗 *qi¹pian⁴* it is 自我欺骗 *zi⁴wo³ qi¹pian⁴* ‘to deceive oneself’.

syllabicity: The syllable count of an expression.

syllable: While the syllable is difficult to rigorously define in some languages, it is a clearly defined unit in Mandarin, and is thus available for use as a unit of analysis; in most cases, one syllable in Mandarin corresponds to one morpheme, especially in the case of verbs, though there are occasionally disyllabic verbs in which one or the other element does not have a discernible independent meaning and thus is not an independent morpheme.

syllable count: The number of monosyllabic units in a given formation.

symmetry: Balance of the number of members of two matched sets; e.g. there is a lack of symmetry of corresponding semantic opposites among degree-changing deadjectival compound verbs; there are more examples of these compounds with the meaning of ‘large’, e.g. 放大 *fang⁴da⁴* [to render + large] ‘to magnify’, rather than the meaning of ‘small’, e.g. 缩小 *suo¹xiao³* [to shrink + small] ‘to shrink’; see Ch. V.

syntactic: A grammatical rather than **morphological** relationship; in Mandarin Chinese, this means relationships between the elements of utterances that are not inseparable compounds; e.g. in 好好坐 *hao³⁽²⁾hao³zuo⁴* ‘to sit properly’, 好好 *hao³⁽²⁾hao³* and 坐 *zuo⁴* ‘to sit’ are separable and thus in a syntactic relationship of adverbial modifier and verb; in 善用 *shan⁴yong⁴* ‘to use carefully, not wastefully or frivolously’ and 善待 *shan⁴dai⁴* ‘to treat well’, the two elements are inseparable and the relationship between them is a morphological, or morphosyntactic, and lexical one.

subordinate compound verb: A type of compound verb in which the initial element(s) modifies (modify) a head, e.g. 軟禁 *ruan³jin⁴* [soft + to forbid] ‘to put/be under house arrest’.

superficial structure: An alternate term for **surface structure**.

surface structure: The external form of a linguistic expression, which may not always reflect information and grammatical relations it implies or assumes; alternate term: **superficial structure**.

Taiwan Mandarin: The variety of **standard Chinese** or **Mandarin** current in the Taiwan area.

telic: Having a well-defined ending point, outcome or result.

terminative: A type of aspect expressing the idea of ‘stopping’ an action, e.g. 停辦 *ting²ban⁴* ‘to stop administering (a procedure)’.

tetrasyllabic: Having four syllables.

transitive verb: A verb which can take a direct object.

trisyllabic: Having three syllables.

trivalent: Having three arguments, e.g. *to give* is trivalent, in that it takes a subject, object or patient, and indirect object or recipient.

unaccusative verb: A special type of intransitive verb, the subject of which does not actively initiate or is not actively responsible for the action of the verb; rather, it has properties which it shares with the direct object of a corresponding transitive verb, or with the grammatical subject of its passive counterpart; unaccusatives cannot be passivized; a Mandarin example is 失竊 *shī¹qié⁴* [to lose + to steal] ‘to be stolen’; however, according to its literal meaning, the subject ‘loses itself’ through theft; it is thus similar to a passive construction, and is generally translated as such.

verbal: Adjective form of *verb*; being a verb, having the properties of a verb, or used with verbs, as a *verbal prefix*.

verb complement: A verb that functions like the object of a matrix verb, e.g. in *to begin to build*, *build* is the verb complement of *to begin*; in the Chinese 開始建造 *kāi²shǐ³ jiàn⁴zào⁴* ‘to begin to build’, 建造 *jiàn⁴zào⁴* is the verb complement of 開始 *kāi²shǐ³*; in the compound verb 興建 *xīng¹jiàn⁴* ‘to begin to build, begin construction’, 建 *jiàn⁴* is the verb complement of 興 *xīng¹* ‘to initiate’.

verb compound: Alternate term for **compound verb**.

verb of perception and feeling: A type of verb which expresses a feeling or sensory perception of the world, e.g. *see, feel, experience, hope, desire*; some Chinese examples are 喜歡 *xi³huan¹* ‘to like’, 知道 *zhi¹dao⁴* ‘to know’, 感覺 *gan³jue²* ‘to feel’; unlike non-perception action verbs, verbs of this type can usually be modified by adverbs such as 非常 *fei¹chang²* ‘very, extremely’ and 不太 *bu⁴⁽²⁾tai⁴* ‘not very (much)’, but unlike **stative verbs** they cannot be used directly before a noun as attributive adjectives; alternate terms: **perception verb**; **psych verb**.

verb phrase: This term is used loosely in this study to refer to an expression containing a verb, but having no special syntactic or morphological standing; it most often is used to describe a verb-object collocation, e.g. 走路 *zuo³lu⁴* [to walk + road] ‘to walk’; a verb phrase is **not** a compound verb.

VO = Verb + Object.

VO compound verb: An inseparable, often transitive verb consisting of a verb and its object; there are two types: one implies but usually omits marking of the oblique object with e.g. 於 *yu²* ‘at, from, to’ or 爲 *wei⁴* ‘for, for the sake of’, e.g. 聞名 *wen²ming²* [to hear + name] ‘to be famous (in)’; the other shows bleaching of the nominal object so that the compound can directly take a second, external direct object, e.g. 登陸 *deng¹lu⁴* [to mount, ascend + land (n.)] ‘to land, disembark’.

VO phrase: A separable, syntactic sequence of a verb and its object, e.g. 吃飯 *chi¹fan⁴* ‘to eat (rice)’; since it is separable, it is not a compound verb.

II. Technical conventions

1. Traditional characters are used for all Chinese characters in this text, including when citing examples from sources that use simplified Chinese characters, e.g. Packard 2000; the font used is regular (non-italic) 新細明體 *xin¹xi⁴ming²ti³* (Big5).
2. Pinyin Romanization is given in italics; tones are indicated in non-italic superscript. Tone sandhi, when they occur, are indicated in parentheses after the citation tone, e.g. 苦守 *ku³⁽²⁾shou³*, 不太 *bu⁴⁽²⁾tai⁴*. The neutral tone is unmarked, e.g. 了 *le*.

3. Alternate tone readings or pronunciations are indicated with a slash between the two possible forms, with the first the preferred one, e.g. 偽 *wei^{3/4}* ‘false, bogus’; 油炸 *you²zha^{4/2}* [oil + to deep-fry] ‘to deep-fry’.
4. Tones are not marked in personal names in Chinese, though they are sometimes given in parentheses upon their first occurrence.
5. Literal English morpheme-by-morpheme translations are enclosed in brackets: 追蹤 *zhui¹zong¹* [to chase + tracks] ‘to pursue, track down’; a plus mark (+) is placed between individual morphemes of a compound or expression; spaces are left between morphemes in an analytic, syntactic relation with each other, with hyphens being used between morphemes of longer collocations, e.g. 我喜歡獨自一個人 *wo³ xi³ huan¹ du²zi⁴ yi¹ geren²* [I like singly-alone one-person].
6. English glosses are enclosed in single quotes: ‘to begin to use’.
7. Emphasized text is rendered in **boldface**.
8. Cited forms in the Latin alphabet are given in *italics*.
9. Parentheses are used to indicate the internal hierarchical structure among the morphemes within a compound: 自我催眠 *zi⁴wo³cui¹mian²* [(self + I) + (to urge + sleep)].
10. When the default part of speech is unclear in an English translation, it is indicated in parentheses: 寶貝你的頭髮 *bao³bei⁴ ni³de tou²fa³* [treasure (n.) + your + hair]. Also, in phrases such as this one, compounds rather than individual morphemes are glossed.
11. If there is important additional information on a gloss, it is enclosed in parentheses, as in 出嫁 *chu¹jia⁴* ‘to marry (a man)’.
12. Parentheses in the glosses are also used to mark literal translations of elements in the Chinese translation that are omitted from the English to make the English more idiomatic, e.g. 這雙鞋樣子很漂亮 *Zhe⁴ shuang¹ xie² yang⁴zi hen³ piao⁴liang⁴* ‘T(he style of t)his pair of shoes is (very) pretty’.

13. Syllables without independent meaning are sometimes left in Romanization, e.g. 相思 *xiang¹si¹* [*xiang¹* + to think of] ‘to pine after (a loved one)’; or the part of speech of a morpheme with unclear meaning may be indicated and enclosed in parentheses: 在乎 *zai⁴hu¹* [to rely on + (particle)] ‘to care about’.
14. Material added by the author is enclosed in brackets, e.g. [Author’s note: ...].
15. Arrows are used in some cases to trace the analysis of a meaning from literal morpheme-by-morpheme translation, to a form that makes implied information explicit, to an idiomatic English translation, e.g. 自重 *zi⁴zhong⁴* [self + to consider important] → self considers-important self → ‘to comport oneself well’.
16. Arrows are also used to show related forms, e.g. Noun + Verb → instrumental verb 用 *yong⁴* (instrument) (來 *lai²*) + V ‘use (instrument) to V’, as in 用毛筆寫字 *yong⁴ mao²bi³⁽²⁾ xie³zi⁴* ‘to use a brush pen to write characters’ or ‘to write with a brush pen’.
17. Arrows are further used to indicate example members of a set of items including a given morpheme: 隊 *dui⁴* ‘line, row’ → 隊伍 *dui⁴wu³* [line + rank] ‘line, rank’; see Ch. III.
18. Parts of speech are capitalized to indicate the compound or formation type, e.g. Verb + Adjective; alternately, upper case first letters or other abbreviations are sometimes used: N + N compound verbs.
19. Newly coined expressions are sometimes enclosed in double quotes the first time they occur, e.g. “pure verbs”. Double quotes may also indicate that a usage is quoted from another source and is not necessarily in accord with usage or concepts in this work.
20. In general, examples are arranged roughly in descending order according to frequency and how representative each is for its category, with semantically related items grouped together.

21. The largest number of occurrences that can be shown for one search in the Sinica Corpus is 2,000, so for some items the number of occurrences is given as 2,000+.

SOURCES CONSULTED IN THE PREPARATION OF THIS SECTION:

Web sites:

Classical Chinese

Wen-chao Li

San Francisco State University, California, USA

<http://online.sfsu.edu/~wenchao/writings/classical.do>

Classical Chinese Primer: Grammar Abbreviations

<http://www.umass.edu/wsp/primer/grammar/abbreviations.html>

Glossary

Joost van de Weijer

<http://www.ling.lu.se/persons/Joost/Texts/glossary.pdf>

Glossary of linguistic terms (SIL site)

Eugene E. Loos et al, ed.

<http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/Index.htm>

Lexicon of Linguistics

Utrecht institute of Linguistics OTS

Utrecht University

<http://tristram.let.uu.nl/UiL-OTS/Lexicon/>

Lexique Linguistique (in English)

Thomas Lebarbé

Université Stendhal, Grenoble, France

<http://www.u-grenoble3.fr/lebarbe/linguistique.html>

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CHAPTER I: LAYING THE GROUNDWORK

This is a study of Mandarin compound verbs: how they are put together, and the relationships of the parts to each other. In addition to subordination and coordination, these relationships include some structures usually thought of as exclusively syntactic, such as aspectual verbs with complements, passives, and causatives.

Many different verb classification schemes with varying purposes have been proposed for Chinese. Tsao (1996) summarizes a number of these, most notably those of Chao Yuen Ren (1968), Li Ying-che (1971), the CKIP (Chinese Knowledge Information Processing) Group of the Academia Sinica, and One-soon Her (1990). Chao classifies verbs as transitive or intransitive, then subcategorizes them as action, quality, stative, classificatory, 是 *shì*⁴ ‘to be’, 有 *yǒu*³ ‘to have’ and modal verbs. Li has two basic categories of verbs, activity and state, each of which is further divided into transitive and intransitive, and these in turn are subdivided into action, perception, quoting, shape, and state verbs, among other types. Verbs in the online five million-word Sinica Corpus, created and maintained by the CKIP Group of the Academia Sinica in Taipei, are tagged according to such parameters as transitivity, action vs. stative verbs, causatives, and locatives. Her, working within a Lexical Functional Grammar (LFG) framework, proposes 24 categories of verbs defined by such features as how many arguments each verb may take, and which element is subject, object, possessive, adjunct, and so on. Packard (2000), not covered in Tsao, places special emphasis on whether the component parts of a construction are free or bound forms.

None of the proposed systems classifies Chinese verbs according to the contextual grammatical category of each component monosyllable of the formation and the relationship of the parts to each other. In this study we have designed from scratch a classification system with these particular features as a foundation, thereby offering a new approach to analyzing Chinese compound verbs. We do not follow any existing framework in its entirety, but allowed the data to sort themselves into useful categories based on our chosen criteria, incorporating elements from various studies and approaches where applicable and illuminating.

Chinese compound verbs are not “black boxes”, i.e. dead, monolithic expressions, simply because they may not be directly accessible to the syntax of the sentence as a whole, and their elements are by no means randomly matched and ordered. Even though compounds are by our definition

inseparable (more on this in the discussion to follow), the morphosyntactic relationships between their elements are very much alive, functional, and rule-governed, even when these relationships are sometimes opaque to modern users. And each monosyllabic element of a verb compound strongly affects the syntax of the rest of the sentence, albeit indirectly, such as when a full aspectual verb, like 開始 *kai¹shi³* ‘to begin’, is omitted in the presence of a lexical aspectual compound such as 啓用 *qi³yong⁴* [to open + to use] ‘to begin to use (e.g. a building)’ (see Chapter IV); or when an adverbial expression such as 一起 *yi¹⁽⁴⁾qi³* ‘together’ is not used because its meaning is already expressed in a verb prefix, such as 合 *he²* ‘jointly’ or 齊 *qi²* ‘together’, as in 合唱 *he²chang⁴* [jointly + to sing] ‘to sing in chorus’ and 齊唱 *qi²chang⁴* [together + to sing] ‘to sing in unison’ (see Chapter II).

Our goal in this chapter is to clarify a number of the fundamental issues and assumptions on which we have based our investigation. These include:

(1) defining the **variety of Chinese** that will be examined in this study, and establishing the **terms** we will use to refer to it;

(2) discussing the differences between, and shared features of, the **spoken and the written language**, and defining what we consider to comprise the modern Chinese language in Taiwan;

(3) establishing and defining our key units of analysis, namely, the **monosyllable** and the **morpheme**; and defining **free, semibound and bound morphemes**;

(4) differentiating between **syntax** and **morphology**, and defining **morphosyntax**;

(5) discussing the **transparency** and **opacity** of morphemes;

(6) discussing **default** and **contextual grammatical category** assignment of morphemes and their role in the formation of compound verbs;

(7) establishing our definitions of **morphological** and **semantic head**;

(8) defining **simplex, complex and compound verbs**, and **pure verbs**;

(9) outlining the **types of verbs** that are covered in this study;

(10) briefly describing the **methods of composition** of compound verbs; and

(11) describing the **methodology** used in this study.

1.1 THE VARIETY OF CHINESE EXAMINED IN THIS STUDY

The object of study in this investigation is both the spoken and written forms of the variety of modern standard Chinese, or Mandarin, current in Taiwan today, including usages of well educated speakers and writers. In Taiwan the spoken version of this language is referred to as 國語 *Guo²yu³*, the ‘National Language’, the term used during the Republican period (1912-1949) on the Chinese mainland, and up to the present day in Taiwan. Like its mainland counterpart, currently called 普通話 *Pu³tong¹hua⁴*, it is a standardized language based on the speech of Beijing. Since its introduction in Taiwan in 1946, however, Mandarin Chinese has taken on a number of local characteristics, such as loss of the neutral tone in most contexts except for grammatical particles; fronting of the retroflexed series of initial consonants *zh-*, *ch-*, *sh-*, *r-*; marginalization of the retroflexed final *-r*; and divergent vocabulary and syntactic development. The written language is usually simply called 中文 *Zhong¹wen²* ‘Chinese’, though this term is also used to refer to the spoken language in common usage. The written language is sometimes also called 國文 *Guo²wen²*, ‘the National Written Language’, mainly when referring to Chinese literature and composition. In Singapore and South East Asia, the spoken language is usually referred to as 華語 *Hua²yu³* and the written language as 華文 *Hua²wen²*.

This variety is chosen because it is the one that the writer is most familiar with; but also because in order to produce consistent and valid results, it is important to use one single, more-or-less homogeneous variety of a language rather than to cobble together bits and pieces of data that occur in one variety but not necessarily in another.

We will refer to the language under investigation in this study variously as “Mandarin”, “Taiwan Mandarin”, “standard Chinese”, “Mandarin Chinese”, and simply “Chinese”, with the understanding that in each case in this context it is the variety now current in Taiwan that is referred to, unless otherwise specified. This is done to simplify the terms of reference and avoid unnecessary repetition of modifiers and qualifiers.

It should be noted that in practice, the majority of the findings for Taiwan Mandarin in this study will in fact apply to most other varieties of standard Chinese as well, so the implications of this investigation go far beyond gaining a deeper understanding of just one particular variety of Chinese. Where there are points of difference, however, we will simply follow what holds for Taiwan Mandarin, though we do in places offer a passing comparison to other varieties where relevant.

1.2 THE SPOKEN AND WRITTEN LANGUAGES

There is no disputing the primacy of the spoken relative to the written language. Written language, where it has evolved or been adopted, originated as a record of the spoken language, and is an extension of it. In most cases the written language differs to varying extents from the spoken, and probably in all cases, it has taken on a life of its own as regards style, conventions, and the social and practical functions it is used for. These are in many cases natural outgrowths of the inherent characteristics of the written as opposed to spoken medium. Writing can be done at one's leisure, offering time to think one's message through carefully, and to go back and make changes without disrupting the form of the final message. Writing is often used for more formal purposes than speaking typically is. It is used, for example, in textbooks that will influence the thinking of large numbers of people, statements of policy that set the course for political and other practical action, monuments, widely-circulated literature, letters to be read and reread, and on and on. Before the invention of sound recording, writing gave language a permanence that it otherwise did not have. One will naturally tend to be more careful and less spontaneous when producing something that will last and that one may later have to answer for. There are thus undeniable differences between the written and spoken media.

On the other hand, writing plays a hugely important role in the everyday lives of the members of a literate culture and society. According to the *Taipei Times* (2 Dec 2003:3), the literacy rate in Taiwan is about 95.8 percent. Very few people in Taiwan are excluded from the culture of literacy. As a result they, and the language they use, cannot help but be deeply influenced by the written word. The spoken language quickly becomes part of the written language, and the written language feeds back into the spoken, both on enormous scales.

There are many different registers of both the spoken and the written languages. The spoken language may achieve an extreme of casualness that is perhaps seldom seen in the written; and the written will attain levels of formality and succinctness not likely to be matched in the spoken language except when reading aloud. Yet the spoken and written languages together form an unbroken continuum. It is not as though there is a discrete variety of the language that can be neatly labeled "the spoken language", which meticulously excludes everything that occurs only in the written language. This is because just about anything that occurs in one medium can and does on occasion turn up in the other.

This brings us to a point crucial to this study regarding the relationship between the spoken and written language; namely, that the methods of concatenation for morphological formations **are the same for the written and the spoken languages**. Some formation patterns may be more common in one variety than the other, for example some subordinate compound verbs, such as 怒視 *nu⁴shi⁴* [angrily + to look] ‘to glare, scowl, glower at’, may more likely be used in writing than in speech; but the same rules for verb compound formation apply to both varieties throughout each system. The compound 正視 *zheng⁴shi⁴* [straight + to look] ‘to face squarely’, for example, is common in spoken Mandarin, and has the same structure as 怒視 *nu⁴shi⁴*. For this reason, we are including **both** the written and spoken varieties of Taiwan Mandarin, or standard Taiwan Chinese, in this study, without attempting to artificially separate the two.

While the majority of examples cited in this study are established, lexical forms, the same rules that created these forms historically are still at work today and are followed, usually by analogy, to coin new compounds. So we refer to the rules of formation as processes rather than just historical artifacts.

A further point requires clarification in this regard, namely, the distinction between **Classical Chinese** and **current written standard Chinese**. This is mainly in response to the possible criticism that some of data included in this study are in fact vocabulary items or usages from Classical Chinese, and should be omitted from consideration.

We define Classical Chinese as the written form of the Chinese language up until the May Fourth (1919) Vernacular Literature movement. “Classical Chinese” is thus a heterogeneous collection of the styles of many periods and varieties of written Chinese. Classical Chinese is now seldom used to compose an entire piece of writing except for very formal purposes, but bits and pieces of it abound in both the written and spoken languages. One can distinguish two main categories of Classical Chinese usage in modern Chinese: first, idioms, phrases, proverbs, and quotes from stories. An example is 塞翁失馬，安（或焉）知非福 *Sai¹weng¹shi¹ma³, an¹ (or yan¹) zhi¹fei¹fu²* ‘How can one know that a loss is not actually good fortune?’ (referring to the story of a man on the frontier who lost a horse, but the horse eventually returned with a fine mate; originally recorded in the *Huai Nan Zi* (1973: 311), but many popular versions are in circulation). These are occasional embellishments of the modern colloquial language, usually used with considerable awareness that they come from Classical Chinese. This is comparable to how lines from Shakespeare, like *To be or not to be, that is the question* (Hamlet III/1), or familiar phrases from the King James Bible, like

an eye for an eye and a tooth for a tooth (Matthew 5:38) are part of the active vocabulary of collocations of almost any English speaker. These items could in most cases be replaced by a more colloquial version; e.g. one could say (*to get*) *revenge in kind* instead of *an eye for an eye and a tooth for a tooth*.

The second type includes vocabulary items from Classical Chinese, especially grammatical particles, which are an integral and important part of the modern language. These have very specific functions in the modern language and cannot be easily replaced by other items. An example is 之 *zhi*¹, a Classical Chinese possessive particle (among other functions) which also marks relative time and aspect in modern Chinese, much like an English past perfect. 之前 *zhi*¹ *qian*², shortened from 在此之前 *zai*⁴ *ci*³ *zhi*¹ *qian*², means ‘before this, before the incident just described’, as in: ...去年打過韓國羅德巨人職棒隊, 之前打過日本業餘棒球隊; *qu*⁴ *nian*² *da*³ *guo*⁴ *Han*² *guo*² *Luo*² *de*² *Ju*⁴ *ren*², *zhi*¹ *qian*² *da*³ *guo*⁴ *Ri*⁴ *ben*³ *ye*⁴ *yu*² *bang*⁴ *qiu*² *dui*⁴ ‘...last year they played the Korean Lotte Giants; **before then** they had played Japanese amateur baseball teams;...’. 之前 *zhi*¹ *qian*² could not in this type of example be replaced with the higher frequency expression 以前 *yi*³ *qian*² ‘before’, which also contains a Classical Chinese particle, 以 *yi*³; that would imply simply ‘in the past’, rather than relating it chronologically to a given incident in the past.

Another example of an expression taken from Classical Chinese that is common in the modern language is the verb 出乎 *chu*¹ *hu*¹ [to go out + from] ‘to go beyond, go outside of’ as in 出乎我的想像 *chu*¹ *hu*¹ *wo*³ *de* *xiang*³ *xiang*⁴ ‘this went beyond what I originally imagined’. This is a fixed, inseparable compound formed from the semibound verb morpheme 出 *chu*¹ ‘to proceed from, go out of, exit’, and the almost obsolete 乎 *hu*¹, which in one function is a particle meaning ‘at’ or ‘from’. Among Chinese speakers, there is awareness that 乎 *hu*¹ is a particle from Classical Chinese, whether the speaker is sure of its precise meaning or not, and the expression as a whole has a strong literary flavor. Yet it and uncounted others like it are very much part of the living language, both written and spoken.

In short, modern Chinese includes many selected bits from Classical Chinese that are an integral part of the living language, and these selected bits are included in the present study.

1.3 THE MONOSYLLABLE AND THE MORPHEME IN CHINESE; FREE, SEMIBOUND, AND BOUND MORPHEMES

In this study we concurrently employ two basic units of analysis: the syllable, and the morpheme.

Linguists have thus far found it impossible to formulate an airtight universal definition of the syllable. First of all, what is considered a “syllable” by the average speaker of one language (e.g. English) will often differ from what the average speaker of another language (e.g. Japanese or Bella Coola; Laver 1994:265) would call a “syllable”. Second, within the same language, it is often difficult to determine the precise boundaries of a syllable. This is the case in English, which tends toward ambisyllabicity, meaning that the boundary sounds of a syllable often belong to both of two adjacent syllables; for example, is the /l/ sound in *melon* the coda of the first syllable, the onset of the second, or both? The syllable is thus a problematic unit of analysis in English.

The situation is entirely different in Mandarin, in which the syllable is an easily identified discrete phonological and prosodic unit. The total number of distinct syllables can be fairly easily counted. Including tonal distinctions, DeFrancis (1990:42), citing Jordan (1963:xxi), puts the figure at 1,277; if tonal differences are disregarded, there are only from 398 to 418 distinct syllables. While the syllable admittedly has dubious status in many languages, it is clearly defined in Chinese, and thus available as a viable and reliable unit of analysis, if chosen to be used as such.

The Mandarin language is built up of monosyllabic units. And, in the words of Norman (1988:154): “In both Classical and Modern Chinese, the great majority of morphemes coincide phonologically with a monosyllable; stated conversely, almost every syllable can be analyzed as an independent morpheme. Since the basic graphic unit, the character (*zì*⁴) is also monosyllabic, it is clear that the overwhelming majority of characters represent single morphemes.” The relatively few exceptions to be found are usually due to foreign loans into Chinese, a number of plant and animal names, and proper names. And though we will not use written Chinese characters as a basic unit of analysis, the stability of the one-to-one relationship between monosyllable and character over thousands of years is strong evidence as to the reality of the monosyllable as the basic structural unit of the Chinese language. DeFrancis (1990:187) has suggested the term **morphosyllabic** to describe the close correspondence between the phonological syllabic unit and morpheme in Mandarin.

Of course, lexical items will often be polysyllabic; but these are built up from the stock of available monosyllables, and in most cases, most particularly so in the case of verbs, they can be analyzed on the basis of the meanings of each monosyllable. It is for this reason we call Chinese a morphologically “modular” language, that is, it is “constructed with standardized units or dimensions allowing flexibility and variety in use” (WordWeb).

Our particular motivation for using the syllable as one of the basic units of analysis is a property that emerged in the examination of the data. The vast majority of inseparable compound verbs were found to have either two syllables, or to be concatenations of disyllabic units, as is the case with many four-syllable series verb expressions, such as 吃喝玩樂 *chi¹he¹wan²le⁴* ‘to eat, drink, play, enjoy’, and 煎煮炒炸 *jian¹zhu^{3(2)}}chao³zha^{2/4}* ‘to pan-fry, boil, stir-fry, deep-fry’; plus the tetrasyllabic reflexive pattern illustrated in the example 自我介紹 *zi⁴wo³jie⁴shao⁴* ‘to introduce oneself’. Leaving aside morphological processes such as reduplication, there are very few trisyllabic pure compound verbs in Mandarin. This is a significant finding. Nouns, adjectives and adverbs, in contrast to pure verb compounds, are not limited in this way regarding the number of syllables they generally consist of.

The nature of the exceptions to the disyllabic rule for pure verb compounds is significant: they tend to be based on conscious translations of verb forms from English or other Western European languages into Chinese, and two of the exceptions refer to ‘doing something a second time’. The first of these two is compound verbs prefixed by 再 *zai⁴* ‘again’, a consciously chosen equivalent of the English prefix *re-*; examples are 再進口 *zai⁴jin⁴kou³* ‘to reimport’ and 再投資 *zai⁴tou²zi¹* ‘to reinvest, plow money back into’. These compounds may consist of two, three or more syllables; three is common. The second is semantically similar to the first and used in similar contexts; the aspectual matrix verb 轉 *zhuan³* ‘to transfer to’ sometimes takes a complement of more than one syllable, e.g. 轉投資 *zhuan³tou²zi¹* [to transfer + to invest] ‘to reinvest’ and 轉託管 *zhuan³tuo¹guan³* [to transfer + to entrust + to manage] ‘to transfer management rights to’. A third major exception is compound verbs formed with the well-known suffix 化 *hua⁴* ‘to change’, a conscious translation of English *-ify*, *-ize*, *-ate*, or *-en*, as in *verify*, *privatize*, *substantiate* and *harden*; examples are 強化 *qiang²hua⁴* [strong + -en] ‘to strengthen’ and 理想化 *li^{3(2)}}xiang³hua⁴* [ideal + -ize] ‘to idealize’. Verb compounds with 再 *zai⁴* ‘re-’ and 轉 *zhuan³* ‘to transfer to’ as an initial element are rather limited in productivity, but the 化 *hua⁴* suffix is virtually endlessly productive, and has no specific syllabic requirement attached to it.

There are a very few other miscellaneous exceptions, such as 深呼吸 *shen¹hu¹xi¹* ‘to breathe deeply, take a deep breath’. Leaving aside these very limited and mostly foreign-originating exceptions, we are left with a very strong tendency toward disyllabicity.

This is a morphological study, so we of course also use the morpheme as a basic unit of analysis. We agree with Norman that with few exceptions, each Mandarin monosyllable is also a morpheme with an identifiable meaning and part of speech, both a default one and contextual one, even in cases where the meaning may seem somewhat obscure.

DeFrancis (1990:184) puts it thus: “Syllables like *wo³* [我 ‘I’] that are intelligible even in isolation are at the opposite extreme from syllables like *hu⁴* [蝴], allegedly “butterfly” but actually a mere phonetic element devoid of meaning and tightly bound as part of the two-syllable expression *hu⁴diar²*. [Author’s note: This is pronounced 蝴蝶 *hu²die²* in Taiwan Mandarin, a pronunciation also mentioned by DeFrancis as standard for modern Beijing Mandarin.] Between these two extremes are meaningful syllables that are semibound in the sense that they always occur bound but have a certain flexibility in joining with other syllables. There are thus three types of Chinese syllables: 1. F free, meaningful; 2. SB semibound, meaningful; 3. CB completely bound, meaningless” (1990:185). DeFrancis then cites a 200-character survey he did of the percentages of free, semibound, and completely bound morphemes in Chinese. He counted 44% of the 200 as free morphemes, 7% of which are literary; 45% semibound; and 11% completely bound. Morphosyllabicity, according to DeFrancis (1990:187) “accounts for nine-tenths of the facts about Chinese syllables and characters.”

We suggest that the percentage of semibound meaningful elements may be even higher, most especially in the case of verbs. There are for example many sound symbolism verb compounds with monosyllables that occur in no other context; yet we propose that these often have discernible meaning as well. We call morphemes like these **correlative morphemes**, on the analogy of pairs of correlative conjunctions in English such as *neither...nor....* An example is 徘徊 *pai²huai²* ‘to pace to and fro’. The English morpheme *fro* (a variant of ‘from’) hardly occurs except in the context of *to and fro*; yet in that context it does have a distinct meaning, namely ‘back’ to the place one started out from when walking *to*. Grammatically *fro* does not normally appear in isolation, but it does have its own semantic content and is a morpheme.

An example in which it is more difficult to assign separate meaning to each syllable is 蹂躪 *rou²lin⁴* ‘to trample on, devastate’. One might assume that neither element normally occurs in any other compound other than this one,

nor is used alone. Yet examples of both possibilities were found through a Google search. Several instances of compounds containing the first element 蹂 *rou*² are used in the context of Chinese massage therapy: 點蹂 *dian*³*rou*² [to touch lightly + to step on] ‘to step on lightly, apply pressure (therapeutically) with the feet’, as in ...再用足跟輕輕點蹂這些部位和穴位 ...*zai*⁴ *yong*⁴ *zu*²*gen*¹ *qing*¹*qing*¹ *dian*³*rou*² *zhe*⁴ *xie*¹ *bu*⁴*wei*⁴ *he*² *xue*⁴*wei*⁴ ‘...then use your heels to lightly step on these places and acupuncture points.’; 蹂蹂 *cai*³*rou*² [to step on + to apply pressure with the feet] ‘to step on and apply pressure with the feet’, e.g. ...左右蹂蹂...*zuo*³*you*⁴ *cai*³*rou*² ‘...apply pressure with the feet, moving left and right’; 搓蹂 *cuo*¹*rou*² [to rub + to apply pressure with the feet] ‘to rub while applying pressure with the foot’; and 蹂動 *rou*²*dong*⁴ [to apply pressure with the feet + to move] ‘to massage while applying pressure with the feet’. 蹂 *rou*² can also be used as a simplex verb in similar contexts, e.g. 腳蹂法 *jiao*³*rou*²*fa*³ [foot + to apply pressure with the feet + method] ‘method for using foot pressure therapeutically’.

Two compounds were found that use the second element of 蹂躪 *rou*²*lin*⁴: 蹂躪 *cai*³*lin*⁴ [to step on + to trample] ‘to trample on’, e.g. ...像花朵轉瞬慘遭蹂躪 ...*xiang*⁴ *hua*¹*duo*³ *zhuan*³*shun*⁴ *can*³*zao*¹ *cai*³*lin*⁴ ‘...like flowers trampled to tatters in an instant’; and a fairly rare (two Google hits) literary usage, 躪藉 *lin*⁴*jie*⁴ [to trample on + to avail o.s. of] ‘to insult and oppress’. If the example of 蹂躪 *rou*²*lin*⁴ is representative, we can conclude that even in seemingly monomorphemic disyllabic verb compounds, the component elements are on occasion in fact used as independent morphemes to form additional compounds, and they may also be used as simplex verbs. The tendency in Mandarin toward a one-syllable-to-one-morpheme relationship is a highly tenacious one.

Though we have found that most monosyllables have their own discrete semantic content, the **syllable count** of pure compound verbs is an even more consistent and reliable unit of analysis than the morphemic structure. Regardless of the free, semibound, or bound status, or the transparency or opacity, of a given component, compound verbs will still have, with few exceptions, a disyllabic, or occasionally tetrasyllabic, structure. For this reason, we start from the notion of a disyllabic **template** in most of the compound verbs we discuss here, and then proceed to an analysis of the individual elements, and their relationship to each other.

1.4 DIFFERENTIATING BETWEEN MORPHOLOGY, SYNTAX, AND MORPHOSYNTAX

A central issue in Chinese morphology is how to differentiate between syntax and morphology. Since Chinese lacks explicit morphological markers, we must rely on other means to distinguish between the two.

Our key criterion is **inseparability**. If the syllabic components of an item cannot be separated in actual language use, for example by 了 *le* or 得 *de* in the case of verbs, the expression is a morphological and lexical unit, more specifically, a compound, and the relationships that apply between the components of the item are morphological or morphosyntactic ones. We discount separability through the V 不 *bu*⁴ V form, e.g. 登不登陸 *deng*¹ *bu*⁴ *deng*¹ *lu*⁴ ‘will it land?’ and 你在不在乎? *ni*³ *zai*⁴ *bu*⁴⁽²⁾ *zai*⁴ *hu*¹ ‘do you care?’ The V 不 *bu*⁴ V form is spreading wildly in Mandarin and allows an increasing number of otherwise inseparable compounds to be split. These rule-breaking V 不 *bu*⁴ V forms often are used tongue-in-cheek, and are worthy of a separate study. Using separability by morphemes such as 了 *le* or 得 *de* as our criterion produces more consistent results in accord with canonical notions of inseparability, rather than innovative violations of it.

Some types of syntactic constructions will exhibit a higher degree of cohesion than others, for example resultative and directional constructions. We classify syntactic constructions with a relatively high degree of cohesion, but which are still separable, as **collocations**. They are not compounds, but because they occur frequently in their particular configuration, and may also have idiomatic meaning, they are often included in dictionaries.

Lexical compounds are often formed from abbreviated syntactic phrases. One may say: 我們三個人輪流教這門課 *Wo*³ *men* *san*¹ *ge* *ren*² *lun*² *liu*² *jiao*¹ *zhe*⁴ *men*² *ke*⁴ ‘The three of us teach this course on a rotational basis’, in which 輪流 *lun*² *liu*² ‘to rotate’ is an independent backgrounded verb. One could also express the same idea of rotational teaching in a lexical compound: 我們三個人輪教這門課 *Wo*³ *men* *san*¹ *ge* *ren*² *lun*² *jiao*¹ *zhe*⁴ *men*² *ke*⁴ ‘The three of us rotate-teach this course’ (both examples were heard in the same discourse at a department faculty meeting). In its disyllabic format, this item is analyzed as a conjunctive subordinate V + V inseparable compound verb: ‘to teach while rotating’. The criterion of inseparability neatly separates out the lexical compounds from syntactic phrases.

Though we are proposing canonical inseparability as a criterion for identifying compounds only in Mandarin Chinese, we believe that it may turn

out to be a valid criterion for other languages as well. Further studies are needed to test the viability of this proposal.

In this study we will use the term **morphosyntax** to refer to active syntactic relationships in operation within lexical items.

1.5 TRANSPARENCY AND OPACITY

To average speakers of a language, language is a tool for communication rather than an object of study itself. It is not the business of the average speaker to analyze his or her own language, but simply to understand what other people wish to communicate through speech or writing or whatever medium is being used, and to make oneself understood. It is part of the competence of a native speaker to intuitively choose appropriate forms and use them correctly almost automatically, that is, without a high level of conscious thought or analysis; a form will simply “sound” right. Native speakers do not build sentences according to a mathematical model, but vocalize, or also in the case of the literate majority, write, what expresses their intended meaning, based on their built-up store of correctly formed utterances heard since birth, and also from written sentences read since learning how to read.

Linguistic knowledge in the case of average speakers is thus largely implicit rather than explicit. Even those with explicit knowledge cannot be said to have any absolute analyses of linguistic forms, since there is as yet no such thing as an absolute analysis. Consequently, in our attempt to determine what is and is not a morpheme, what it means, and its default grammatical category, it would not do much good to take a survey of native speakers and ask them their beliefs on the matter. The more curious, when presented with various alternative analyses of a morpheme in the context of a lexical item, might react by saying, “Hey, that’s interesting – I never thought about that before.” The less curious would probably just shrug their shoulders and say they don’t know. We need a different, more concrete and verifiable way to identify morphemes and how they are used.

The clearest way to determine a speaker’s intuition regarding a morpheme is through **actual usage**. Although different speakers may have different ideas about whether a given monosyllable has any independent meaning or status, its precise meaning, and its grammatical category, we will conclude that language users are in agreement if they **use** an item in the same way. When the usage of an item changes in a way that is observable, then we can

conclude unequivocally that an analysis has changed. An example of this are the VO (Verb + Object) compound verbs, such as 追蹤 *zhui¹zong¹* [to chase + tracks] ‘to pursue, track down’ and 進軍 *jin⁴jun¹* [to enter + army] ‘to enter (e.g. a new market)’. Presumably, these were originally VO phrases in which the final element, originally a nominal object of the initial-position verb, later became bleached, and the compound as a whole could then take a further external object, e.g. 追蹤錯誤 *zhui¹zong¹cuo⁴wu⁴* ‘to track down errors’, and 進軍大陸 *jin⁴jun¹da⁴lu⁴* ‘to enter the mainland market’. Only where there is an observable change in actual **usage** such as this can we positively infer a change in the structural analysis of a compound.

Some compounds are more thoroughly lexified than others, that is, the meanings of the components may seem more integrated into a single whole and less like the sum of the individual parts. These also tend to be older compounds. As examples we contrast 預熱 *yu⁴re⁴* [beforehand, pre- + to heat] ‘to preheat’ and 預備 *yu⁴bei⁴* [pre- + to make ready] ‘to prepare’. Both contain the prefix 預 *yu⁴* ‘pre-’. The individual elements of 預熱 *yu⁴re⁴* ‘to preheat’ may seem more salient and transparent – and it is a newer formation – while 預備 *yu⁴bei⁴* is older, and the prefixal quality of 預 *yu⁴* perhaps less prominent in this compound. In English, the prefix *pre-* is used in both *preheat* and *prepare*, but is probably less noticeable as such in *prepare*, since *-pare* is relatively opaque. The two compounds may also have different stress patterns both in English and Chinese, often depending on dialect, which may suggest differing lengths of time that they have been in use in the language, differing levels of integration into the language, and differing frequency of use. Yet this does not change the prefixal status of *pre-* in either case. The same is often true of Chinese. The existence of 預熱 *yu⁴re⁴* ‘to preheat’ provides confirmation that the template for subordinate compound verb formation used in forming 預備 *yu⁴bei⁴* ‘to prepare’ is still alive and productive.

Next we will discuss the issue of part-of-speech assignment in Chinese compound verbs.

1.6 DEFAULT AND CONTEXTUAL PART-OF-SPEECH ASSIGNMENT

In this study we analyze each compound verb according to the contextual part of speech of each monosyllabic element. One might ask how we can determine the part of speech of bound or semibound monosyllables. We

propose that it is indeed possible and that it is part of intuitive native speaker knowledge about most morphemes.

First we will distinguish **default part of speech** and **contextual part of speech**. Default part of speech is the most usual, unmarked part-of-speech assignment of a given morphosyllable considered in isolation. Contextual part of speech depends on how a morpheme is used in the context of a compound. As a simple English example, the default part of speech of *book* is “noun”; the contextual part of speech *book* in the nominal compound *bookcase* is “adjective”, called an “adjunct” by some researchers. There are plenty of cases in which the default part of speech will be ambiguous, for example, is *rain* most often a verb or a noun? The contextual part of speech, on the other hand, will almost always be clear. In *It looks like it might rain.* it is a verb; in *It looks like rain.* it is a noun. The situation in Chinese is similar to that illustrated in these English examples; sometimes the default part of speech is not obvious or certain, but contextual part of speech is normally resolved by context.

We propose that for their default part of speech, Chinese monosyllables, including those which do not often occur as free morphemes, will normally be assigned the most usual, representative, or unmarked meaning and grammatical category based on Classical Chinese usage, or more precisely, the cumulative usage of each monosyllable over the history of the Chinese language up until the present. A good dictionary can be used as a supplementary check on native speaker judgment of a default analysis.

Part-of-speech assignment may theoretically be easier for free morphemes like 你 *nǐ*³ ‘you’, 書 *shū*¹ ‘book’ and 去 *qù*⁴ ‘to go’, and more difficult for bound and semibound morphemes. But Chinese semibound morphemes may still in fact at times be free morphemes, and this is one way to note their default part-of-speech assignment. An example is 視 *shì*⁴ ‘to see’, which would usually be classified as semibound. Su (1990:98) calls it “weak” as a free morpheme, but it does at times occur as such. Though one usually hears 看情況 *kàn⁴ qíng²kuàng⁴* ‘it depends on the situation’, one on occasion hears 視情況 *shì⁴ qíng²kuàng⁴* to express the same meaning. The Taiwan translation of the computer term WYSIWYG (“What You See Is What You Get”) is 所視即所得 *suǒ³ shì⁴ jí² suǒ³ de²* [that-which-is seen is that-which-is obtained]. The grammar is Classical Chinese, but the use of 視 *shì*⁴ as a free morpheme and as a verb is living and frequently drawn on by modern Mandarin speakers to create novel collocations and phrases. 視 *shì*⁴ is also used in the separable collocation 視爲 *shì⁴ wéi²* ‘to view s.o./s.t. as’, e.g. 我們視他們爲共產國家... *Wǒ³ men shì⁴ tā¹ men wéi² gōng⁴ chǎn³ guó² jiā¹*... ‘We view them as a

Communist country...’. And the frequency of use of 視 *shì*⁴ as a free morpheme is in fact not that low – there are 426 tokens of 視 *shì*⁴ used as a free morpheme in the Sinica Corpus, all as a verb. This illustrates how 視 *shì*⁴ does in fact have an active analysis as a verb meaning ‘to look at’; and a similar situation applies to most other semibound forms. This kind of evidence corroborates with our view that most Chinese monosyllables have an unmarked default analysis as to both meaning and grammatical category in the mind of each speaker of Mandarin Chinese, though this knowledge is generally reflected in correct usage rather than conscious awareness.

Secondly and perhaps more importantly, regardless of whether a bound or semibound form ever occurs in isolation, the average Chinese speaker develops a sense for each morpheme based on how it is used in larger formations, even if he or she is relatively untrained in Classical Chinese. For example, even if 視 *shì*⁴ has never been heard or read in isolation, a speaker will be able to conclude that it is indeed a verb having to do with the meaning ‘to see’, based on compound verbs such as 檢視 *jiǎnshì*⁴ [to examine + to look] ‘to inspect’, 窺視 *kūishì*⁴ [to peep + to look] ‘to peep at, spy on’, and 視察 *shìchá*² [to look at + to check] ‘to inspect’ (= ‘to check by looking at’). A competent speaker will recognize these as coordinate compounds (even if he or she does not have a name for this verb compound type), in which both individual elements are verbs and their meanings are closely related.

The contextual part of speech of 視 *shì*⁴ can also be inferred from compounds like 正視 *zhèngshì*⁴ [straight + to look] ‘to face squarely’, as in 父母親必須要正視這個問題 *Fùmuqīn bìxūyào zhèngshì zhège wèntí* ‘Parents must face up to this problem squarely’; further examples are 輕視 *qīngshì*⁴ [light + to look] ‘to look down on’, as in 誰能輕視你? *Shéi nǚng qīngshì nǐ?* ‘Who can look down on you?’ and 重視 *zhòngshì*⁴ [heavy + to look] ‘to view s.t. as important’ as in 我們十分重視顧客的需求 *wǒmen shífēn zhòngshì gùkè de xūqiú* ‘we take our customers’ needs seriously’. In all three cases, the item as a whole is unquestionably a verb, and the initial monosyllable is clearly a modifier of the action referred to; just knowing this enables the speaker to know that it is a subordinate compound verb, in which the modified element in final position must itself be a verb.

Let us now look at another semibound morpheme, 希 *xī*¹, best known from its use in the disyllabic verb 希望 *xīwàng*⁴ ‘to hope’, and which is unlikely to ever appear in isolation except when writing in Classical Chinese. 希 *xī*¹ does appear in other compound verbs, such as 期盼 *xīpàn*⁴ [to hope + to anticipate] ‘to hope, expect’, 希求 *xīqiú*² [to hope + to seek] ‘to hope, wish for’, and 希冀 *xījì*⁴ [to hope + to long for] ‘to hope, aspire after’, all of which express

different shades of meaning of the notion of ‘to hope’. Though these examples are lower-frequency items used more often by relatively learned speakers, this does not affect their method of composition – it is the same in all cases as higher-frequency compounds. From the existence of these compounds, a native Mandarin speaker can infer the meaning of 希 *xi*¹ as ‘to hope’, confirm that it is used as a verb, and furthermore also predict that it occurs largely in initial position in similar compounds. 視 *shi*⁴ ‘to see’, on the other hand may, as seen in the examples, occur in either position, though mainly in final position.

This is not to say that the analysis of any given morphosyllable is in every case infallible; there is certainly room for different interpretations, especially when two conflicting analyses of a monosyllable are both relatively common. An example is 食 *shi*² which can be analyzed as the verb ‘to eat’, as in 飲食 *yin*³*shi*² (e.g. 請勿在此飲食 *qing*³ *wu*⁴ *zai*⁴ *ci*³⁽²⁾ *yin*³*shi*² ‘Do not eat or drink here’); and as in 可素食 *ke*³ *su*⁴*shi*² [can + vegetarian + to eat], printed on the packaging of various processed foods, ‘suitable for a vegetarian diet’, literally, ‘can be eaten vegetarianly’; or it can also be analyzed as the noun ‘food’, as in 豬食 *zhu*¹*shi*² ‘pig feed, hog slop’ or 外食 *wai*⁴*shi*² ‘food brought in from outside (a restaurant)’; and the coordinate compound 飲食 *yin*³*shi*² can also be nominalized, as in 夏天飲食中，外燴料理最容易出問題... *Xia*⁴*tian*¹ *yin*³*shi*²*zhong*¹, *wai*⁴*hui*⁴ *liao*⁴*li*³ *zui*⁴ *rong*²*yi*⁴ *chu*¹ *wen*⁴*ti*²... ‘Of [the different kinds of] summer food and drink, catered foods are the most likely to have problems...’ This will lead to an uncertain analysis of forms like 斷食 *duan*⁴*shi*² ‘to go on a fast’; is it ‘to cut off (intake of) food’ (i.e. 食 *shi*² is nominal), or ‘to stop eating’ (in which 食 *shi*² is verbal)? Nevertheless, ambiguous cases like this one seem to comprise only a small minority of the total examples.

Though most morphosyllables will have an identifiable default meaning and grammatical category, the analysis of each will be adjusted according to the demands of the context. While the default interpretation of 視 *shi*⁴ is a verb meaning ‘to look at’, it will be analyzed as a contextual noun where nominalized, as in 視聽 *shi*⁴*ting*¹ ‘public opinion, that which is seen and heard’ in the context of phrases like 混淆視聽 *hun*³*yao*² *shi*⁴*ting*¹ ‘to confuse public opinion’; and as a contextual adjective in compounds like 視野 *shi*⁴*ye*³ ‘visual field’. This does not compromise its default analysis as a verb; it is a verb when used in isolation.

In this study we use the same terms for grammatical categories, e.g. “verb”, “adverb”, “adjective” and “noun”, for both syntax and morphology, because Mandarin morphemes generally retain the same form in either case. (The tone

sandhi rules do however operate, e.g. 苦守 ku^3shou^3 ‘to hold watch for a long time’ is pronounced ku^2shou^3 , represented in this study as $ku^{3(2)}shou^3$.) Whether, for example, an adverb (or other grammatical category) is morphological or syntactic is determined by whether it is used in an inseparable compound or a separable formation. So affixes will be called “adverbs” when they have an adverbial function. Unlike the situation in English, in which affixes are not generally free morphemes, they are usually free or semibound in Mandarin, so we have the somewhat paradoxical situation (from an Indo-European point of view) of affixation forming compounds rather than derivational forms; compare with the English *describe*, *prescribe*, *ascribe*, *circumscribe*; and *nation*, *national*, *nationalism*, *nationalistic*, which are classified as derivations rather than compounds.

In cases in which the default grammatical category of a word is, as far as we can determine, a noun, verb or adjective, we can express the concept of “default grammatical category” with the help of the words **denominal**, **deverbal**, and **deadjectival**; e.g. *to table* is a denominal verb; *run* in the phrase *his second run for president* is a deverbal noun, and *the Reds* is a deadjectival noun. We can add an analogous term for adverbs, **deadverbial**, e.g. *carefully* and *sloppily* are deadverbial nouns in: *his “carefully” is my “sloppily”*; and *carefully* is a deadverbial verb in “*Carefully?*” *I’ll “carefully” you....*

We further propose that Chinese verb compounds are formed according to a relatively small number of fixed patterns of concatenation. Each monosyllable in each concatenated form must be in accord with the rules of one of these patterns or templates. (There will, of course, be a small number of inevitable exceptions, but these are generally due to grammaticalization or foreign loans, and will be treated individually.) From the relative position of each monosyllable in each concatenation, the speaker of a language can infer or at least narrow down its possible meanings and its grammatical category as used in the formation. In almost all cases, the structure of each compound can be analyzed and fitted neatly into one of the compound verb types of the system, which are briefly summarized in section 1.9 below.

1.7 DEFINING “MORPHOLOGICAL HEAD” AND “SEMANTIC HEAD”

1.7.1 Morphological head

We will devote considerable space to clarifying the basic working concept of morphological **head**, since it figures importantly in the approach adopted in this study.

There are two main categories of views on what a “head” is. The first is that of Leonard Bloomfield in his book *Language* (1933:195), used in defining endocentric constructions:

“In subordinative endocentric constructions, the resultant phrase belongs to the same form-class as one of the constituents, which we call the *head*: thus, *poor John* belongs to the same form-class as *John*, which we accordingly call the head; the other member, in our example *poor*, is the *attribute*.”

For Bloomfield, a head is that which is ultimately **modified** in a construction; and it must belong to the same form-class, i.e. grammatical category or part of speech, as the construction as a whole. Bloomfield’s definition includes only attributive modification, or what Jespersen terms “junction” relations, and excludes predicative relations, or what Jespersen terms “nexus” (Jespersen 1992:108ff).

The second category of views – we say “category” because it is a heterogeneous collection of varying definitions which is still evolving – is that of recent generativist scholars. Roughly, a head is the constituent that determines the properties of the complex word or phrase as a whole; the other elements are in some kind of dependency relationship with the head; this includes any element in the phrase that does not refer to the same entity that the whole phrase refers to.

The Concise Oxford Dictionary of Linguistics (1997) summarizes the situation thus:

A *head* is “a single element in a construction which characterizes or may stand for the construction as a whole.” But there are two main definitions, one narrower and due largely to Bloomfield, the other wider and now more usual, following work by R. S. Jackendoff in the 1970s.

1. In the narrower definition, a phrase *p* has a head *h* if *h* alone can bear any syntactic function that *p* can bear. E.g. *very cold* can be

replaced by *cold* in any construction: *very cold water* or *cold water*, *I feel very cold* or *I feel cold*. Therefore the adjective is its head and, by that token, the whole is an ‘adjective phrase’.

2. In the wider definition, a phrase *p* has a head *h* if the presence of *h* determines the range of syntactic functions that *p* can bear. E.g. the constructions into which *on the table* can enter are determined by the presence of a preposition, *on*. Therefore the preposition is its head and, by that token, it is a ‘prepositional phrase’. Similarly, in *I feel cold*, the predicate *feel cold* is a ‘verb phrase’ whose construction, as a whole, with *I* is determined by its having as its head the verb *feel*. This second definition is central e.g. to X-bar syntax.

The generativist definition is intended mainly for use in syntactic rather than morphological analysis. It serves to pick out the core component of each type of phrase: noun, verb, adjective, and adposition. Under this definition, a verb is generally considered to be the “head” of a “verb phrase” (e.g. *saw* in *saw the dog*) in that the object complement is in a dependency relationship with the verb. Examples of Chinese equivalents of the kind of “verb phrase” described here would be the separable phrases 吃飯 *chi¹fan⁴* ‘to eat (rice)’ and 唸書 *nian⁴shu¹* ‘to study (books)’.

Under the two definitions of head, we are talking about very different kinds of relationships. Bauer discusses this at length and concludes (Bauer 1990:201), “...no generalization about heads in English morphology is going to remain tenable unless ‘head’ is delimited very specifically. Given the things that ‘head’ is supposed to do at the moment, we would not be much worse off without our heads.” In this study, we delimit the notion of head “very specifically” by adhering to a single, rigorous definition, the Bloomfieldian one. Under Bloomfield’s definition, we have a clear, unequivocal, consistent principle of identifying which material modifies which, that is, which material is in a junction relationship with what other material. The generativist definition brings in nexus relationships as well. If we were to use the second definition, we would be mixing junction relationships with nexus relationships, which respectively follow very different rules in Mandarin as regards word order. In junction relationships in Mandarin, modifiers invariably come **before** what they modify. In nexus relationships, objects normally **follow** the verb – Mandarin is basically an SVO language – unless they are preposed, as for example in a 把 *ba³*-type construction. So the term “head” according to the second definition cannot help us to identify Chinese as a “right-headed” or “left-headed” language in a meaningful way; we need first to decide on

whether it is junction or nexus relationships that we wish to investigate. In the case of morphology, it is junction that interests us most, since nexus mostly belongs to the level of syntax. In order to sort out only the relationships of junction in our data, we insist on Bloomfield's original definition of "head". Where we encounter relationships of nexus, we will refer to them as relationships of predication or nexus.

It is interesting to note that Jespersen, in his theory of "rank" (1992:96ff), proposes that finite verbs are never "primaries" and always belong to his "secondary" or "tertiary rank", that is, verbs modify nouns in nexus relationships. He gives the examples: *a furiously barking dog*, in which *dog* is primary (that which is modified, i.e. the head by the Bloomfieldian definition), *barking* is secondary (it modifies *dog*, a primary-rank word), and *furiously* is tertiary (it modifies *barking*, a secondary-rank word). Jespersen concludes that verbs belong to the secondary rank, as do adjectives, by connecting *barking*, in its role as an adjective in the preceding sentence, with *barks* in the sentence *the dog barks*. He says that nouns are classified as belonging to the primary rank also when objects, as in *I see the dog*. Jespersen does go on to clarify the fundamental differences between the two kinds of relationships, e.g. a modifying participle vs. a predicative finite verb, and this is the basis on which he makes his major distinction between junction and nexus in the discussion that follows. To further strengthen the distinction, he coins special terms for secondary words in junction and nexus relationships respectively, namely, "adjunct" and "adnex". Wang (1987a: 31ff.; 1987b: 34ff) applied Jespersen's idea of "rank" (1992:96-107) to Mandarin morphology, calling it 品 *pin*³ in Chinese.

In contrast to Jespersen's assignment of the secondary rank to verbs in a nexus relationship, generativists consider verbs rather than nouns to be the head of verb phrases including a nominal object. This illustrates that there is no intuitively correct correspondence between junction and nexus relationships that everybody will agree on. The relationships of junction and nexus are like apples and oranges, and are best considered separately, rather than under an umbrella term, as is implied by the term "head" according to its second definition.

Under the approach adopted here, both nouns and verbs can be what Jespersen and Wang call "primaries", or heads. We leave nexus relationships out of consideration, and consider only relationships of junction. We follow Grammarian Lü Shuxiang (Lü³ Shu²xiang¹) 呂叔湘, who does not consider phrases with a nexus relationship (which he calls 結合關係 *jie²he² guan¹xi*) to have a head (Lü 1985:22-24). We will see that this will help reveal the

inherently similar headedness properties of both nouns and verbs, namely, that **modifiers always precede the head**, whether it is verbal or nominal. Chinese is right-headed in all parts of its morphology.

Use of the second definition of head accounts for why Packard (2000:194) needed to make two separate and opposite rules to describe Mandarin data. He says that Chinese “verbs have their canonical head on the left, and nouns have their canonical head on the right.” He apparently draws this conclusion from the occurrence of verbs on the left in VO type-constructions such as 跑步 *pao³bu⁴* [to run + step (n.)] ‘to run, jog’. We consider separable expressions like these to be verb-object phrases, not verb compounds, and thus not pure verbs at all, no more than *to eat rice* is a “verb” in English. There is no headedness relationship here, since the relationship is one of nexus, not junction.

In cases of true verb compounds where there is a junction relationship, Packard posits a “large class of exceptions” to his rule (2000:233), saying the head is on the right. The reasons he gives: “...the more lexicalized a word is, the less it is subject to the [i.e. Packard’s] Headedness Principle. I would like to make that general proposal more specific now by suggesting that bisyllabic Chinese words that do not conform to the Headedness Principle belong to one of the two ‘most lexicalized’ categories... – either agrammatical or complete lexicalization – since, by definition, grammatical relations and identities are absent in components of words with those lexicalization types. Since the Headedness Principle refers to a grammatical relationship that obtains between words and their constituents, we would expect such a relationship to be weakened or suspended in words whose inner-outer relation has become opaque due to lexicalization.” (Packard 2000:226). The two categories Packard is referring to here are Adverb + Verb compound verbs, such as 慢跑 *man⁴pao³* [slowly + to run] ‘to jog’ and 朗讀 *lang³du²* [bright + to read] ‘to read aloud’; and Adverbial Noun + Verb subordinate compound verbs, such as 步行 *bu⁴xing²* [foot + to walk] ‘to walk on foot’ and 槍斃 *qiang¹bi⁴* [gun + to execute] ‘to execute’. These are treated in detail in Chapter II, “Prefixed and other subordinate compound verbs.”

Rather than viewing these compound verb types as exceptions, we propose just the opposite; namely, that morphological relationships within compounds follow the rules of the overall syntax of Mandarin very strictly, including most emphatically the right-headedness rule. Once separable VO phrases, and a small number of exceptions due to grammaticalization, are removed from consideration, the inseparable compound verbs which are left **all** follow the right-headedness rule.

1.7.2 Semantic head

Packard (2000:195), citing Zwicky, distinguishes a **semantic head** from a structural one. Packard defines a semantic head as “a more general instance of what the entire word means”, e.g. 車 *che*¹ ‘vehicle’ is the semantic head of 汽車 *qi*⁴*che*¹ [steam + vehicle] ‘automobile’, since a ‘car’ is a specific type of the larger category of ‘vehicle’. Though we disagree with Packard’s example – we consider 汽車 *qi*⁴*che*¹ to contain what he calls a structural head – we do recognize semantic heads. In our usage, they are to be found only in cases of coordinate compounds. A coordinate compound verb consists of two semantically related elements. Morphosyntactically, both have equal standing as verbs. But because of the powerful tendency toward right-headedness in Mandarin, the semantically more specific of the two verbs will almost always precede the less semantically specific one; Packard also observed this but does not call it semantic headedness (2000:94). Below follow some examples of compound verbs referring to motion or movement, as expressed by the second verb, 動 *dong*⁴ ‘to move’, taken from Chapter III. The first verb, though in an equal, coordinate morphosyntactic relationship with the second, concurrently functions as a modifier of the second verb, in that it specifies exactly what kind of motion is referred to. Examples: 跳動 *tiao*⁴*dong*⁴ [to jump + to move] ‘to pulsate’; 抖動 *dou*³*dong*⁴ [to tremble + to move] ‘to shake’; 舞動 *wu*³*dong*⁴ [to dance + to move] ‘to wave, brandish’; and 浮動 *fu*²*dong*⁴ [to float + to move] ‘to float about, drift’. We will refer to the verb in final position in such coordinate compound verbs as a semantic head (and we will use that term when that is what is specifically referred to), though not a morphological or structural one. We will use the term “morphological head” to refer to the morphosyntactic head of a compound; “structural head” as a general term to refer to the Bloomfieldian syntactic head of a phrase or the morphosyntactic head of a compound; and “head” will be used as an abbreviation for both of these terms.

1.8 SIMPLEX, COMPLEX AND COMPOUND VERBS; PURE VERBS

1.8.1 Simplex, complex and compound verbs

With the above understanding regarding syntactic and morphological heads and headedness in mind, we are now ready to start talking more specifically about Mandarin verbs. The most basic question we need to answer first is

“What is a verb?” This is not a trivial or obvious question, since many different kinds of structures in Chinese with varying characteristics and properties have been called “verbs”.

Chao (1968:663) defines a verb in Chinese as “any word which can be modified by the negative 不 *bu*⁴ “not” or 沒 *mei*² “have not or did not” and which can serve as the predicate or the center of a predicative expression.” In addition to encompassing action, state of being, and modal verbs, this distributional and syntactic definition is designed to include adjectives used predicatively; these are usually called **stative verbs**. We will accept Chao’s definition for the sake of simplicity and convenience, then go on to further classify verbs by type, and finally we will delimit exactly which categories of Mandarin verbs we will treat in this study.

We will first categorize Chinese verbs very broadly by the number of syllables they contain. **Simplex verbs** are monosyllabic, single-morpheme verbs, corresponding to one written Chinese character. Though we will not normally be using written Chinese characters as a basic element of analysis, it is worth noting, first, that the citation pronunciation of each written Chinese character is exactly one prosodic syllable. The retroflex 兒 *er*² ending, which usually becomes incorporated into the previous syllable and does not in this case constitute an additional syllable, will be omitted from the present discussion, since it does not figure in the verb types under consideration. It is relatively rare in Taiwan Mandarin; and when it is used, it behaves rather differently from the 兒 *er*² ending in Beijing Mandarin. Its citation form in isolation, like other Chinese morphemes, does in any case also constitute a single syllable. Second, sometimes the written form is germane to the discussion, for example when a given construction is largely a literary one, and the character forms give relevant information on the nature of the whole, as when there is a shared radical, e.g. 蹣跚 *man*²*shan*¹ (or *pan*²*shan*¹) ‘to hobble along’, or the character forms are otherwise very similar, e.g. 上下 *shang*⁴*xia*⁴ [to ascend + to descend] ‘to ascend and descend, to go up and down’. So we may refer to written characters in certain contexts.

A **complex verb** is any verb consisting of more than one syllable.

In this study we will be dealing only with a subset of complex verbs, namely **compound verbs** or **verb compounds**, terms which we will treat as synonyms. We define a compound verb as a verb that consists of more than one syllable, and the component parts of which are **inseparable**. This is the so-called “phrase-structure condition” referred to in C. T. Huang 1984, Thompson 1981, and S. F. Huang 1998. We shall be very strict about this condition, and will consider any separable verb type, such as resultatives and

directionals, to be a **construction** and/or a **collocation** rather than a compound, and these types will thus not be included in the present discussion. The words “construction”, “formation”, “collocation”, “structure”, and “expression” will be used as general and neutral terms, unlike “compound”, to refer to any morphological or syntactic formation which consists of more than a single syllable, and the elements of which are felt to be part of some kind of coherent semantic and structural unit or whole. “Phrase” will be used to refer to syntactic rather than morphological constructions. We will use the word “component,” “element”, or “formative” to refer to any monosyllabic unit of an expression.

In contrast to compound nouns, for which there is no theoretical limit (but certainly practical limits) regarding the maximum number of syllables they may consist of, compound verbs are in the vast majority of cases **disyllabic** and bimorphemic. Excluding a few exceptions, the high degree of cohesion necessary to form inseparable verb compounds in Chinese is generally achieved only in disyllabic form: verbs bond best in pairs.

1.8.2 Pure verbs

We have said that we will be examining only a subset of the lexical items that Chao admits as verbs, and we will now establish the criteria for what that subset will consist of. In this study, we will consider only what we will call pure verbs, sometimes called 純粹動詞 *chun²cu⁴ dong⁴ci²* in Chinese. The main reason for this is to enable us to tease out the most essential, most representative properties of true verbs, e.g. headedness properties, and morphosyntactic relationships between component parts, and not mix them together with less typical “verb” types or with verb phrases. A second reason is to keep the scope covered by this study, and its resulting length, within manageable bounds.

Under pure verbs we include compounds, lexical items and constructions with a **verbal head**. Verbs in Chinese are often closely linked to a nominal object, as in the oft-cited 吃飯 *chi¹fan⁴* ‘to eat (rice)’ and 念書 *nian⁴shu¹* ‘to study (books)’ examples. These are in most cases not verbs at all, as already discussed in the preceding, but **verb-object phrases**. There is indeed a tendency for the object in many of these constructions to become bleached. However, it is still thoroughly a grammatical object of the verb, and these expressions, with few exceptions, do not permit the addition of another external object. And the stereotypical object is often substituted by a more appropriate object when there is a semantic mismatch between the expression

and an actual situation. One will often call out, 吃麵! *chi¹mian⁴*! ‘Eat noodles!’ when noodles are being served rather than rice; this may be altered according to the main dish. 吃 *chi¹* ‘Eat!’ may at times be used alone; and one can say 吃東西 *chi¹ dong¹xi¹* ‘eat something’ when one wishes to be more generic and not refer specifically to rice. So it would seem that the tendency toward semantic bleaching of some of the objects in Chinese VO constructions, together with the frequent correspondence of Chinese VO phrases to bare, objectless verbs in languages like English, have led to an incorrect analysis of VO constructions or phrases as pure verbs.

A second category of constructions which we will not treat here are **resultatives**, such as 擦乾 *ca¹ gan¹* [to wipe + dry] ‘to wipe dry’, as in 最好先將身體擦乾, 避免增加曬傷的機會 *Zui⁴ hao³ xian¹ jiang¹ shen¹ ti³ ca¹ gan¹, bi⁴ mian³ zeng¹ jia¹ shai⁴ shang¹ de ji¹ hu⁴* ‘It is best to towel oneself dry, to avoid increasing the chance of sunburn’. These are separable; one could also say: 擦得很乾 *ca¹ de hen³ gan¹* ‘towel oneself very dry’. Likewise, we do not include **directionals**, such as 走進去 *zou³ jin⁴ qu⁴* ‘to walk into’, e.g. 他順利走進去, 發現學校裡面空空的 *Ta¹ shun⁴ li⁴ zou³ jin⁴ qu⁴, fa¹ xian⁴ xue² xiao⁴ li³ mian⁴ kong¹ kong¹ de* ‘He entered without difficulty, then discovered that the school was empty’. These are separable as well; the particle 了 *le* could be inserted in 走進去 *zou³ jin⁴ qu⁴* to form 走了進去 *zou³ le jin⁴ qu⁴*.

Resultatives and directionals fill in some of the gaps left by a study of verb compounds alone, in particular in relation to embedded lexical aspect verb compounds. In aspectual embedded compound verbs like 興建 *xing¹ jian⁴* [to initiate + to construct] ‘to begin construction’, the first element refers to an intentional initiation of an action; the finishing of this action would usually be expressed in a resultative construction, such as 蓋完 *gai⁴ wan²* [to build + to finish] ‘to finish building’. But again, as separable constructions, resultatives and directionals will be omitted from consideration here. We come to a similar conclusion for Chinese resultatives and directionals as Lüdeling (1991:9) does for German particle verbs, namely that “The only property that distinguishes those constructions that we want to call particle verbs [such as *aufgeben* [up + to give] ‘to give up’ and *ausschließen* [out + to shut] ‘to exclude’ (author’s examples)] from other PVCs [predicate verb constructions] is the fact that many particle verbs are lexicalized, or listed.” We differ with Lüdeling, however, in that we do suggest a separate category for lexically-listed syntactic constructions as mentioned in the preceding, namely **collocations**. Readers interested in a deeper understanding of resultative and directional constructions may refer to numerous excellent studies, such as Thompson 1973 and McDonald 1994.

A further type of construction that we will not examine in this study is **stative verbs**, since we do not include stative verbs in our definition of pure verbs. Stative verbs such as 漂亮 *piao⁴liang⁴* ‘pretty’ do indeed have many verblike qualities: they can be preceded by 不 *bu⁴* ‘not’, and they can follow a grammatical subject and serve as a sentence predicate without an additional verb, as would be required in English: 這雙鞋樣子很漂亮 *Zhe⁴ shuang¹ xie² yang⁴ zi hen³ piao⁴ liang⁴* ‘T(he style of t)his pair of shoes is (very) pretty’.

However, there are also formal properties of stative verbs that are not shared by non-modal and non-perception action and state of being verbs: while stative verbs can be modified by a preceding 很 *hen³* ‘very’ and other intensifiers like 非常 *fei¹chang²* ‘extremely’, or other adverbial qualifiers such as 不太 *bu⁴(2) tai⁴* ‘not very’, they cannot usually be preceded by 沒(有) *mei²(you³)* ‘has/have not’ to negate events in the past; *沒有漂亮 *mei²you³ piao⁴liang⁴* *‘doesn’t have pretty’ is ungrammatical, at least in standard Taiwan Mandarin.

Stative verbs are not divided into transitive and intransitive; they are predicative, but cannot be transitive. Sometimes other forms can be coined from stative verbs, e.g. 餓 *e⁴* ‘to be hungry’ can be used as a causative verb meaning ‘to starve (s.o.)’; but such forms are then no longer stative verbs. Similar to stative verbs, some modal verbs like 能夠 *neng²gou⁴* ‘to be able to’ and verbs of perception and feeling like 喜歡 *xi³huan¹* ‘to like’ can be modified by adverbial qualifiers like 非常 *fei¹chang²* ‘extremely’. But stative verbs can generally function as attributive adjectives without the particle 的 *de*, while action, state of being verbs, verbs of perception and feeling, and modal verbs cannot. One can say 一位漂亮小姐 *yi¹⁽²⁾wei⁴ piao⁴liang⁴ xiao³⁽²⁾jie³* ‘a pretty young woman’, but not *一位喜歡小姐 *yi¹⁽²⁾wei⁴ xi³huan¹ xiao³⁽²⁾jie³* *‘a like (v.) young woman’ or *一位能夠小姐 *yi¹⁽²⁾wei⁴ neng²gou⁴ xiao³⁽²⁾jie³* *‘a can (v.) young woman’. In this way we can distinguish stative verbs from action and state of being verbs, and especially verbs of perception and feeling, and modal verbs. It is thus clear that stative verbs are a distinct grammatical category, and in spite of their verblike qualities they are not typical verbs. Stative verbs are much more representative of the category “adjectives”; and for this reason we omit them too from consideration in this study so as to be able to focus on pure verbs.

1.9 COMPOUND VERB TYPES INCLUDED IN THIS STUDY

Having determined which constructions we are not studying, we will now specify which ones we are examining. We will study pure verb compounds, including:

(1) action verbs, which may be:

(i) **transitive**, i.e. taking or allowing a direct object, e.g. 製造 *zhì⁴zào⁴* ‘to produce, manufacture’, 尊重 *zūn¹zhōng⁴* ‘to respect’, 觀察 *guān¹chá²* ‘to observe’, 演奏 *yǎn³zòu⁴* ‘to play (a musical instrument), perform’; or

(ii) **intransitive**, not allowing a direct object, e.g. 閃爍 *shǎn³shuò⁴* ‘to glimmer’, 逃跑 *tāo²pǎo³* ‘to flee’; we include here state of being verbs, such as 存在 *cún²zài⁴* ‘to exist’ and 殘留 *cán²liú²* ‘to remain’, which are always intransitive;

Verbs of perception and feeling, sometimes called **psych verbs**, are a subtype of action verbs; examples are 喜歡 *xǐ³huān¹* ‘to like’, 在乎 *zài⁴hū¹* ‘to care about’, and 感謝 *gǎn³xiè⁴* ‘to be grateful towards, to thank s.o.’; unlike non-perception action and state of being verbs, they can take adverbial modifiers like 很 *hěn³* ‘very much’ and 不太 *bù⁴(2) tài⁴*; they distinguish themselves from stative verbs like 漂亮 *piào⁴liang⁴* ‘pretty’ in that some can be transitive, and they cannot be used as attributive adjectives without the particle 的 *de*;

(2) modal and other auxiliary verbs usually requiring or implying a verbal complement, such as 應該 *yīng¹gāi¹* ‘should, ought to’, 能夠 *néng²gōu⁴* ‘to be able to’, 想要 *xiǎng³yào⁴* ‘to want to’, and 必須 *bì⁴xū¹* ‘must’, though they may also be used with no verbal complement; some, like 想要 *xiǎng³yào⁴*, may also take a nominal object;

(3) aspectual verbs which normally require a verbal complement, e.g. 開始 *kāi¹shǐ³* ‘to begin’, 繼續 *jì⁴xù⁴* ‘to continue’, and 停止 *tíng²zhǐ³* ‘to stop’; it should be noted that these verbs can be used without an object, or with a nominal object, though they in almost every case imply a verb complement, even when it is unexpressed – ‘to begin’ implies ‘beginning’ some agreed-upon action; also to be noted is that other verbs besides modal and aspectual verbs can sometimes take a verbal complement, e.g. 選擇 *xuǎn³zé²* ‘to choose to’, as in 選擇投入慈濟 *xuǎn³zé² tóu²rù⁴ cí²jì⁴* ‘to choose to become involved in the Tzu Chi Foundation’; 考慮 *kǎo³lǔ⁴* ‘to consider’, as in 你是否考慮放棄律師的職務? *nǐ³ shì⁴fóu³ kǎo³lǔ⁴ fàng⁴qì⁴ lǚ⁴shī¹ de zhí²wú⁴?* ‘Are you considering giving up your duties as attorney?’; and 決定 *jué²dìng⁴* ‘to decide to’. However, these verbs usually involve consideration or a

decision regarding initiating an action, and are thus closely related to inceptive aspectual verbs.

Because in this study we are focusing specifically on how compounds are put together, we will not separate out these different types of verbs or note transitivity properties in the course of classifying them according to their word formation patterns.

1.10 METHODS OF COMPOSITION OF VERB COMPOUNDS

This study focuses on the three basic methods of composition of compound verbs: **(1) prefixed and other subordinate compound verbs**; **(2) coordinate compound verbs**; and **(3) embedded compound verbs**, including lexical aspectual compound verbs, passive compound verbs, and causative and passive-causative compound verbs. There are a smaller number of **(4) other types of verb compounds**, covered in a catch-all chapter, Chapter V. Many of these emerged through a process of reanalysis of other forms and grammaticalization; one is a foreign import. The three main types are described briefly below, together with a listing of some of the compound types treated in Chapter V:

(1) Prefixed and other subordinate compounds: Subordinate compounds are those in which one element, which always occurs in final position, can be identified as the head, and the other as a modifier of that head, occurring before the head; in a few exceptional cases the modifying portion and/or the head consists of more than one syllable. Subordinate compound verbs include prefixed compound verbs e.g. 並排 *bìng⁴pái²* [side by side + to arrange] ‘to place/be placed next to each other’, 誤導 *wù⁴dǎo³* [mistaken + to lead] ‘to mislead’; Denominal Adverb + Verb instrumental compound verbs, e.g. 面試 *miàn⁴shì⁴* [face + to test] ‘to test by interview’, and 法辦 *fǎ³bàn⁴* [law + to process] ‘to deal with according to the law’; manner-via-metaphor compounds, e.g. 瓜分 *guā¹fēn¹* [melon + to divide] ‘to divide, split (in the manner that a melon is cut)’; and conjunctive subordinate compounds, e.g. 跪拜 *guì⁴bái⁴* [to kneel + to worship] ‘to kneel and do reverence’ and 搶修 *qiǎng³xiū¹* [to rush + to repair] ‘to rush to repair in time’; all of which will be further described and exemplified in the next chapter, Chapter II.

(2) Coordinate verb compounds: In coordinate compounds, covered in Chapter III, both elements belong to the same contextual grammatical category; they are also very similar semantically and have equal morphosyntactic standing. The morphemes may be synonyms or near synonyms, related actions, or antonyms; or sequential actions, forming a serial verb; or phonetically similar in some way, forming sound symbolism compounds. A coordinate compound is headless, since neither of the elements in it assumes a dominant position by being irreversibly semantically modified by another element. In practice, however, the lefthand element will often be more specific semantically than the righthand one, though still very close in meaning. In this sense, it can be considered to delimit the meaning and to some extent to modify the righthand element; the righthand element is thus considered a semantic head, though not a morphosyntactic one. Some examples of coordinate verbs: 保護 *bao³hu⁴* [to ensure + to protect] ‘to protect’, 踐踏 *jian⁴ta⁴* [to trample on + to stamp on] ‘to tread on’, 行走 *xing²zou³* [to walk, go + to walk] ‘to walk, go’, 拍打 *pai¹da³* [to pat + to strike] ‘to hit, strike’, 呼吸 *hu¹xi¹* [to exhale + to inhale] ‘to breathe’, 來往 *lai²wang³* [to come + to go] ‘to see someone socially’, 進出 *jin⁴chu¹* [to enter + to exit, leave] ‘to enter and exit, come and go’.

(3) Embedded compounds: In embedded verb compounds, examined in Chapter IV, the lefthand verb must be a matrix verb that exercises some kind of action or effect or otherwise impinges on the righthand verb; the righthand verb is the embedded verb or verb complement. These verbs will often involve an aspectual element, expressing such ideas as starting, stopping, continuing, or changing; examples: 興建 *xing¹jian⁴* ‘to begin construction’, 續訂 *xu⁴ding⁴* ‘to renew a subscription’, 改寫 *gai³⁽²⁾xie³* ‘to revise, rewrite’, 停辦 *ting²ban⁴* ‘to discontinue administering’. **Light verb compounds** fall under this category; these are formed with a very general verb, usually with inceptive force, such as 發 *fa¹* ‘to emanate’ or 開 *kai¹* ‘to open, begin’ in the initial position; the second element is a verb that describes the main action, e.g. 發作 *fa¹zuo⁴* ‘to have an attack (of s.t.)’ and 開辦 *kai¹ban⁴* ‘to initiate an administrative procedure’. Light verb compounds formed with 打 *da³* ‘to strike’ are a subtype of inceptive aspectual verbs, and express intensified intentionality of the action described in V2, e.g. 打撈 *da³lao¹* ‘to fish out from’, 打扮 *da³ban⁴* [to strike + to dress up] ‘to dress up’. A number of lexical passives, causatives, and passive-causatives also belong in this category; examples: 獲頒 *huo⁴ban¹* [to receive + to award] ‘to be awarded s.t.’; 逼供 *bi¹gong¹* [to coerce + to confess] ‘to force a confession’; 請示

qing³shi⁴ [to request + to instruct, show] ‘to ask to be instructed’. There is also a subcategory of “emissive verbs” such as 交印 *jiao¹yin⁴* [to submit + to print] ‘to submit to be printed’, and 送修 *song⁴xiu¹* [to deliver + to repair] ‘to deliver to be repaired’; and one expressing the availability of something for an action described by the second verb, e.g. 備索 *bei⁴suo³* [to prepare, be prepared for + to demand] ‘to be available for picking up’.

(4) Other types of verb compounds: A number of compounds that are not covered under the three main types listed above are treated in Chapter V, “Other compound verb types”. They include mostly compounds that originally belonged to another grammatical category or construction type. Some examples are: VO constructions with a bleached object, e.g. 追蹤 *zhui¹zong¹* [to pursue + tracks] ‘to be on the trail of’, which have been reanalyzed as inseparable compounds and which can take an external object; resultative compounds such as 說明 *shuo¹ming²* [to say + clear] ‘to explain’, which unlike resultative constructions are inseparable; denominal verbs like 物色 *wu⁴se⁴* [object + color] ‘to look for an item for purchase’; Verb + Particle compounds like 在乎 *zai⁴hu¹* [to rely on + (particle)] ‘to care about’; degree-changing deadjectival compound verbs, such as 加重 *jia¹zhong⁴* [to add + heavy] ‘to make heavier’ and 減少 *jian³⁽²⁾shao³* [to decrease + few] ‘to decrease in number’; deadjectival compound verbs of “becoming” with 發 *fa¹* such as 發黃 *fa¹huang²* [to emanate + yellow] ‘to yellow’ (e.g. due to age); the *-ize* type compound verbs suffixed with 化 *hua⁴*, such as 現代化 *xian⁴dai⁴hua⁴* [modern + -ize] ‘to modernize’; deadjectival/deadverbial compound verbs like 輕慢 *qing¹man⁴* [light + slow] ‘to fail to treat s.o./s.t. with due respect’; Adjective + Noun compound verbs like 同情 *tong²qing²* [same + feeling] ‘to sympathize with, feel sympathy for’; and so on.

1.11 METHODOLOGY

First, after making a fairly extensive survey of the literature, a wide selection of verbs was gathered systematically. This was done by assembling a collection of high frequency morphemes, verbal and otherwise, from the “1020 List” of characters (Kennedy 1954:1-7). Two main dictionaries, the *English-Chinese Dictionary* (1996) and the *Reverse Order Chinese Dictionary* (1986), as well as the Sinica Corpus, and the Google Taiwan search engine, were consulted to collect lists of compounds beginning and ending with each morpheme in the list. Items that were verb compounds were recorded, and

some of questionable status were included in the initial collection as well, so that any doubtful case could be given further consideration. The relationship between the elements and the contextual grammatical category of each morpheme in the compounds were determined. Other properties of the verbs were also recorded where observed.

Next, the verbs were divided up into categories according to composition: coordinate Verb + Verb, subordinate Adverb + Verb, resultative compound, and so forth. The categories were then further considered, analyzed, and refined. Each item was verified in the Sinica Corpus to make sure that it was a living item in actual use in modern-day Taiwan Mandarin, in the spoken or written language or both. A few that did not occur in the corpus, due either to chance or other reason, were confirmed in other ways: verbally with native speakers, through various other sources such as novels, newspapers, the electronic media, and advertising, or with a Google search. If a compound could not be confirmed by one of these methods it was rejected. A concerted effort was made in this study to find and identify as many of the verb compound types currently used in Taiwan Mandarin as possible.

No particular framework was assumed beforehand and brought to bear on the data other than a generic acquaintance with morphology and syntax, especially as outlined in Payne 1997. Terms were added and defined as the need came up. This was a deliberate effort, employed to avoid trying to fit the data into conventional or preconceived ideas or patterns. In this way, the data were allowed to form the analysis rather than vice-versa. In the remaining chapters, we will present the relatively simple, neat and regular system that emerged from this process.

SUMMARY

In this chapter we established that we will adhere to a Bloomfieldian definition of “head” and “headedness”, and to a definition of “compound verb” in which inseparability is an absolute requirement. We also described the concept of a pure verb, which has a verbal head, and specifically does not include separable VO constructions, in spite of how common and important they are in the overall Chinese verb system. This study will define, describe and exemplify coordinate compound verbs, subordinate and prefixed compound verbs, embedded compound verbs including lexical aspectual, lexical passive, lexical causative, and lexical passive-causative embedded compound verbs, and a fourth category of other compound verbs types, many

of which have been reanalyzed from other compound and construction types. Finally, the methodology used in this study was described, and our argument presented for the importance of adopting a data-driven rather than rule-driven approach.

CHAPTER II: PREFIXED AND OTHER SUBORDINATE COMPOUND VERBS

In this chapter we will discuss and examine the three major types of subordinate compound verbs in Mandarin Chinese: **(1) prefixed verbs**; **(2) instrumental and metaphorical verb compounds** formed from a denominal adverb plus a verb; and **(3) subordinate conjunctive verb compounds**.

2.1 PREFIXED VERB COMPOUNDS

Chinese is not generally considered to employ extensive verbal prefixing. “There are few discernible prefixes in Chinese,” says Yip (1992:67). Li and Thompson (1981:36) propose that “Compared to Indo-European languages, Mandarin has few affixes.” and that “prefixes and infixes are extremely rare in Mandarin, while suffixes are slightly more numerous”. Packard (2000:174) lists only seven verbal and adjectival prefixes in his work on Chinese morphology: 第 *dì*⁴ (ordinalizer), 非 *fei*¹ ‘not’, 複 *fù*⁴ ‘again’, 可 *ke*³ ‘may’, 無 *wú*² ‘without’, 未 *wèi*⁴ ‘not yet’, 再 *zài*⁴ ‘again’, though he does also discuss Adverb + Verb and Denominal Adverb + Verb compound verbs such as 慢跑 *man*⁴*pào*³ [slow + to run] ‘to jog’ and 槍斃 *qiāng*¹*bì*⁴ [gun + to shoot] ‘to execute’, which he calls “left-modified verbs” (2000:233). Lü (1985:21) lists a number of subordinate compound verbs containing adverbs of manner, such as 暗笑 *àn*⁴*xiào*⁴ [dark, hidden + to laugh] ‘to laugh secretly’ and 瞎摸 *xiā*¹*mō*¹ [blind + to grope] ‘to blindly grope’, but merely comments that they are cases of verbal modification. Y. R. Chao (1968:211-219) described and offered some limited examples of mostly nominal “prefixes and versatile first morphemes”, but did not continue to develop this idea in the context of Adverb + Verb compounds.

In their brief history of Chinese morphological concepts, Pan et al (1993:61ff) detail how the idea of affixation in Chinese was not accepted for many years, and when it did eventually become part of mainstream thought in Chinese linguistics, it pretty much adhered to what would be admissible as an affix in a typical Western language, especially a Romance, Germanic, or Slavic one, with English most often setting the standard. Affixes identified in Chinese were most frequently nominal, and included such suffixes as 子 *zi* (as in 裙子 *qún*²*zi* ‘skirt’), 頭 *tou* (e.g. 石頭 *shí*²*tou* ‘stone’) and the retroflex ending 兒 *er* (歌兒 *gē*¹ ‘song’); prefixes such as 老 *lǎo*³ (as in 老虎

*lao*³⁽²⁾*hu*³ ‘tiger’ and 老師 *lao*³*shi*¹ ‘teacher’); and affixes that were conscious translations directly from Western languages, such as 化 *hua*⁴, equivalent to the English verbal suffixes *-ize/ise*, *-ify*, *-ate*, or *-en* (e.g. 現代化 *xian*⁴*dai*⁴*hua*⁴ ‘to modernize’), and 主義 *zhu*³*yi*⁴, ‘-ism’ (e.g. 存在主義 *cun*²*zai*⁴*zhu*³*yi*⁴ ‘existentialism’). These latter cases finally provided basis for agreement that certain Chinese morphemes were *bona fide* “suffixes”. Their member-by-member correspondence to an English model seemed to “prove” their admissibility as true suffixes.

In this study we will attempt to define such concepts as “prefix” and “suffix” according to the unique characteristics of Chinese, so that we do not end up with a category whose members are used almost exclusively in translations from Western languages, or are analogous formations based on such.

To qualify as a Mandarin prefix, a morpheme must first, as with any compound, meet the inseparability condition, that is, the prefix and the base it joins to must be inseparably bonded, allowing no intervening material.

The second condition is that a prefix must directly precede and modify the verb base. We do not require that a prefix be a bound morpheme. As it turns out, most verbal prefixes in Mandarin are free or semibound morphemes which bond to verbs to form compounds rather than derivational forms. This is in contrast to English, in which prefixes are generally bound morphemes which combine with a base to produce class-maintaining derivational forms rather than compounds (Bauer 1983:31; Adams 1973:14); for example, the prefixes in *impose*, *expose*, *repose*, *propose*, and *oppose* are all bound.

Third, although default verbs can be prefixes, they must be clearly **adverbial** and must not function as an independent verb in the context of the verb compound. In the compound 回想 *hui*²*xiang*³ [to return, back + to think] ‘to think back on, recall’, the initial element 回 *hui*² is a default verb; but in the context of this compound, it is mainly directional in nature, specifying that the ‘thinking’ 想 *xiang*³ goes in a backward direction; and it thus qualifies as a prefix. Some of these have a more established adverbial function than others. 偷 *tou*¹ ‘to steal’, for example, has a corresponding overtly adverbial form 偷偷的 (or 地) *tou*¹*tou*¹*de* ‘surreptitiously’. Some verbs can function as adverbial prefixes, but have no such corresponding adverbial form, such as 竊 *qie*⁴ ‘to pilfer’ in 竊聽 *qie*⁴*ting*¹ [to pilfer + to listen] ‘to eavesdrop’; but 竊 *qie*⁴ has made the semantic and functional leap from ‘steal’ to ‘secretly, surreptitiously’ in compounds such as 竊聽 *qie*⁴*ting*¹, perhaps partly as an analogical formation based on 偷 *tou*¹. Verbs that function adverbially will be treated in this study as ordinary adverbs when they can be used as prefixes in

compound verbs. The situation is different with embedded compounds like 續訂 *xu⁴ding⁴* [to continue + to subscribe] ‘to renew (a subscription)’, in which the initial element is a full-fledged aspectual verb of continuation, functioning in this compound as a matrix verb controlling the final element, the verb complement. Aspectual verb constructions are treated in a separate chapter, Chapter IV.

Additionally, with just a few exceptions, we have found mostly only **disyllabic** examples of prefixed compound verbs, with possible expansions to four syllables in some cases. The disyllabic format plays a central role in many word types, since morphemes easily bond in this format in Chinese. Possession of a disyllabic format does not, however, guarantee that a construction is a compound.

We will at this point address the question of what exactly constitutes “subordination”. Chan (2002:32) concludes that “Constructions that have the purpose interpretation...[and] circumstance interpretation receive a subordinate structure”, in contrast to “[c]onstructions that have the consecutive or alternating interpretation”, which receive a coordinate structure. Wippermann (1993:126-7) notes that Chinese syntacticians such as Lü Shuxiang tend to use both syntactic and semantic criteria to determine subordination, without explicitly giving the basis on which they make their judgments.

Other authors have dealt with similar issues. Miller (1993:121), for example, says: “Classical Greek presents a dilemma. Is verb prefixation an example of syntactic PI [preposition incorporation] or is it lexical compounding, or a combination of the two? And what are the relevant criteria? ...it is necessary to derive some in syntax and the rest in the lexicon.”

We can identify sets of constructions and forms in English that are somewhat parallel to what we find in Mandarin. Compare: *We need to clean the house.*; *We need to clean house.*; and *We need to house-clean.* The first is a straight syntactic construction, the most analytic and periphrastic; the second is much like a conventionalized Chinese 吃飯 *chi¹fan⁴* [to eat + rice] ‘to eat’ VO construction which is a high-frequency collocation, but not a compound; and the third is a Denominal Adverb + Verb compound.

It is, however, difficult to categorize many verbs definitively. In English we have compound verbs like *stir-fry* and *freeze-dry* that present the same dilemma. You could argue that these actions are e.g. ‘frying in the manner of stirring’, thus modifier + modified, with ‘fry’, as the head, and ‘drying by freezing’, with ‘freeze’ as the head. Yet you could also argue that both actions are crucial to the whole, and the whole would not be what it is with one or the

other removed. The same applies to many complex verbs in Chinese that are composed of two verb morphemes. For example, is 飛舞 *fei¹wu³* ‘to dance around while flying’ modifier + modified, i.e. ‘to dance in the manner of/by/while flying’ or it is an “equal” combination of dancing and flying, which would completely lose its integrity by removing one or the other?

We will encounter varying degrees of productivity, though we will not use this as a criterion for accepting or rejecting a morpheme as a verbal prefix. Some adverbs are very limited in their compatibility with verbs, others are applicable to a wide selection of verbs; still others fall somewhere between the two extremes. Examples of high-frequency verbal prefixes include 複 *fu⁴* ‘to do something again, re-’, 預 *yu⁴* ‘to prepare beforehand, pre-’, and 誤 *wu⁴* ‘mistaken, mis-’. There are many semi-productive prefixes indicating manner, intensity, and frequency of an action, the attitude of the doer, the number of participants, and so on. Morphemes that are low frequency still have their place and fit into the pattern of conventionalized prefixes, but because they are not called upon as frequently, they are marginal in the system; one example is 頻 *pin²* ‘frequently’: the only common collocation with this prefix is 頻傳 *pin²chuan²* [frequently + to transmit] ‘to pour in (said of news)’. Chao (1968:403ff) describes morphemes as being of “limited versatility,” “unlimited versatility”, and “moderate productivity”; and in his section on “Prefixes” (1968:211), he further states that between the polar categories of “the meaningful, the infrequent, the stressed, the clearly articulated, and the unlistable full morphemes, on the one hand”, and “the meaningless, the frequent, the unstressed, the phonetically more neutral, and the listable empty morphemes on the other...there are intermediate cases with combinations of different degrees of the various factors.”

The structure of an initial-position adverb of manner, intention or attitude, plus a final-position verb, embodies a highly useful resource of the Chinese language in expressing nuanced variations of a basic verbal concept. Adverbial morphemes functioning as verbal prefixes come from several different default parts of speech – adverbs, adjectives, nouns, dummy pronouns, and other verbs, offering a broad range of modifying material. Prefix-verb combinations that proved themselves to be especially useful eventually became fixed usages in the language.

There are a number of key motivations for qualifying a verb with an adverb.

- (1) A direction or polarity, negative or positive, needs to be specified, e.g. 高估 *gao¹gu¹* [high + to estimate] ‘to overestimate’ vs. 低估 *di¹gu¹* [low + to estimate] ‘to underestimate’; 重視 *zhong⁴shi⁴*

- [heavy + to view] ‘to consider important’ vs. 輕視 *qing¹shi⁴* [light + to view] ‘to look down on’.
- (2) There may be a number of equally probable manners of doing something, and in some contexts it may be relevant to specify which of the possibilities is being referred to; or it might be unclear which is used unless it is specified, e.g. 熱敷 *re⁴fu¹* [hot + to apply on the skin] ‘to apply a hot compress’ vs. 冷敷 *leng³fu¹* [cold + to apply on the skin] ‘to apply a cold compress’ or 冰敷 *bing¹fu¹* [ice + to apply on the skin] ‘to apply an ice compress’. Another example is 乾洗 *gan¹xi³* [dry + to wash] ‘to dry clean’ vs. the unmarked monosyllabic 洗 *xi³* ‘to wash’, which assumes washing in water; however in a context where dry cleaning is expected, the back formation of 水洗 *shui³⁽²⁾xi³* [water + to wash] ‘to wash in water’ may appear.
- (3) It may add in compact form relevant further information, such as manner, attitude, and point in time, making the discourse more concise, and obviating the need for wordier modifying phrases, e.g. 偷看 *tou¹kan⁴* [to steal + to look] ‘to peek’; 並存 *bing⁴cun²* [side by side + to exist] ‘to coexist’, as opposed to 偷偷地看 *tou¹tou¹de kan⁴* ‘to look at surreptitiously’ and 同時存在 *tong²shi²cun²zai⁴* ‘to exist at the same time, contemporaneously’.
- (4) It may reinforce an original expectation, as an intensifier, e.g. as in 確信 *que⁴xin⁴* [certain + to believe] ‘to truly believe, be confident that’ or 緊握 *jin³wo⁴* [tight + to grasp] ‘to grasp tightly’.
- (5) It may simply fill out a syllabic requirement, adding an extra syllabic beat to a simplex verb. In this case a semantically cognate adverb, that is, one that expresses some of the same information as the verb, may be used, e.g. 後退 *hou⁴tui⁴* [back + to retreat] ‘to retreat’; 冷凍 *leng³dong⁴* [cold + to freeze] ‘to freeze’; this subtype is close in spirit, though not in actual substance, to coordinate compounding.

There is considerable overlap between the above categories; they are all in fact only different aspects of a shared core, namely, further delimitation of a verbal head, and filling in of a disyllabic template.

A number of Chinese prefixed verbs are so common that they are often seen as idiosyncratic lexical items, for example, 歡迎 *huan¹ying²* ‘to welcome’. This compound is in fact composed of a qualifying adverb, 歡 *huan¹* ‘joyously’, which describes the attitude with which someone is

‘received’, 迎 *ying*². Because it is such a high-frequency item, and an expletive as well, uncovering the prefixed structure can be a bit startling. The compound 歡送 *huan*¹*song*⁴ ‘to send someone off with fanfare’, which replaces the verb ‘to receive’ with ‘to send off’, is perhaps more transparent as an Adverb + Verb prefixed formation, since it is usually used as a regular verb in a sentence and cannot be used as a bare expletive, as 歡迎 *huan*¹*ying*² ‘welcome’ can.

Some verbs of this type probably started out as phrases, then became shortened to disyllabic collocations, for example, 聯署 *lian*²*shu*³ [jointly + to sign] ‘to sign a petition’ is apparently derived from 聯合簽署 *lian*²*he*²*qian*¹*shu*³ [(jointly + together) + (to sign + to sign)] ‘to jointly sign’. Through this process the Adverb + Verb template of verbal compound formation became more established. This is however not merely a diachronic process, but also a synchronic one, and both the expanded and abbreviated forms may occur in the same discourse; one may start out using a full syntactic phrase for clarity, then switch to the disyllabic compound for economy and convenience. Further individual collocations were and still are formed by analogy based on the successful collocations. These are often the result of a conscious stylistic choice toward conciseness for use in more formal contexts, as opposed to casual, more analytic, wordier, colloquial speech. The most successful and versatile initial elements move toward status as established prefixes and ready combination with suitable verb heads.

Semantic extension and metaphor are key features of many Adverb + Verb compounds. The deadjectival adverb 高 *gao*¹ ‘high’ may be used in a literal sense, e.g. 高漲 *gao*¹*zhang*³ [high + to rise, swell] ‘to rise (e.g. water level)’, and 高舉 *gao*¹*ju*³ [high + raise] ‘to lift high’ (e.g. a wine glass or banner). It can also mean ‘high’ or ‘too high’ in a more abstract rather than spatial sense, for example, the previously cited 高估 *gao*¹*gu*¹ [high + to estimate] ‘to give an [overly] high estimate, to overestimate’.

高 *gao*¹ is further often used in the metaphorical sense of ‘presumptuously’, ‘loftily’, ‘glibly’, or ‘assuming an air of superiority or self-importance’, e.g. 高談 *gao*¹*tan*² [high + to chat] ‘to speak presumptuously of’ (as in 高談教育改革 *gao*¹*tan*² *jiao*⁴*yu*⁴ *gai*³*ge*² ‘talking unrealistically about educational reform’), 高唱 *gao*¹*chang*⁴ [high + to sing] ‘to talk glibly of, to arrogantly promote’ (e.g. 高唱男女平等 *gao*¹*chang*⁴ *nan*²*nu*³ *ping*²*deng*³ ‘to talk glibly of the equality of the sexes’), 高喊 *gao*¹*han*³ ‘to mouth a catch-phrase/slogan’ (as in 這些東西不是光靠高喊信心或台灣意識便能解決 *Zhe*⁴ *xie*¹ *dong*¹*xi*¹ *bu*⁴⁽²⁾ *shi*⁴ *guang*¹ *kao*⁴ *gao*¹*han*³ *xin*⁴*xin*¹ *huo*⁴ *tai*²*wan*¹*yi*⁴ *shi*⁴ *bian*⁴ *neng*² *jie*³*jue*² ‘These are things that cannot be solved by simply relying on

[the mouthing of] catch-phrases like “confidence” or “Taiwanese awareness”. In each case, both in the concrete and more abstract usages, we see how the preverbal adverb describes the **manner**, **intention** and/or **attitude** of or behind an action before and during its performance, and not the outcome of the action.

To better understand the origins, characteristics, and functions of Adverb + Verb constructions, let us first look at an example of a prefixed compound and some of the alternative ways of expressing the same semantic content. We will compare possible ways of saying, ‘I like to be alone/spend time by myself.’

In Chinese you might say colloquially, 我喜歡一個人. $wo^{3(2)} xi^3 huan^1 yi^{1(2)} ge ren^2$ [I like one person]. This expression, in which there is an optional caesura after $xi^3 huan^1$ to distinguish it from the sentence meaning ‘I like a certain person’, uses a noun phrase adverbially; it could be expressed in English as ‘I like it when it’s just me’. This could be further expanded to a more formal 我喜歡獨自一個人 $wo^{3(2)} xi^3 huan^1 du^2 zi^4 yi^{1(2)} ge ren^2$ [I like (singly + self) (one + (classifier) + person)] by adding the adverbial phrase 獨自 $du^2 zi^4$ ‘alone, on my own, by myself’ (this sentence may be followed by a verb or VO phrase complement such as 做事 $zuo^4 shi^4$ ‘doing things’, thus ‘I like doing things on my own.’). Or alternatively, one could say yet a bit more formally, 我喜歡獨處 $wo^{3(2)} xi^3 huan^1 du^2 chu^3$ [I like-to (singly + spend-time)], which combines into a single compound one element of the preceding adverbial phrase with a monosyllabic verb meaning ‘to spend time’: 獨處 $du^2 chu^3$. One might also use an established phrase, e.g. a four-syllable idiom: 我喜歡獨來獨往 $wo^{3(2)} xi^3 huan^1 du^2 lai^2 du^2 wang^3$ ‘I like coming and going alone/doing things on my own.’

Of the several possibilities listed, 獨處 $du^2 chu^3$, the prefixed verb form, is the most concise and formal. It exemplifies the process of “editing down” a complex idea into a highly compact form, with all its stylistic and prosodic implications for speech and writing. It is a semantically “heavy verb”, in contrast to light complex verbs, such as 打扮 $da^3 ban^4$ ‘to dress oneself up’, in which only one of the two elements has a strong semantic component, the other being an “all-purpose” or generic verb such as 打 da^3 ‘to strike’. (Light verbs will be treated in Chapter IV.) Creation and use of this kind of heavy verb is a basic strategy of concise speech and writing in Chinese.

To illustrate the different ways Chinese and English can distribute semantic material to express the same concepts, we will now look at some representative examples of prefixed Adverb + Verb compounds in Chinese, together with suggested English equivalents. We will propose a number of

different ways in each language to express the same basic meaning, for comparison.

First, examples which show fairly close structural correspondence between Chinese and English.

A. Compounds with a clear, roughly equivalent prefix + base structure in both Chinese and English:

- (1) 重 *chong*² ‘again, re-’: 重考 *chong*²*kao*³ [again + to take an exam] ‘to **retake** an exam’; 重現 *chong*²*xian*⁴ [again + to appear] ‘to **reappear**’.
- (2) 復 or 複 *fu*⁴ ‘again, back, re-’: 復習 *fu*⁴*xi*² [again + to study] ‘to **review** [a lesson]’; 復現 *fu*⁴*xian*⁴ [again + to appear] ‘to **reappear**’.
- (3) 預 *yu*⁴ ‘in advance, beforehand, pre-’: 預防 *yu*⁴*fang*² [beforehand + to ward off] ‘to **prevent**’; 預付 *yu*⁴*fu*⁴ [beforehand + to pay] ‘to pay in advance, **prepay**’.
- (4) 誤 *wu*⁴ ‘mistaken, wrong, mis-’: 誤會 *wu*⁴*hui*⁴ [mistakenly + to understand] ‘to **misunderstand**’; 誤診 *wu*⁴*zhen*³ [mistakenly + to diagnose] ‘to **misdiagnose**’.

These Chinese initial morphemes attach themselves to about the same type of bases that the corresponding English prefixes *re-*, *pre-* and *mis-* would. (More examples below.) Some are more transparent and lexicalized than others, but the Prefix + Verb compositional structure is the same regardless.

Second, we will look at some examples in which this compound type translates into a very specific single English verb.

B. Chinese Adverb + Verb compound equivalent to a single specific English verb:

- (1) 偽造 *wei*^{3/4}*zao*⁴ [false + to manufacture] ‘to **forge**, counterfeit’
- (2) 合併 *he*²*bing*⁴ [combined + to collapse together] ‘to **merge**’
- (3) 強壓 *qiang*²*ya*¹ [strongly + to press down] ‘to **stifle**, suppress’
- (4) 怒視 *nu*⁴*shi*⁴ [angrily + to look] ‘to **glare**, scowl, glower at, to look angrily at’

In the cases where English can use a very specific (and thus often rhetorically desirable, for conciseness) verb, such as *forge*, *merge*, *stifle*, *glare*, or *glower*, as an equivalent to the Chinese Adverb + Verb compound type, that English verb may well contain a phonaestheme, e.g. the consonant cluster *gl-* (cf. *glimmer*, *glitter*, *glance*, *glisten*, *gleam*, *glare*, *glower*) which is often

associated with brightness or shine, or *fl-* with ‘rapid movement’ (*flit, flicker, fly, flow, flee*). Knowles (1987:113) suggests that phonaesthemes such as these may be remnants of ancient but well-defined morphemes which have been phonetically reduced over time, to the point that their original form and meaning are by now relatively vague, with only fragments surviving in some modern words. So in some cases English verbs of this type may after a fashion be composed of more than one morpheme as well.

In the majority of examples, the English translation of the compact Chinese Adverb + Verb form seems to require a periphrastic description, as in the last gloss of B. (4), ‘to look angrily at’. This certainly has to do first and foremost with the different ways the two languages divide up semantic information among morphemes; this compound type in Chinese simply tends to correspond more often to a descriptive phrase in English rather than a single specific verb, simplex, prefixed or otherwise. Sometimes the reason may be cultural. Chinese quite naturally abbreviates expressions that are highly typical of Chinese culture, for example, cooking terms like 清蒸 *qing¹zheng¹* [clear + to steam] ‘to steam without adding soy sauce’ and 生炒 *sheng¹chao³* [raw + to stir-fry] ‘to stir-fry food that has not been precooked’; festival-related activities like 團拜 *tuan²bai⁴* [group + to congratulate] ‘to exchange Chinese New Year’s wishes as a group’; education expressions like 惡補 *e⁴bu³* [malicious + to supplement] ‘to take extra classes out of desperation for the sole purpose of passing a test’; or honorific and polite constructions, like 榮升 *rong²sheng¹* [honor + to ascend] ‘to be promoted with honor’, 高就 *gao¹jiu⁴* [high + to approach, achieve] ‘to accept a higher position, to serve in an honored post’, and 久仰 *jiu³⁽²⁾yang³* [a long time + to look up to, admire] ‘I’ve been looking forward to meeting you for a long time’.

In the following sections, we will examine, classify and analyze individual examples of Adverb + Verb formations. Explanations and comments are provided where appropriate.

2.1.1 Repeated action

Under the category of Adverb + Verb formations, Chao includes 復寫 *fu⁴xie³* [again + to write] ‘to make a (carbon) copy’ and 復印 *fu⁴yin⁴* [again + to print] ‘to photocopy’. The first element, *fu⁴* ‘again’, ‘repeated’ (which may be written 復 *fu⁴* or 複 *fu⁴*; the two have basically the same meaning and function and only a slightly different graphic form), has the widely applicable meaning of ‘repeated’, ‘again’, ‘to do a second (or more) time’. It is

comparable to the Romance-originated *re-* prefix in English. Though the Chinese 復 *fu*⁴ or 複 *fu*⁴ is nowhere near as productive as the English *re-*, it is well established as a prefix. Note that 復 *fu*⁴ as a free morpheme can be a verb which means ‘to answer (e.g. a letter)’. Examples:

- (1) 復 or 複 *fu*⁴ ‘again, re-’: 複製 *fu*⁴*zhi*⁴ [again + to manufacture] ‘to copy, reproduce’; 復發 *fu*⁴*fa*¹ [again + to occur] ‘to have a relapse’; 復查 *fu*⁴*cha*² [again + to examine] ‘to reexamine’; 復反 *fu*⁴*fan*³ [again + to go back] ‘to return’; 復核 *fu*⁴*he*² [again + to examine] ‘to review [a case]’; 復刊 *fu*⁴*kan*¹ [again + to publish] ‘to resume publication’; 復生 *fu*⁴*sheng*¹ [again + to live] ‘to be revived’; 復甦 *fu*⁴*su*¹ [again + to come to] ‘to resuscitate’; 復習 *fu*⁴*xi*² [again + to study] ‘to review [a lesson]’; 復現 *fu*⁴*xian*⁴ [again + to appear] ‘to reappear’; 復興 *fu*⁴*xing*¹ [again + to thrive] ‘to rejuvenate’; 復議 *fu*⁴*yi*⁴ [again + to discuss] ‘to reconsider [a decision]’.

There is another, more colloquial morpheme serving a very similar function, but with nearly unlimited productivity, especially when the entire compound is followed by an adverbial quantifier such as 一遍 *yi*¹⁽²⁾*bian*⁴ or 一次 *yi*¹⁽²⁾*ci*⁴ ‘one time’:

- (2) 重 *chong*² ‘repeat, duplicate, again, once more, layer, re-’: 重做 (一次) *chong*²*zuo*⁴ (*yi*¹⁽²⁾*ci*⁴) ‘to redo, to do over’; 重說 (一遍) *chong*²*shuo*¹ (*yi*¹⁽²⁾*bian*⁴) ‘to repeat’; 重開 (一次) *chong*²*kai*¹ (*yi*¹⁽²⁾*ci*⁴) ‘to reopen, restart’; 重考 *chong*²*kao*³ [again + to take an exam] ‘to retake an exam’; 重現 *chong*²*xian*⁴ [again + to appear] ‘to reappear’; 重回 *chong*²*hui*² [again + to return] ‘to return to again’.
- (3) A consciously-chosen morpheme often used in certain modern formations to fill the role of English *re-* is 再 *zai*⁴. In early Chinese, at least through the Han dynasty, it meant ‘to do s.t. a **second** time’, in contrast to 復 *fu*⁴ which simply meant ‘to do something again’ (Ota 1987:263). The two are no longer distinguished semantically, but 再 *zai*⁴ now tends to be used in translations of more technical, especially economics-related, foreign-originating concepts. 再 *zai*⁴ is one of the few affixes found to produce exceptions to the almost exclusively disyllabic format of compound verbs in Mandarin: terms using the 再 *zai*⁴ prefix are sometimes more than two syllables long, often three, and are thus marked as recent translations or coinages, e.g. 再投資 *zai*⁴*tou*²*zi*¹ [again + to put

in + capital] ‘to reinvest’ and 再進口 *zai⁴jin⁴kou³* ‘to reimport’. (Another exception to the disyllabic template is the aspectual verb 轉 *zhuan³* ‘to transfer’, which is used in compounds of more than two syllables also having to do with doing something a second time, e.g. 轉託管 *zhuan³tuo¹guan³* [to transfer + to entrust + to manage] ‘to transfer management rights to’.)

2.1.2 Reflexivity and reciprocity

自 *zi⁴* ‘self’

自 *zi⁴* is a productive prefix that carries the meaning of ‘self’. In some contexts it is “translatable as ‘auto-’ as in 自動 [*zi⁴dong⁴*] ‘move of its own accord, – automatic; on one’s own initiative’...” (Chao 1968:407). As Ōta (1987:111) notes, in spite of its pronominal meaning, 自 *zi⁴* is purely adverbial, and has never functioned as an independent subject or object; 己 *ji³* was used in Classical Chinese where an independent pronoun for ‘self’ was required. In modern Mandarin, 自己 *zi⁴ji³* is used pronominally in syntactic constructions.

自 *zi⁴* as a verb prefix has two possible interpretations, depending on context: it may be only the subject, or it may be both the subject and object of the verb. This can be illustrated with syntactic expansions of the meanings the compounds:

- (1) 自己 *zi⁴ji³* ‘self’ + V
- (2) 自己 *zi⁴ji³* ‘self’ + V + 自己 *zi⁴ji³* ‘self’

It does not seem possible for the ‘self’ in 自 *zi⁴* + V to be only the object; the whole idea of 自 *zi⁴* as a verbal prefix is that one initiates something oneself (he or she is the agent or actor). The results of the action do not necessarily play out on the initiator (i.e. he or she is not necessarily the recipient or patient), though they in some cases may. 自 *zi⁴* ‘self’ + V is a Classical Chinese syntactic pattern, used mainly in modern Mandarin to achieve stylistic conciseness and formality, as mentioned in the preceding regarding 獨處 *du²chu³* ‘to spend time alone’.

In the following examples, ‘self’ is only the subject. The constructions may stand alone or take an additional argument in the role of direct or oblique object:

自居 *zi⁴ju¹* = 自己住 (Ø or 在台北) *zi⁴ji³zhu⁴* (*zai⁴ tai²bei³*)
 (self resides)
 i.e. ‘to live by oneself/alone (in Taipei)’

- 自知 $zì^4 zhi^1$ = 自己知道 (Ø or 這件事) $zì^4 ji^3 zhi^1 dao^4$ ($zhe^4 jian^4 shì^4$)
(self knows)
'to know within oneself (about this matter)'
- 自購 $zì^4 gou^4$ = 自己買 (Ø or 房子) $zì^4 ji^3(2) mai^3$ ($fang^2 zi$)
(self buys)
to buy (a home) oneself'

In the following examples, 'self' is both subject and object:

- 自殺 $zì^4 sha^1$ = 自己殺自己 $zì^4 ji^3 sha^1 zì^4 ji^3$
(self kills self)
'to commit suicide'
- 自稱 $zì^4 cheng^1$ = 自己稱呼自己 $zì^4 ji^3 cheng^1 hu^1 zì^4 ji^3$
(self calls self)
'to call oneself...'
- 自治 $zì^4 zhi^4$ = 自己治理自己 $zì^4 ji^3 zhi^4 li^3 zì^4 ji^3$
(self governs self)
'to be autonomous'

The template 自 $zì^4$ 'self' + V enjoys considerable though not unlimited productivity. One limitation is that the verbs it affixes onto are generally monosyllabic. If the verb is disyllabic, a kind of "syllabic harmony" (on the analogy of "vowel harmony") is required, and a disyllabic word for 'self', 自我 $zì^4 wǒ^3$ [self + I] will usually be used instead; thus: 自我催眠 $zì^4 wǒ^3 cui^1 mian^2$ [(self + I) + (to urge + to sleep)] 'self-hypnosis; to practice self-hypnosis; to hypnotize oneself'; 自我欺騙 $zì^4 wǒ^3 qi^1 pian^4$ [(self + I) + (to deceive + to cheat)] 'self-deception; to deceive oneself'; 自我陶醉 $zì^4 wǒ^3 tao^2 zui^4$ [(self + I) + (happy + drunk)] 'to be full of oneself'; 自我吹噓 $zì^4 wǒ^3 chui^1 xu^1$ [(self + I) + (to blow + to breathe out slowly)] 'to praise oneself or others, to boast'. Note how the *self-* form is used here in the English nominal but not verbal form, though verbal forms such as *self-medicate* are also used in English. In Chinese the same collocation may be either nominal or verbal depending on context. Some of these four-syllable formations have a disyllabic equivalent, e.g. 自我欺騙 $zì^4 wǒ^3 qi^1 pian^4$ 'to deceive oneself' can be shortened to 自欺 $zì^4 qi^1$ in some contexts; others exist only in the four-syllable format, e.g. 自我介紹 $zì^4 wǒ^3 jie^4 shao^4$ [(self + I) + (to introduce + to introduce)] 'to introduce oneself, give a self-introduction'.

Examples in which 自 $zì^4$ is only the subject:

- (4) (a) 自決 *zì⁴jue²* [self + to decide] ‘self-determination; to determine or decide s.t. oneself’; 自學 *zì⁴xue²* [self + to study] ‘to study on one’s own’; 自供 *zì⁴gong¹* [self + to provide] ‘to provide s.t. oneself’; 自覺 *zì⁴jue²* [self + to be aware] ‘to be conscious, aware of’; 自選 *zì⁴xuan³* [self + to choose] ‘to choose, elect oneself’; 自籌 *zì⁴chou²* [self + to prepare, raise funds] ‘to prepare s.t. oneself’; 自成 *zì⁴cheng²* [self + to become] ‘to become [s.t. else] by oneself, on one’s own power’; 自立 *zì⁴li⁴* [self + to establish] ‘to establish oneself independently’; 自理 *zì⁴li³* [self + to manage] ‘to take care of s.t. oneself’; 自製 *zì⁴zhi⁴* [self + to make, produce, manufacture] ‘to produce s.t. oneself’.

Examples in which 自 *zì⁴* is both subject and object:

- (4) (b) 自重 *zì⁴zhong⁴* [self + to consider important] → self considers-important self → ‘to comport oneself well’; 自盡 *zì⁴jin⁴* [self + to exhaust] → self exhausts self → ‘to commit suicide’; 自救 *zì⁴jiu⁴* [self + to save] → self saves self → ‘to save oneself’; 自省 *zì⁴xing³* [self + to examine] → self examines self → ‘to examine oneself and one’s motives’; 自轉 *zì⁴zhuan⁴* [self + to turn] → self turns self → ‘to rotate’; 自乘 *zì⁴cheng²* [self + to multiply] → self multiplies self → ‘to multiply a number by itself’; 自首 *zì⁴shou³* [self + to confess] → self confesses self → ‘to turn oneself in and confess’; 自衛 *zì⁴wei⁴* [self + to protect] → self protects self → ‘to defend oneself’.

相 *xiang¹*

相 *xiang¹* is an adverbial prefix that combines relatively productively with action verbs. It is the one example of a possible verbal prefix suggested by Yip (1992: 67), cited above.

相 *xiang¹* has always meant ‘mutually’, but Ōta (1987:265-266) describes how it for a time came to be employed as a preverbal dummy object pronoun, used in order to avoid explicit mention of a personal object pronoun like 君 *jun¹*, 公 *gong¹*, or 足下 *zu²xia¹*, all honorific second person pronouns. It was also called upon for stylistic reasons, i.e. to add an extra syllable to form a disyllabic collocation (Wang 1988:430-3). Thus in frozen modern verbal compounds like 相信 *xiang¹xin⁴* [*xiang¹* + to believe] ‘to believe’, 相勸 *xiang¹quan⁴* [*xiang¹* + to advise] ‘to try to advise, persuade someone’, 相迎 *xiang¹ying²* [*xiang¹* + to welcome] ‘to give someone a warm welcome’, the 相 *xiang¹* has no substantive meaning and functions simply as a filler syllable. This is true also of 相思 *xiang¹si¹* [*xiang¹* + to think of] ‘to pine after [a loved

one]'; the pining referred to here is in fact one-way, though one would expect otherwise in the context of romance.

In most modern formations, 相 *xiang*¹ means 'mutually, to each other', though several of the following examples can be interpreted either with the meaning of 'mutually' or with the one-way dummy pronoun interpretation. 相助 *xiang*¹*zhu*⁴, for example, can be either a unidirectional 'to come to someone's aid', or 'to help each other'. 相 *xiang*¹ can also mean 'one to another, and on to yet another', as in 相傳 *xiang*¹*chuan*² [*xiang*¹ + to transmit] 'to transmit, pass down a tradition', i.e. one generation on to the next; in this case it is not 'mutual'. This meaning is also found in the adverbial phrase 相繼 *xiang*¹*ji*⁴ [*xiang*¹ + to continue] 'one after the other, successively'.

As with 自 *zi*⁴, which tends to expand to 自我 *zi*⁴*wo*³ when modifying more than one syllable, 相 *xiang*¹ can expand to 互相 *hu*⁴*xiang*¹ when it unambiguously means 'mutually', and when it precedes a polysyllabic verb compound or VO construction, e.g. 互相摔打 *hu*⁴*xiang*¹ *shuai*¹*da*³ [(reciprocally + mutually) + (to throw + to strike)] 'to wrestle around with each other', 互相打招呼 *hu*⁴*xiang*¹ *da*³*zhao*¹*hu*¹ [(reciprocally + mutually) + {to strike + (to summon + to call)} → to greet] 'to greet each other'. These are separable and thus syntactic rather than lexical formations. Examples of compound verbs prefixed by 相 *xiang*¹:

- (5) 相交 *xiang*¹*jiao*¹ [mutually + to intersect] 'to intersect; to be friends with'; 相愛 *xiang*¹*ai*⁴ [mutually + to love] 'to love each other'; 相比 *xiang*¹*bi*³ [mutually + to compare] 'to compare with each other'; 相稱 *xiang*¹*chen*⁴ [mutually + to match] 'to be suited to each other'; 相持 *xiang*¹*chi*² [mutually + to hold] 'to be locked in a stalemate'; 相抵 *xiang*¹*di*³ [mutually + to use in exchange for] 'to cancel each other out'; 相見 *xiang*¹*jian*⁴ 'to see each other'; 相會 *xiang*¹*hui*⁴ [mutually + to meet] 'to see each other'; 相罵 *xiang*¹*ma*⁴ [mutually + to scold, reprimand] 'to yell at each other'; 相撞 *xiang*¹*zhuang*⁴ [mutually + to run into] 'to collide'; 相遇 *xiang*¹*yu*⁴ [mutually + to encounter] 'to run into each other'; 相約 *xiang*¹*yue*¹ [mutually + to make a date, appointment] 'to make a date, to agree on a date to meet'; 相處 *xiang*¹*chu*³ [mutually + to process] 'to interact, to get along with each other'; 相依 *xiang*¹*yi*¹ [mutually + to depend on] 'to depend on each other'; 相打 *xiang*¹*da*³ [mutually + to strike] 'to come to blows.'

互 *hu*⁴

The other element of the expanded form of ‘mutually’ 互相 *hu*⁴*xiang*¹, i.e. 互 *hu*⁴, is a productive prefix that has the unequivocal meaning of ‘mutual(ly)’ or ‘reciprocal(ly)’, and is not pronominal. It has the same expansion as 相 *xiang*¹ ‘mutual’ when modifying more than one syllable.

Examples:

- (6) 互派 *hu*⁴*pai*⁴ [mutually + to send] ‘to exchange [e.g. representatives or diplomatic personnel]’; 互勉 *hu*⁴*mian*³ [mutually + to encourage] ‘to encourage each other’; 互訪 *hu*⁴*fang*³ [mutually + to visit] ‘to visit each other, to exchange visits’; 互動 *hu*⁴*dong*⁴ [mutually + to move] ‘to interact’; 互定 *hu*⁴*ding*⁴ [mutually + to establish] ‘to mutually establish’; 互換 *hu*⁴*huan*⁴ [mutually + to change] ‘to exchange’; 互見 *hu*⁴*jian*⁴ [mutually + to appear] ‘to exist side by side’ (cf. 相見 *xiang*¹*jian*⁴ above); 互助 *hu*⁴*zhu*⁴ [mutually + to help] ‘to help each other’ (cf. 相助 *xiang*¹*zhu*⁴ above); 互讓 *hu*⁴*rang*⁴ [mutually + to yield] ‘to yield to each other’; 互通 *hu*⁴*tong*¹ [mutually + to connect] ‘to connect with each other’; 互補 *hu*⁴*bu*³ [mutually + to supplement, fill out] ‘to complement each other’.

Expansions: 互訪 *hu*⁴*fang*³ [mutually + to visit] ‘to visit each other’ can be expanded to 互相訪問 *hu*⁴*xiang*¹*fang*³*wen*⁴ [(reciprocally + mutually) + (to visit + to ask)] ‘to visit each other’; 互勉 *hu*⁴*mian*³ [mutually + to encourage] to 互相勉勵 *hu*⁴*xiang*¹*mian*³*li*⁴ ‘to encourage each other’.

Note that verbs which can take both 相 *xiang*¹ and 互 *hu*⁴ have different meanings in the respective pairings; so within the relatively high productivity and close meanings of the two forms, there is a complementary and lexicalized idiosyncratic division of labor.

2.1.3 Activities done alone or in concert with other people; doing one thing or groups of things at a time

Many prefixes relate to doing something alone, leading an activity, or doing something together or in concert with others; they refer to the number of the **subject** of the verb. Semantically they are related to the “reflexive” (自 *zi*⁴ ‘self’) and “mutuality” (相 *xiang*¹ and 互 *hu*⁴) prefixes discussed in the preceding section in that they suggest the number – sometimes only approximately – of people involved in an activity. Other prefixes refer to the

number of things done at a time, e.g. 單點 *dan¹dian³* means ‘ordering à la carte’, i.e. ‘ordering one item at a time/separately’, while 批發 *pi¹fa¹* is ‘to sell wholesale’ or ‘selling things in large lots’. These prefixes refer to the number of the **object** of the verb. Some prefixes can refer to either the subject or the object of the verb, depending on the specific compound in which the prefix occurs, e.g. 單點 *dan¹dian³* is ordering single items (object) from the menu; 單戀 *dan¹lian⁴* is one-sided love on the part of the subject.

This is a very developed category, and is perhaps one of the ways that Chinese compensates for its lack of a grammatical plural.

- (7) 獨 *du²* ‘singly, independently, alone, solo’: 獨唱 *du²chang⁴* [alone + to sing] ‘to sing (a) solo’; 獨處 *du²chu³* [alone + to get along with, pass one’s time] ‘to spend time alone’; 獨佔 *du²zhan⁴* [single-handedly + to occupy] ‘to monopolize’; 獨居 *du²ju¹* [alone + to live] ‘to live alone’; 獨坐 *du²zuo⁴* [alone + to sit] ‘to sit alone’; 獨行 *du²xing²* [alone + to walk] ‘to walk alone’; 獨創 *du²chuang⁴* [alone + to create] ‘to create single-handedly’.
- (8) 單 *dan¹* ‘singly’: 單點 *dan¹dian³* [singly + to order (food)] ‘to order à la carte’; 單賣 *dan¹mai⁴* [singly + to sell] ‘to sell individually (rather than in a larger prepackaged quantity)’; 單買 *dan¹mai³* [singly + to buy] ‘to buy individually, separately, singly’; 單戀 *dan¹lian⁴* [singly + to be in love] ‘to love one-sidedly’; 單幹 *dan¹gan⁴* [singly + to work, do] ‘to work alone’; 單傳 *dan¹chuan²* [singly + to transmit] ‘to pass from a master to a single disciple’ or ‘to maintain a patrilineal line of only one son per generation’; 單行 *dan¹xing²* [singly + to go] ‘to go alone; to go in a single direction’, as in the saying 禍不單行 *huo⁴bu⁴dan¹xing²* [disasters + (not + singly + go)] ‘troubles come in threes’; also the tetrasyllabic expression: 單打獨鬥 *dan¹da³du²dou⁴* [(singly + to strike) + (alone + to struggle)] ‘to fight singlehandedly’.
- (9) 專 *zhuan¹* ‘exclusively, expressly, single-handedly, specializing in (a single thing)’: 專有 *zhuan¹you³* [having a specialty in + to have] ‘to have exclusive rights to’; 專賣 *zhuan¹mai⁴* [having a specialty in + to sell] ‘to specialize in selling’; 專辦 *zhuan¹ban⁴* [having a specialty in + to sell] ‘to specialize in administering’; 專攻 *zhuan¹gong¹* [exclusively + to attack, study] ‘to specialize in (a field)’; 專修 *zhuan¹xiu¹* [exclusively + to study] ‘to specialize in (a field of study)’; 專管 *zhuan¹guan³* [expressly + to manage] ‘to be assigned to manage a specific task’.
- (10) 兼 *jian¹* ‘simultaneously, concurrently’: 兼顧 *jian¹gu⁴* [simultaneously + to consider] ‘to give consideration to more than one item’; 兼備 *jian¹bei⁴*

- [simultaneously + to offer] ‘to offer two different things’; 兼辦 *jian¹ban⁴* [simultaneously + to process] ‘to process a second matter at the same time as a first’; 兼併 *jian¹bing⁴* [simultaneously + to merge, incorporate] ‘to annex’; 兼負 *jian¹fu⁴* [simultaneously + to bear] ‘to bear concurrent responsibility for’; 兼聽 *jian¹ting¹* [simultaneously + to listen] ‘to listen to both sides’; 兼管 *jian¹guan³* [simultaneously + to manage] ‘to manage simultaneously’; 兼差 *jian¹chai¹* [concurrently + to hold a position, job] ‘to hold a second position, job’; 兼任 *jian¹ren⁴* [concurrently + to hold a position] ‘to hold a concurrent position’; 兼有 *jian¹you³* [concurrently + to have] ‘to have two things at the same time’; 兼營 *jian¹ying²* [simultaneously + to run (a business)] ‘to simultaneously offer a second line of services, to run a parallel business’.
- (11) 合 *he²* ‘jointly, combined, co-’; this prefix has high productivity: 合作 *he²zuo⁴* [jointly + to do] ‘to cooperate’; 合辦 *he²ban⁴* [jointly + to hold] ‘to jointly hold, administer’; 合併 *he²bing⁴* [combined + to collapse together] ‘to merge’; 合謀 *he²mou²* [jointly + to plot] ‘to conspire’; 合訂 *he²ding⁴* [together + to bind] ‘to bind together (several issues of a journal into one volume)’; 合流 *he²liu²* [together + to flow] ‘to flow together, work together closely’; 合計 *he²ji⁴* [jointly + to calculate] ‘to add up, to consult’; 合擊 *he²ji²* [jointly + to attack] ‘to launch a joint attack’; 合成 *he²cheng²* [together + to achieve] ‘to put together, synthesize’; 合唱 *he²chang⁴* [jointly + to sing] ‘to sing in chorus’; 合稱 *he²cheng¹* [jointly + to be called] ‘for two things together to be called s.t.’; 合算 *he²suan⁴* [together + to figure] ‘to reckon up’; 合用 *he²yong⁴* [jointly + to use] ‘to share’; 合演 *he²yan³* [jointly + to perform] ‘to perform jointly’.
- (12) 齊 *qi²* ‘together, in unison’: 齊唱 *qi²chang⁴* [in unison + to sing] ‘to sing in unison’; 齊鳴 *qi²ming²* [in unison + to call out, sing, chirp] ‘to call out together’; 齊動 *qi²dong⁴* [in unison + to move] ‘to move as a unit, act in unison’; 齊集 *qi²ji²* [together + to collect] ‘to assemble’; 齊奏 *qi²zou⁴* [in unison + to play (music)] ‘to play in unison’.
- (13) 聯 *lian²* ‘jointly’: 聯署 *lian²shu³* [jointly + to sign] ‘to sign a petition’; 聯營 *lian²ying²* [jointly + to operate a business] ‘to jointly run a business’; 聯播 *lian²bo¹* [jointly + to broadcast] ‘to jointly broadcast (e.g. the same radio program over several stations)’; 聯歡 *lian²huan¹* [jointly + to rejoice] ‘to hold a social gathering’.
- (14) 同 *tong²* ‘together’: 同居 *tong²ju¹* [together + to live] ‘to live together (as a couple), cohabit’; 同宿 *tong²su⁴* [together + to lodge] ‘to share lodgings, a dorm’; 同謀 *tong²mou²* [same + to conspire] ‘to conspire with someone’; 同行 *tong²xing²* [same + to walk] ‘to walk together’; 同歸

- tong²gui¹* [together + to return] ‘to return together, to have the same fate as someone else, to reach the same goal’; 同賀 *tong²he⁴* [together + to congratulate] ‘to jointly congratulate, send best wishes’.
- (15) 共 *gong⁴* ‘together, shared’ (see also 並 *bing⁴* below): 共處 *gong⁴chu³* [together + to get along with] ‘to coexist’; 共謀 *gong⁴mou²* [together + to conspire] ‘to conspire with someone’; 共進 *gong⁴jin⁴* [common + to enter] ‘to advance together’; 共建 *gong⁴jian⁴* [together + to build] ‘to join together (financially) in the construction of a building’; 共計 *gong⁴ji⁴* [together + to calculate] ‘to add up to’; 共居 *gong⁴ju¹* [together + to live] ‘to live together (as a group)’; 共慶 *gong⁴qing⁴* [together + to celebrate] ‘to celebrate together’; 共享 *gong⁴xiang³* [together + to enjoy] ‘to enjoy together’; 共生 *gong⁴sheng¹* [together + to live] ‘to live in symbiosis’; 共商 *gong⁴shang¹* [together + to confer] ‘to consult with someone on’; 共存 *gong⁴cun²* [together + to exist] ‘to coexist’; 共用 *gong⁴yong⁴* [common + to use] ‘to share’ (synonymous with 合用 *he²yong⁴*).
- (16) 並 *bing⁴* ‘side by side, adjacent, equally, simultaneously’ (see also 共 *gong⁴*): 並排 *bing⁴pai²* [side by side + to arrange] ‘to place/be placed next to each other’; 並列 *bing⁴lie⁴* [side by side + to place in a row] ‘to be juxtaposed’; 並存 *bing⁴cun²* [side by side + to exist] ‘to exist side by side’; 並發 *bing⁴fa¹* [simultaneously + to break out] ‘to erupt simultaneously’; 並進 *bing⁴jin⁴* [adjacent + to advance] ‘to advance side by side’; 並行 *bing⁴xing²* [adjacent + to walk] ‘to walk side by side; to have two things going at the same time’; 並用 *bing⁴yong⁴* [simultaneously + to use] ‘to use at the same time’; 並重 *bing⁴zhong⁴* [equally + to consider important] ‘to place equal emphasis on’.
- (17) 協 *xie²* ‘jointly, common’: 協助 *xie²zhu⁴* [jointly + to help] ‘to assist’; 協談 *xie²tan²* [jointly + to talk] ‘to hold talks’; 協商 *xie²shang¹* [jointly + to consult with] ‘to consult with someone’; 協作 *xie²zuo⁴* [jointly + to do] ‘to cooperate on s.t.’.
- (18) 雙 *shuang¹* ‘pair, double, both’; this is usually adjectival and not widely used to prefix verbs, but it does occur in: 雙贏 *shuang¹ying²* [pair + to win] ‘to be in a win-win situation’; and 父母雙亡 *fu⁴mu³shuang¹wang²* [(father + mother {= parents}) + (both + deceased)] ‘both parents are deceased’.
- (19) 群 *qun²* ‘in or as a group’: 群毆 *qun²ou¹* [group + to beat] ‘to gang up and attack someone’; 群打 *qun²da³* [group + to strike] ‘to gang up and strike someone’; 群居 *qun²ju¹* [group + to live] ‘to live in communal groups’.

- (20) 團 *tuan*² ‘in or as a group’: 團結 *tuan*²*jie*² ‘to unite’; 團聚 *tuan*²*ju*⁴ ‘to gather together’; 團拜 *tuan*²*bai*⁴ ‘to exchange New Year’s wishes as a group’.
- (21) 批 *pi*¹ ‘in a batch’: 批發 *pi*¹*fa*¹ [batch + to issue] ‘to sell wholesale’.
- (22) 零 *ling*² ‘fragmentary, in pieces’: 零賣 *ling*²*mai*⁴ or 零售 *ling*²*shou*⁴ [fragmentarily+ to sell] ‘to sell retail, in small quantities’; 零用 *ling*²*yong*⁴ [fragmentarily + to spend] ‘to spend money on minor expenses’.
- (23) 散 *san*³ ‘in a scattered manner’: 散賣 *san*³*mai*⁴ [scattered + to sell] ‘to sell separately (not in a large package)’; 散居 *san*³*ju*¹ [scattered + to live] ‘to live scattered across an area’.

2.1.4 Temporal duration, sequence, frequency

- (24) 久 *jiu*³ ‘a long time’: 久留 *jiu*³*liu*² [a long time + to stay] ‘to stay in a place a long time’; 久別 *jiu*³*bie*² ‘to be parted for a long time’; 久等 *jiu*³⁽²⁾*deng*³ ‘to wait a long time’; 久仰 *jiu*³⁽²⁾*yang*³ [a long time + to look up to, admire] a polite set phrase meaning ‘I’ve heard so much about you.’
- (25) 長 *chang*² ‘a long time, forever’: 長住 *chang*²*zhu*⁴ [long + to reside] ‘to be settled down in a place’; 長存 *chang*²*cun*² [long + to remain] ‘to live, exist forever’; 長辭 *chang*²*ci*² ‘to take permanent leave, to die’.
- (26) 常 *chang*² ‘permanently, frequently, constantly, invariably’: 常住 *chang*²*zhu*⁴ [permanently + to reside] ‘to be settled down in a place’; 常用 *chang*²*yong*⁴ [frequently + to use] ‘to use frequently’; 常 *chang*² is used more often in adjectival expressions like 常設 *chang*²*she*⁴ ‘standing’ (committee) than in verbal ones.
- (27) 永 *yong*³ ‘forever’: 永續 *yong*³*xu*⁴ [forever + to continue] ‘continue indefinitely’ (also an adjective meaning ‘maintainable’); 永別 *yong*³*bie*² [forever + to part] ‘to part forever’; also called 永訣 *yong*³*jue*² [forever + to split] ‘to part forever’; 永生 *yong*³*sheng*¹ [forever + to live] ‘to live on forever’ (usually said of the dead); 永逝 *yong*³*shi*⁴ [forever + to leave the world] ‘to die’; 永眠 *yong*³*mian*² [forever + to sleep] ‘to sleep forever, die’.
- (28) 預 *yu*⁴ ‘in advance, beforehand, pre-’: 預洗 *yu*⁴*xi*³ [beforehand + to wash] ‘to prewash’; 預約 *yu*⁴*yue*¹ [beforehand + to agree] ‘to make an appointment’; 預定 *yu*⁴*ding*⁴ [beforehand + to establish] ‘fix in advance, predetermine’; 預備 *yu*⁴*bei*⁴ [beforehand + to prepare] ‘to prepare (ahead of time)’; 預測 *yu*⁴*ce*⁴ [beforehand + to ascertain] ‘to predict’; 預習

- yu*⁴*xi*² [beforehand + to study] ‘to preview a lesson’; 預訂 *yu*⁴*ding*⁴ or 預留 *yu*⁴*liu*² [beforehand + to reserve] ‘to reserve in advance’; 預卜 *yu*⁴*bu*³ [beforehand + to divine] ‘to prognosticate’; 預防 *yu*⁴*fang*² [beforehand + to ward off] ‘to prevent’; 預付 *yu*⁴*fu*⁴ [beforehand + to pay] ‘to pay in advance, prepay’; 預料 *yu*⁴*liao*⁴ [beforehand + to occur to one] ‘to anticipate’; 預計 *yu*⁴*ji*⁴ [beforehand + to calculate] ‘to estimate’; 預見 *yu*⁴*jian*⁴ [beforehand + to see] ‘to foresee’; 預期 *yu*⁴*qi*² [beforehand + to expect] ‘to anticipate, project’; 預想 *yu*⁴*xiang*³ [beforehand + to think] ‘to anticipate’; 預祝 *yu*⁴*zhu*⁴ [beforehand + to wish] ‘to wish in advance’ (e.g. a happy New Year before New Year’s has arrived); 預知 *yu*⁴*zhi*¹ [beforehand + to know] ‘to know in advance’; 預熱 *yu*⁴*re*⁴ [beforehand + to heat] ‘to preheat’.
- (29) 連 *lian*² ‘in a row, consecutively, successive, serial’: 連殺 *lian*²*sha*¹ [series + to kill] ‘to commit serial killings’; 連載 *lian*²*zai*⁴ [series + to publish] ‘to publish as a series’; 連任 *lian*²*ren*⁴ [consecutively + to hold office] ‘to hold office consecutively’; 連挫 *lian*²*cuo*⁴ [consecutively + to suffer defeat] ‘to suffer successive defeats’; 連辦 *lian*²*ban*⁴ [consecutively + to hold (an activity)] ‘to hold activities consecutively’; 連用 *lian*²*yong*⁴ [consecutively + to use] ‘to use consecutively’.
- (30) 頻 *pin*² ‘frequently’: the only common collocation with this prefix is 頻傳 *pin*²*chuan*² [frequently + to transmit] ‘to pour in (said of news)’; 頻尿 *pin*²*niao*⁴ ‘to urinate frequently, to experience frequent micturition’ could also be used as a verb.
- (31) 層 *ceng*² ‘layer, level, one after another’: 層報 *ceng*²*bao*⁴ [level + report] ‘to report to higher authorities level by level’; this prefix usually appears in fixed four-syllable expressions, like 層出不窮 *ceng*²*chu*¹*bu*⁴*qiong*² [repeatedly + appear + not + to exhaust] ‘to occur over and over again’; and 層見疊出 *ceng*²*jian*⁴*die*²*chu*¹ [(repeatedly + to appear) + (piled up + to occur)] ‘to occur again and again’.

2.1.5 Entirety, completeness, thoroughness

- (32) 清 *qing*¹ ‘clean; to the point of clarity; completely’: 清查 *qing*¹*cha*² [clear + to check] ‘to take an inventory (to uncover and list all items)’; 清償 *qing*¹*chang*² [clear + to compensate] ‘to pay off all debts’; 清算 *qing*¹*suan*⁴ [clear + to calculate] ‘to clear accounts; to expose and criticize, liquidate’; 清點 *qing*¹*dian*³ [clear + to take inventory] ‘to take a full inventory of’; contrast this with the 清 *qing*¹ in **State** below.

- (33) 徹 *che*⁴ ‘thorough(ly)’: 徹查 *che*⁴*cha*² [thoroughly + to investigate] ‘to make a thorough investigation’; 徹悟 *che*⁴*wu*⁴ [thorough + to be enlightened] ‘to thoroughly understand the truth’.
- (34) 通 *tong*¹ ‘to connect, through(ly); throughout, entirely, overall’: 通讀 *tong*¹*du*² [throughout + to read] ‘to acquire a thorough knowledge of’; 通覽 *tong*¹*lan*³ [throughout + to view] ‘to take an overall view of’; 通曉 *tong*¹*xiao*³ [throughout + to know] ‘to thoroughly understand, be well versed in’.
- (35) 備 *bei*⁴ ‘fully, entirely’: 備陳 *bei*⁴*chen*² or 備述 *bei*⁴*shu*⁴ [fully + to state] ‘to tell in full detail’ (literary usage).
- (36) 統 *tong*³ ‘altogether, as a whole’: 統治 *tong*³*zhi*⁴ [as a whole + to govern] ‘to rule’; 統購 *tong*³*gou*⁴ [altogether + to purchase] ‘to purchase in quantity for a large group’; 統制 *tong*³*zhi*⁴ [as a whole + to control] ‘to control, rule’; 統籌 *tong*³*chou*² [as a whole + to plan] ‘to make an overall plan’; 統計 *tong*³*ji*⁴ [altogether + to calculate] ‘to total up, calculate statistics’.
- (37) 窮 *qiong*² ‘poor; to use up; to exhaust; relentlessly’: 窮追 *qiong*²*zhui*¹ [exhausted + to pursue] ‘to relentlessly pursue’; 窮究 *qiong*²*jiu*⁴ [exhausted + to inquire] ‘to make a thorough inquiry into’; 窮忙 *qiong*²*mang*² [exhausted + to be busy] ‘to be senselessly busy’.
- (38) 泛 *fan*⁴ ‘extensively, general’: 泛讀 *fan*⁴*du*² [general + to read] ‘to read broadly, extensively’, also 泛覽 *fan*⁴*lan*³ [extensively + to look, read]; 泛濫 *fan*⁴*lan*⁴ [extensively + to flood] ‘to inundate’; 泛指 *fan*⁴*zhi*³ [general + to point to, refer to] ‘to make a general reference to’.
- (39) 遍 *bian*⁴/*pian*⁴ ‘everywhere, all over, all-inclusive, widely’: 遍讀 *bian*⁴*du*² [everywhere + to read] ‘to read everything there is (on a subject); 遍布 *bian*⁴*bu*⁴ [everywhere + to be spread over] ‘to be spread throughout a whole area’.

2.1.6 Location and orientation

- (40) 外 *wai*⁴ ‘outside, external’: 外調 *wai*⁴*diao*⁴ [outside + to transfer] ‘to transfer (out), be transferred elsewhere’; 外接 *wai*⁴*jie*¹ [outside + to connect] ‘to connect externally’; 外借 *wai*⁴*jie*⁴ [outside + to loan] ‘to loan out’; 外敷 *wai*⁴*fu*¹ [outside + to plaster (a wound)] ‘to apply a compress, plaster’; 外賣 *wai*⁴*mai*⁴ [outside + to sell] ‘to sell take-out food’; 外帶 *wai*⁴*dai*⁴ [outside + to take] ‘to take out/away (food), to buy take-out food’; 外送 *wai*⁴*song*⁴ [outside + to deliver] ‘to deliver’ (e.g. take-out food); 外流 *wai*⁴*liu*² [outside + to flow] ‘to seep out’; 外出 *wai*⁴*chu*¹

- [outside + to go out] ‘to go/be out’; 外設 *wai⁴she⁴* [outside + to establish] ‘to establish s.t. externally’.
- (41) 內 *nei⁴* ‘inside, internal’; there are fewer combinations with 內 *nei⁴* than with 外 *wai⁴*: 內服 *nei⁴fu²* [inside + to take (medicine)] ‘to take medicine’; 內定 *nei⁴ding⁴* [inside + to determine] ‘to determine internally’; 內省 *nei⁴xing³* [inside + to inspect] ‘to introspect’ (cf. 自省 *zi⁴xing³* ‘to examine one’s motives’); 內銷 *nei⁴xiao¹* [inside + to market] ‘to market domestically’.
- (42) 中 *zhong¹* ‘center, in the middle of, mid-’; rather than being a physical location, *zhong¹* often refers, as in English, simply to an action before it has reached its finished state: 中止 *zhong¹zhi³* [middle + to stop] ‘to stop in the middle (of s.t.)’; 中斷 *zhong¹duan⁴* [middle + to break] ‘to break off (before s.t. is finished)’; 中分 *zhong¹fen¹* [center + to divide] ‘to part one’s hair in the middle’.
- (43) 上 *shang⁴* ‘upwards’; *shang⁴* can be both a main verb meaning ‘to rise, go up’ and a prefix meaning ‘upwards’; in the examples chosen here it seems to function as a prefix; the same applies to the next item (5), *mutatis mutandis*; it may be used literally, as in 上吊 *shang⁴diao⁴* ‘to hang oneself (from a high place)’; or figuratively, often in the sense of ‘one’s superiors’: 上升 *shang⁴sheng¹* [upwards + to rise] ‘to rise (upwards)’; 上報 *shang⁴bao⁴* [upwards + to report] ‘to report to one’s superiors’; 上訪 *shang⁴fang³* [upwards + to visit] ‘to call on a superior’; 上呈 *shang⁴cheng²* [upwards + to submit] ‘to submit a document to a higher level for approval’; 上表 *shang⁴biao³* or 上奏 *shang⁴zou⁴* [upwards + to express, submit a memorial] ‘to submit a memorial to the emperor’; 上訴 *shang⁴su⁴* [upwards + to sue] ‘to appeal (a court decision)’.
- (44) 下 *xia⁴* ‘downwards’; there is not an overly large number of examples; some could also be analyzed as synonymous (coordinate) compounds, with 下 *xia⁴* used as a verb in itself meaning ‘to go down’: 下放 *xia⁴fang⁴* [downwards + to place] ‘to transfer to a lower level, exile’; 下瀉 *xia⁴xie⁴* [downwards + to flow, leak] ‘to have diarrhea’; 下跪 *xia⁴gui⁴* [downwards + to kneel] ‘to get down on one’s knees’; 下拜 *xia⁴bai⁴* [downwards + to worship] ‘to kneel down in obeisance’; 下沉 *xia⁴chen²* [downwards + to sink] ‘to sink’; 下降 *xia⁴jiang⁴* [downwards + to drop, descend] ‘to descend’; 下跌 *xia⁴die²* [downwards + to drop] ‘to dip (e.g. in price or value)’.
- (45) 前 *qian²* ‘forward’: 前往 *qian²wang³* [forward + to go] ‘to proceed to’; 前進 *qian²jin⁴* [forward + to enter] ‘to advance, forge ahead’.

- (46) 後 *hou*⁴ ‘back, backwards, after, afterwards’: 後退 *hou*⁴*tui*⁴ ‘to back up, retreat’; 後顧 *hou*⁴*gu*⁴ ‘to turn or look back’; 後悔 *hou*⁴*hui*³ [afterwards + to regret] ‘to regret’; 後繼 *hou*⁴*ji*⁴ [after + to continue] ‘to continue on’; also 背 *bei*⁴ ‘back’: 背書 *bei*⁴*shu*¹ [back + to write] ‘to endorse’ (i.e. to **write** one’s name on the **back**).
- (47) 追 *zhui*¹ ‘to chase, pursue, follow up, to enact retroactively; from behind’: 追撞 *zhui*¹*zhuang*⁴ [to pursue + to hit] ‘to hit from behind’; 追加 *zhui*¹*jia*¹ [to pursue + to add] ‘to increase (e.g. a budget) retroactively’; 追減 *zhui*¹*jian*³ [to pursue + to reduce] ‘to cut (a budget) retroactively’; 追思 *zhui*¹*si*¹ [to pursue + to think about] ‘to recall, reminisce’; 追悼 *zhui*¹*dao*⁴ [to pursue + to mourn] ‘to mourn someone’; 追問 *zhui*¹*wen*⁴ [to pursue + to ask] ‘to ask follow-up questions, continue asking questions’.
- (48) 回 *hui*² ‘to return, go back, back’; compare to the following two items, (10) and (11): 回堵 *hui*²*du*³ [back + to be clogged, stopped up] ‘for traffic to be backed up, gridlocked, jammed’; 回顧 *hui*²*gu*⁴ [back + to look] ‘to look back, review’; 回想 *hui*²*xiang*³ [back + to think] ‘to think back on’; 回答 *hui*²*da*² [back + to respond] ‘to answer’; 回拜 *hui*²*bai*⁴ [back + to visit] ‘to pay a return visit; 回報 *hui*²*bao*⁴ [back + to report; to reward; to revenge] ‘to report back; to reciprocate; to retaliate’; 回避 *hui*²*bi*⁴ [back + to avoid] ‘to evade, withdraw’; 回蕩 *hui*²*dang*⁴ [back + to swing about] ‘to resound, reverberate’; 回跌 *hui*²*die*² [back + to fall] ‘(for prices) to return to a lower level’; 回請 *hui*²*qing*³ [back + to invite] ‘to return an invitation, “invite back”’; 回復 *hui*²*fu*⁴ [back + to answer] ‘to answer (back), reply to’; 回絕 *hui*²*jue*² [back + to break off] ‘to refuse, decline, turn back a request’; 回轉 *hui*²*zhuan*³ [back + to turn] ‘to turn back’; 回收 *hui*²*shou*¹ [back + to collect] ‘to recycle, bring in for recycling’.
- (49) 倒 *dao*⁴ ‘reversed, upside down, backwards’: 倒數 *dao*⁴*shu*³ [backwards + to count] ‘to count backwards’; 倒掛 *dao*⁴*gua*⁴ [upside down + to hang] ‘to hang upside down’; 倒背 *dao*⁴*bei*⁴ [backwards + to recite] ‘to recite backwards’; 倒鎖 *dao*⁴*suo*³ [backwards + to lock] ‘to lock someone in’; 倒立 *dao*⁴*li*⁴ [upside down + to stand] ‘to stand on one’s head or hands, to stand upside down’; 倒轉 *dao*⁴*zhuan*³ [backwards + to turn] ‘to turn in reverse’; 倒流 *dao*⁴*liu*² [backwards + to flow] ‘to flow backwards’; 倒置 *dao*^{4/3}*zhi*⁴ [backwards + to place] ‘to place in reverse order’.
- (50) 反 *fan*³ ‘to reverse, to oppose; opposing, in return, back, backwards’; this prefix is similar to 回 *hui*² and 倒 *dao*⁴ in that it means ‘to do s.t. in return, or back’, though it is usually with more vigor than is suggested by 回 *hui*² and may involve the idea of ‘opposition’: 反駁 *fan*³*bo*² [back + to refute] ‘to refute with convincing arguments’; 反撲 *fan*³*pu*¹ [back + to pounce on]

- ‘to pounce back at, launch a counter-offensive’; 反判 *fan³pan⁴* [back + to rebel] ‘to revolt’; 反顧 *fan³gu⁴* [back + to look] ‘to look back’; 反觀 *fan³guan¹* [back + to look] ‘to look back at’; 反省 *fan³⁽²⁾xing³* [back + to examine] ‘to examine past behavior’; 反轉 *fan³⁽²⁾zhuan³* [back + to turn] ‘to turn backwards’; 反照 *fan³zhao⁴* ‘to reflect back’; 反襯 *fan³chen⁴* [back + to make stand out] ‘to set off by contrast, act as a foil to’; 反串 *fan³chuan⁴* [backwards + to play act] ‘to play a different role from usual, e.g. of the other sex’; 反射 *fan³she⁴* [back + to shoot] ‘to fire back’; 反思 *fan³si¹* [back + to think] ‘to think s.t. over’; 反應 *fan³ying⁴* [back + to respond] ‘to react to’; 反映 *fan³ying⁴* [back + to shine, reflect] ‘to reflect (back)’; 反咬 *fan³⁽²⁾yao³* [back + to bite] ‘to bite back’; 反問 *fan³wen⁴* [back + to ask] ‘to ask back, ask a question in return’.
- (51) 衡 *heng²* ‘horizontally, across’; also 直 *zhi²* ‘vertically, straight, directly’, 豎 *shu⁴* ‘vertically’, and 縱 *zong⁴* ‘longitudinally, vertically, up and down’: 橫跨 *heng²kua⁴* [horizontal + to stride] ‘to span [across]’; 橫貫 *heng²guan⁴* [horizontal + to connect] ‘to link horizontally, in an East-West direction’; 直立 *zhi²li⁴* ‘to stand vertically’; 豎立 *shu⁴li⁴* ‘to stand erect’; 縱貫 *zong⁴guan⁴* [vertical + to connect] ‘to link vertically, in a north-south direction’.
- (52) The cardinal directions of 東 *dong¹* ‘east’, 南 *nan²* ‘south’, 西 *xi¹* ‘west’, 北 *bei³* ‘north’ can also be added directly before certain verbs of motion as adverbs, e.g. 北上 *bei³shang⁴* [north + to go upwards] ‘to travel north’ and 南下 *nan²xia⁴* [south + to go downwards] ‘to travel south’; or 南飛 *nan²fei¹* [south + to fly] ‘to fly south’ (e.g. of birds); 東 *dong¹* and 西 *xi¹*, and 南 *nan²* and 北 *bei³* are correlative prefix morphemes in many tetrasyllabic expressions, such as: 南轅北轍 *nan²yuan²bei³che⁴* [(south + shaft) + (north + road)] ‘to try to go south by driving the chariot north, do something in a roundabout way’; and 東張西望 *dong¹zhang¹xi¹wang⁴* [(east + to stretch) + (west + to gaze)] ‘to look this way and that’; also the two relative directions of 左 *zuo³* ‘left’ and 右 *you⁴* ‘right’, e.g. 左轉 *zuo³⁽²⁾zhuan³* ‘to turn left’; 右拐 *you⁴guai³* or 右彎 *you⁴wan¹* ‘to turn right’.
- (53) 對 *dui⁴* ‘towards each other, back towards, opposite, each other, in half’: 對談 *dui⁴tan²* ‘to talk face to face’; 對摺 *dui⁴zhe²* ‘to fold in half’; 對調 *dui⁴diao⁴* [opposite + to transfer] ‘to exchange places’; 對唱 *dui⁴chang⁴* [towards each other + to sing] ‘to sing antiphonal style’; 對抗 *dui⁴kang⁴* [against each other + to oppose] ‘to resist, oppose’; 對答 *dui⁴da²* [back + to answer] ‘to reply to’; 對待 *dui⁴dai⁴* [towards + to treat] ‘to treat someone (in some way)’; 對付 *dui⁴fu⁴* [towards + to deal with] ‘to deal

- with (a person or situation)'; 對開 *duì⁴kāi¹* [opposite + to run] '(for buses, trains, etc.) to run from opposite directions'; 對照 *duì⁴zhào⁴* [against + to mirror] 'to run in parallel (as a bilingual text)'.
- (54) The number 'four' 四 *sì⁴*, referring to 'the four directions', may be used together with a verb to indicate 'from/on all sides, everywhere, throughout'; examples are given in the context of four-syllable subject-verb phrases: 反彈四起 *fǎn³tán²sì⁴qǐ³* [(back + to recoil {= opposition}) + (four + to arise)] 'there was backlash from all sides'; 生氣四溢 *shēng¹qì⁴sì⁴yì⁴* [(life + energy) + (four + to rise)] 'vigor permeated throughout'; 水花四濺 *shuǐ³huā¹sì⁴jiàn⁴* [(water + flower) + (four + to splash)] 'water splashed all over the place'; 金光四射 *jīn¹guāng¹sì⁴shè⁴* [(gold + light) + (four + to radiate)] 'golden light radiated throughout'. Other numbers may assume an adverbial function in some expressions, especially when they are used in conjunction with 'four', e.g. 四通八達 *sì⁴tōng¹bā¹dá²* [(four + to go through to) + (eight + to arrive)] 'to go in, provide access to all directions'.
- (55) 直 *zhí²* 'straight, vertically, directly'; used more often in the extended meaning of 'direct(ly)': 直走 *zhí²zǒu³* 'to walk straight ahead'; 直撲 *zhí²pū¹* [straight + pounce] 'to pounce on'; 直達 *zhí²dá²* [direct + arrive] 'to go non-stop'; 直播 *zhí²bō¹* [direct + broadcast] 'to broadcast live'; 直升 *zhí²shēng¹* [directly + to ascend] 'to be directly promoted to (e.g. a school on a higher level); 直說 *zhí²shuō¹* [directly + to say] 'to say directly, come right out and say s.t., get to the point'; 直屬 *zhí²shǔ³* [directly + to belong to] 'to be directly under' (an administrative authority); 直譯 *zhí²yì⁴* [direct + to translate] 'to translate directly, literally'.
- (56) 側 *cè⁴* 'side, lateral'; this may be used both literally, as in 'sleeping on one's side' and metaphorically, meaning 'indirectly': 側睡 *cè⁴shuì⁴* 'to sleep on one's side'; 側臥 *cè⁴wò⁴* [side + to lie] 'to lie on one's side'; 側擊 *cè⁴jī²* 'to attack from the side, make a flank attack'; 側視 *cè⁴shì⁴* [side + to look] 'to look sideways'; 側重 *cè⁴zhòng⁴* [side + to emphasize] 'to lay special emphasis on (i.e. to lean to one side in emphasizing one thing over another)'; 側聞 *cè⁴wén²* [side + to hear] 'to hear through a second party, indirectly'.
- (57) 偏 *piān¹* 'leaning to one side'; this prefix also can be used literally, i.e. 'inclining to one side', or figuratively, 'showing favoritism, giving s.t. unequal treatment'; it suggests imbalance, incompleteness; compare with (17) 側 *cè⁴*: 偏移 *piān¹yí²* [to one side + to move] 'to veer to one side'; 偏離 *piān¹lí²* [leaning + to be distanced from] 'to deviate, diverge, be off

- target'; 偏疼 *pian¹teng²* [one side + to feel affection for] 'to favor one (child) over another'; 偏護 *pian¹hu⁴* [leaning + to protect] 'to show partiality to one side'; 偏愛 *pian¹ai⁴* [leaning + to love] 'to show favoritism'; 偏重 *pian¹zhong⁴* [leaning + to stress] 'to emphasize one thing at the expense of another'; 偏廢 *pian¹fei⁴* [leaning + to discard] 'to emphasize one thing and ignore another'.
- (58) 旁 *pang²* '(from the) side; indirectly': 旁聽 *pang²ting¹* [side + to listen] 'to audit (a class)'; 旁觀 *pang²guan¹* [side + to observe] 'to observe from the sidelines'; also 旁敲側擊 *pang²qiao¹ce⁴ji²* [(side + to knock) + (side + to strike)] 'to attack by innuendo; to intimate s.t., mention s.t. indirectly'.
- (59) 平 *ping²* 'evenly [distributed]; calm': 平分 *ping²fen¹* [evenly + to divide] 'to divide up evenly'; 平視 *ping²shi⁴* [even + to look] 'to look straight or squarely ahead'; 平衡 *ping²heng²* [even + to weigh] 'to balance'; 平反 *ping²fan³* [even + to return] 'to rehabilitate'; 平列 *ping²lie⁴* [even + to list] 'to lay side by side on a par with each other'.
- (60) 均 *jun¹* 'evenly, all, completely, equally': 均分 *jun¹fen¹* [evenly + to distribute] 'to distribute evenly'; 均攤 *jun¹tan¹* [equally + split] 'to share expenses equally'.

2.1.7 State

- (61) 熱 *re⁴* 'hot': 熱敷 *re⁴fu¹* [hot + to apply a compress] 'to apply a hot compress'.
- (62) 冷 *leng³* 'cold': 冷藏 *leng³cang²* [cold + to store] 'to refrigerate'; 冷敷 *leng³fu¹* [cold + to apply a compress] 'to apply a cold compress'; note also 涼 *liang²* 'cool': 涼拌 *liang²ban⁴* [cool + to mix] 'to make into a salad'.
- (63) 清 *qing¹* 'clear, with no additives or accompaniments': this is a prefix for several cooking terms, meaning 'without adding soy sauce': 清蒸 *qing¹zheng¹* [clear + to steam] 'to steam without adding soy sauce'; 清炒 *qing¹chao³* [clear + to stir-fry] 'to stir-fry without adding soy sauce'; 清燉 *qing¹dun^{1/4}* 'to stew without soy sauce'; also 清唱 *qing¹chang⁴* [clear + to sing] 'to sing a cappella'.
- (64) 生 *sheng¹* 'raw, alive': 生吃 *sheng¹chi¹* [raw + to eat] 'to eat s.t. raw'; 生炒 *sheng¹chao³* [raw + to stir-fry] 'to stir-fry food that is not precooked'; 生還 *sheng¹huan²* [alive + to return] 'to survive, come back alive'; 生擒 *sheng¹qin²* [alive + to capture] 'to capture alive' (see following item).
- (65) 活 *huo²* 'alive': 活捉 *huo²zhuo¹* [alive + to catch] 'to catch alive'; 活埋 *huo²mai²* [alive + to bury] 'to bury alive'; 活現 *huo²xian⁴* [alive + to

- appear] ‘to appear vividly, come alive’; 活動 *huo²dong⁴* [flexibly + to move] ‘to move around (freely).
- (66) 死 *si³* ‘death, dead’: 死別 *si³bie²* [death + to part] ‘to be parted by death’; 死戰 *si³zhan⁴* [death + to fight] ‘to be in a life-and-death struggle’; 死 *si³* in this compound could also be an expression of intensity; see section on “Intensity” for use of 死 *si³* ‘death, dead’ in compounds in its extended meaning.

2.1.8 Manner and attitude

The feature shared by the following groups of prefixes is reference to an action that somehow departs from what it “should be”, that has in some way gone awry. Unlike 錯 *cuo⁴* and 誤 *wu⁴*, which imply doing something undesirable (‘a mistake’) due to negligence, carelessness, or not knowing better, 假 *jia³*, 偽 *wei^{3/4}*, 虛 *xu¹* and 濫 *lan⁴* involve volition; one purposely makes a false report, for example. Of these, 虛 *xu¹* has a range of related meanings; it is either like 假 *jia³* and 偽 *wei^{3/4}*, an intended deception that one tries to keep secret; or it may be a declared deception for a creative purpose, as in 虛擬 *xu¹ni³* ‘to create a virtual model’; or it may suggest that a poor decision was made (e.g. what to do with one’s time) with undesirable results, as in 虛度 *xu¹du⁴* ‘to spend time in vain, fritter away time’. 白 *bai²* ‘white’, used as an adverb meaning ‘vainly’, is very similar to this use of 虛 *xu¹*, e.g. 白做 *bai²zuo⁴* is ‘to do something in vain’. 白 *bai²* is not included in the list because it seems to be a relatively free and analytic adverb form rather than a more tightly bound component of a compound. Chao (1968:777-8) however correctly noted that in its meaning as ‘plain, with no seasoning’, 白 *bai²* does bond in compounds; cf. 白煮 *bai²zhu³* [plain + to boil] ‘to boil in plain water’.

The same is true to some extent of 亂 *luan⁴*, though 亂 *luan⁴* seems in some cases to bond more tightly with a verb in set formations. The last two prefixes in the last group, 迷 *mi²* and 亂 *luan⁴*, are related in that they also refer to something gone awry, this time due to a loss of control. In the case of 迷 *mi²*, the loss of control is involuntary; with 亂 *luan⁴*, it is often a voluntary giving up of control and a conscious choice to let things get out of hand. A literary equivalent of 亂 *luan⁴* is 妄 *wang⁴* ‘rash(ly)’, as in 妄動 *wang⁴dong⁴* [rashly + to move] ‘to make a false move’, 妄說 *wang⁴shuo¹* [rashly + to say] ‘to talk nonsense’. It is still marginally productive in formal and more self-conscious writing or speaking.

2.1.8.1 Manner and attitude: Mistaken and simulated action

- (67) 誤 *wu*⁴ ‘mistakenly, mis-’: 誤讀 *wu*⁴*du*² [mistakenly + to read] ‘to misread’; 誤會 *wu*⁴*hui*⁴ [mistakenly + to understand] ‘to misunderstand’; 誤解 *wu*⁴*jie*³ [mistakenly + to interpret] ‘to misunderstand’; 誤信 *wu*⁴*xin*⁴ [mistakenly + to believe] ‘to mistakenly believe’; 誤傷 *wu*⁴*shang*¹ [mistakenly + to injure] ‘to mistakenly injure’; 誤食 *wu*⁴*shi*² [mistakenly + to eat] ‘to mistakenly eat s.t.’; 誤認 *wu*⁴*ren*⁴ [mistakenly + to recognize] ‘to make a mistake of recognition’; 誤用 *wu*⁴*yong*⁴ [mistakenly + to use] ‘to use mistakenly, to misuse’; 誤診 *wu*⁴*zhen*³ [mistakenly + to diagnose] ‘to misdiagnose’.
- (68) 錯 *cuo*⁴ ‘mistakenly’; similar to but less productive than 誤 *wu*⁴: 錯怪 *cuo*⁴*guai*⁴ [mistakenly + to blame]; 錯開 *cuo*⁴*kai*¹ ‘to mistakenly open, open the wrong thing’.
- (69) 漏 *lou*⁴ ‘to leak; to omit (inadvertently or otherwise)’; relatively analytic (i.e. not lexical) in composition and productive: 漏打 *lou*⁴*da*³ [to leak + to strike] ‘to omit while typing’; 漏報 *lou*⁴*bao*⁴ [to leak + to report] ‘to fail to report s.t.’; 漏寫 *lou*⁴*xie*³ [to leak + to write] ‘to omit when writing’.
- (70) 假 *jia*³ ‘false’: 假扮 *jia*³*ban*⁴ [false + to dress up] ‘to disguise oneself as’; 假冒 *jia*³*mao*⁴ [false + to fraudulently claim] ‘to try to pass off as’; 假托 *jia*³*tuo*¹ [false + to use someone else’s name] ‘to do s.t. under someone else’s name’; 假借 *jia*³*jie*⁴ [false + to borrow] ‘to deceptively make use of s.t.’; 假裝 *jia*³*zhuang*¹ [false + to feign] ‘to pretend’; 假充 *jia*³*chong*¹ [false + to act as] ‘to try to pass oneself off as’; 假設 *jia*³*she*⁴ [false + to establish] ‘to assume’; 假使 *jia*³⁽²⁾*shi*³ [false + to make] ‘to assume (that...)’; 假釋 *jia*³*shi*⁴ [false + to release] ‘to release on parole’; 假造 *jia*³*zao*⁴ [false + to manufacture] ‘to counterfeit’; 假死 *jia*³⁽²⁾*si*³ [false + to die] ‘to play dead’.
- (71) 偽 *wei*^{3/4} ‘false, bogus’: 偽造 *wei*³*zao*⁴ [false + to manufacture] ‘to forge’; 偽裝 *wei*³*zhuang*¹ [false + to feign] ‘to disguise, camouflage’; 偽撰 *wei*³*zhuan*⁴ [false + to author] ‘to write under someone else’s name (without their permission)’.
- (72) 虛 *xu*¹ ‘empty, false, in vain, virtual’: 虛報 *xu*¹*bao*⁴ [false + to report] ‘to file a falsified report’; 虛度 *xu*¹*du*⁴ [empty + to pass time] ‘to spend time in vain, fritter time away’; 虛擬 *xu*¹*ni*³ [virtual + to draft] ‘to create s.t. fictional, make a virtual model’; 虛構 *xu*¹*gou*⁴ [empty + to construct] ‘to construct s.t. that is purely fictional’; 虛應 *xu*¹*ying*⁴ ‘to do s.t. perfunctorily’.

2.1.8.2 Manner and attitude: Actions done in private, surreptitiously or illegally

- (73) 私 *si*¹ ‘private, secret, illegal, illicit’: 私營 *si*¹*ying*² [private + to operate] ‘to privately run (a business)’; 私訪 *si*¹*fang*³ [secret + to visit] ‘to travel incognito’; 私辦 *si*¹*ban*⁴ [private + to administer] ‘to administer privately’; 私語 *si*¹*yu*³ [private + to speak] ‘to say secretly, in private; to whisper’; 私通 *si*¹*tong*¹ [secret, illicit + to communicate with] ‘to have secret communication with; to have illicit intercourse with’; 私藏 *si*¹*cang*² [illegal + to keep] ‘to possess illegally’; 私宰 *si*¹*zai*³ [illegal + to slaughter, butcher] ‘to slaughter animals without government approval’; 私運 *si*¹*yun*⁴ [illegal + to transport] ‘to smuggle’; 私販 *si*¹*fan*⁴ [illegal + to sell] ‘to smuggle, traffic in contraband goods’; 私製 *si*¹*zhi*⁴ [illegal + to make, manufacture] ‘to manufacture illegally’; 私吞 *si*¹*tun*¹ [illicit + to swallow] ‘to illicitly keep for oneself’; 私奔 *si*¹*ben*¹ [illicit + to run] ‘to elope’; 私釀 *si*¹*niang*⁴ [illegal + to brew] ‘to brew liquor illegally, make moonshine’.
- (74) 密 (sometimes 祕) *mi*⁴ ‘secretly’: 祕傳 *mi*⁴*chuan*² [secretly + to transmit] ‘hand down as a closely guarded secret’; 密告 *mi*⁴*gao*⁴ [secretly + to inform] ‘to secretly inform on/of’; 密報 *mi*⁴*bao*⁴ [secretly + to report] ‘to submit in a secret report’; 密商 *mi*⁴*shang*¹ [secretly + to confer] ‘to confer with secretly’; 密談 *mi*⁴*tan*² [secretly + to talk] ‘to hold secret talks’; 密電 *mi*⁴*dian*⁴ [secretly + to cable] ‘to send a cable secretly’; 密令 *mi*⁴*ling*⁴ [secretly + to order] ‘to secretly order’.
- (75) 暗 *an*⁴ ‘dark, secretly’: 暗藏 *an*⁴*cang*² [secretly + to hide] ‘to secretly hide away’; 暗算 *an*⁴*suan*⁴ [secretly + to calculate] ‘to plot secretly against someone’; 暗示 *an*⁴*shi*⁴ [secretly + to show] ‘to imply, insinuate, hint’; 暗殺 *an*⁴*sha*¹ [secretly + to kill] ‘to assassinate’; 暗喜 *an*⁴*xi*³ [secretly + to be happy] ‘to be secretly happy’; and 暗笑 *an*⁴*xiao*⁴ [secretly + to laugh] ‘to laugh up one’s sleeve, to laugh to oneself’. The analytic form used in syntactic constructions is 暗地 *an*⁴*di*⁴ or 暗地裏 *an*⁴*di*⁴*li*³ [dark + ground + inside], e.g. 他暗地裏想... *ta*¹ *an*⁴*di*⁴*li*³ *xiang*³ ‘He secretly thought that...’.
- (76) 偷 *tou*¹ ‘to steal, to do s.t. surreptitiously’; this prefix corresponds to the syntactic form 偷偷的(地) *tou*¹*tou*¹*de* + V, a common expression meaning ‘to do s.t. surreptitiously’, e.g. 他偷偷的告訴我... *ta*¹ *tou*¹*tou*¹*de* *gao*⁴*su*⁴ *wo*³... ‘He secretly told me that...’; of the various prefixes indicating surreptitious action, 偷 *tou*¹ is the most common and productive – formations with 偷 *tou*¹ seem to have almost unlimited productivity – and most likely to be reexpanded into its analytic form for

use in unbound form; 竊 *qie*⁴ and 盜 *dao*⁴ (below) do not have similar unbound expansions: 偷看 *tou*¹*kan*⁴ [to steal + to look], ‘to peep, to steal a glance, to look at surreptitiously’; 偷聽 *tou*¹*ting*¹ [to steal + to listen] ‘to eavesdrop’; 偷笑 *tou*¹*xiao*⁴ ‘to laugh secretly, up one’s sleeve’; 偷用 *tou*¹*yong*⁴ [to steal + to use] ‘to use without the permission or knowledge of another’; 偷換 *tou*¹*huan*⁴ [to steal + to exchange] ‘to secretly exchange one thing for another’; 偷跑 *tou*¹*pao*³ [to steal + to run] ‘to jump the gun, to run before the signal’.

- (77) 竊 *qie*⁴ ‘to pilfer, steal, secretly, surreptitiously’: 竊聽 *qie*⁴*ting*¹ [to pilfer + to listen] ‘to eavesdrop, bug with electronic equipment’, similar in meaning to 偷聽 *tou*¹*ting*¹ [to steal + to listen] ‘to eavesdrop’; 竊笑 *qie*⁴*xiao*⁴ [to pilfer + to laugh], a more literary way of saying 偷笑 *tou*¹*xiao*⁴ [to steal + to laugh] ‘to laugh secretly, up one’s sleeve’.
- (78) 盜 *dao*⁴ ‘to rob’: 盜獵 *dao*⁴*lie*⁴ [to rob + to hunt] ‘to poach’; 盜用 *dao*⁴*yong*⁴ [to rob + to use] ‘to misappropriate’; 盜刷 *dao*⁴*shua*¹ [to rob + to swipe (a magnetic-strip or chip card)] ‘to charge s.t. to a stolen credit card’; 盜伐 *dao*⁴*fa*² [to rob + to lumber] ‘to poach lumber, cut lumber illegally’.

2.1.8.3 Manner and attitude: Actions done recklessly

- (79) 濫 *lan*⁴ ‘to to s.t. to excess, indiscriminately’: 濫墾 *lan*⁴*ken*³ [immoderately + to reclaim (land)] ‘to level and reclaim land immoderately’; 濫伐 *lan*⁴*fa*² [immoderately + to cut down trees] ‘to overlumber, to denude a forest’; 濫污 *lan*⁴*wu*¹ [indiscriminately + to pollute] ‘to pollute indiscriminately’; 濫捕 *lan*⁴*bu*³ [indiscriminately + to catch (fish)] ‘to overfish’; 濫用 *lan*⁴*yong*⁴ [immoderately + to use] ‘to abuse, to misuse’; 濫交 *lan*⁴*jiao*¹ [indiscriminately + to make friends] ‘to make friends indiscriminately’.
- (80) 亂 *luan*⁴ ‘in an uncontrolled way, recklessly, indiscriminately, arbitrarily, rashly’; this morpheme is also often used in syntactic constructions, in which it has almost unlimited productivity, though it does also bond to verb morphemes to form compound verbs: 亂跑 *luan*⁴*pao*³ [uncontrolled + to run] ‘to run around all over the place’; 亂來 *luan*⁴*lai*² [uncontrolled + to come] ‘to act recklessly’; 亂搞 *luan*⁴*gao*³ ‘to act recklessly’; 亂加 *luan*⁴*jia*¹ [arbitrarily + to add] ‘to arbitrarily impose’; 亂講 *luan*⁴*jiang*³ or 亂說 *luan*⁴*shuo*¹ [uncontrolled + to talk] ‘to talk nonsense’; 亂翻 *luan*⁴*fan*¹ [recklessly + to rummage] ‘to rummage through recklessly’; 亂動 *luan*⁴*dong*⁴ [recklessly + to touch] ‘to tamper with’; 亂彈 *luan*⁴*tan*²

- [carelessly + to pluck, play] ‘to play a plucked instrument any old way’;
亂吃 *luan⁴chi¹* [indiscriminately + to eat] ‘to eat indiscriminately’.
- (81) 胡 *hu²* ‘recklessly, without principle’: 胡搞 *hu²gao³* [recklessly + to mess around] or 胡作 *hu²zuo⁴* [recklessly + to do] ‘to do s.t. recklessly, without knowing what one is doing’; 胡說 *hu²shuo¹* [recklessly + to say] ‘to talk nonsense’; 胡扯 *hu²che³* [recklessly + to pull] ‘to tell a tall tale’; 胡吹 *hu²chui¹* ‘to tell a fish (or ‘cock and bull’) story, tall tale’.
- (82) 瞎 *xia¹* ‘blindly, without knowing what one is doing, unprincipled’: 瞎說 *xia¹shuo¹* [blindly + to say] ‘to say things one knows are not true’; 瞎忙 *xia¹mang²* [blindly + to be busy] ‘to bustle about busily, to be too busy to think’; 瞎鬧 *xia¹nao⁴* [blindly + to make a ruckus] ‘to raise a ruckus without constraint’; 瞎抓 *xia¹zhua¹* [blindly + to grasp] ‘to grab at anything’; 瞎扯 *xia¹che³* [blindly + to pull] ‘to tell a tall tale’; 瞎吹 *xia¹chui¹* [blindly + to blow] ‘to boast shamelessly’; 瞎闖 *xia¹chuang³* [blindly + to crash] ‘to crash (e.g. a party); to blindly run into’; 瞎掰 *xia¹bai¹* [blindly + to talk nonsense] ‘to talk nonsense, say whatever comes into one’s head’.
- (83) 盲 *mang²* ‘blindly, rashly’, a near synonym of (16) 瞎 *xia¹*: 盲從 *mang²cong²* [blindly + to follow] ‘to follow blindly’; 盲動 *mang²dong⁴* [rashly + to move] ‘to do s.t. rashly’; 盲幹 *mang²gan⁴* [rashly + to do] ‘to act rashly’.
- (84) 迷 *mi²* ‘confused, lost, dazed’: 迷戀 *mi²lian⁴* [lost + to be in love with] ‘to be infatuated with’; 迷失 *mi²shi¹* [confused + to lose] ‘to lose (e.g. one’s direction, one’s way)’; 迷瞪 *mi²deng⁴* [dazed + to stare] ‘to stare at dazedly’; 迷信 *mi²xin⁴* [confused + to believe] ‘to hold superstitious beliefs’.

2.1.8.4 Further prefixes of manner and attitude

- (85) 明 *ming²* ‘clear(ly), explicitly’ (contrast with 暗 *an⁴* ‘dark, secretly’): 明說 *ming²shuo¹* [clearly + to say] ‘to say explicitly’; 明示 *ming²shi⁴* [clearly + to show] ‘to show explicitly’; 明知 *ming²zhi¹* [clearly + to know] ‘to know full(y) well’.
- (86) 公 *gong¹* ‘public(ly)’: 公布 *gong¹bu⁴* [public + to spread] ‘to announce’; 公開 *gong¹kai¹* [public + to open] ‘to make public’; 公認 *gong¹ren⁴* [public + to recognize] ‘to (publicly) acknowledge’; 公證 *gong¹zheng⁴* [publicly + to verify] ‘to notarize’; (公事)公辦 (*gong¹shi⁴)gong¹ban⁴* (public + matter) [publicly + to process] ‘to do (government/company/official business) according to the book’.

- (87) 默 *mo*⁴ ‘silently, tacitly’: 默讀 *mo*⁴*du*² or 默念 *mo*⁴*nian*⁴ [silently + to read] ‘to read to oneself, read silently’; 默算 *mo*⁴*suan*⁴ [silently + to calculate] ‘to calculate in one’s head’, synonym of 心算 *xin*¹*suan*⁴; 默許 *mo*⁴*xu*³ [tacitly + to allow] ‘to give tacit permission’; 默認 *mo*⁴*ren*⁴ [tacitly + to admit] ‘to tacitly admit’; 默禱 *mo*⁴*dao*³ [silently + to pray] ‘to pray silently’; 默坐 *mo*⁴*zuo*⁴ [silently + to sit] ‘to meditate’; 默想 *mo*⁴*xiang*³ [silently + to think] ‘to reflect on deeply’; 默記 *mo*⁴*ji*⁴ [silently + to remember] ‘to memorize silently’; 默示 *mo*⁴*shi*⁴ [silent + to show] ‘to give someone a subtle signal to do s.t.’; 默寫 *mo*⁴*xie*³ or 默書 *mo*⁴*shu*¹ [silently + to write] ‘to write from memory (as in a test)’; 默哀 *mo*⁴*ai*¹ [silently + to mourn] ‘to offer a silent tribute to someone’.
- (88) 靜 *jing*⁴ ‘quietly, peacefully’: 靜坐 *jing*⁴*zuo*⁴ [quietly + to sit] ‘to sit quietly, meditate, join a sit-in protest’; 靜思 *jing*⁴*si*¹ [quietly + to think] ‘to ponder quietly’; 靜聽 *jing*⁴*ting*¹ [quietly + to listen] ‘to listen to quietly’; 靜候 *jing*⁴*hou*⁴ [quietly + to wait] ‘to wait quietly’; 靜觀 *jing*⁴*guan*¹ [quietly + to watch] ‘to watch quietly’; 靜養 *jing*⁴*yang*³ [quietly + to cultivate] ‘to rest quietly and recuperate, convalesce’.
- (89) 驚 *jing*¹ ‘with surprise’: 驚動 *jing*¹*dong*⁴ [startling + to disturb] ‘to alert, startle, put others to trouble’; 驚呼 *jing*¹*hu*¹ or 驚叫 *jing*¹*jiao*⁴ [startled + to cry out] ‘to cry out in alarm’; 驚嘆 *jing*¹*tan*⁴ [startled + to sigh] ‘to exclaim, marvel at’; 驚醒 *jing*¹*xing*³ [startled + to awaken] ‘to awaken with a start’.
- (90) 怒 *nu*⁴ ‘angry, angrily, wildly’; expressions using this prefix tend to be relatively literary: 怒吼 *nu*⁴*hou*³ [angrily + to roar] ‘to roar, howl (ferociously)’; 怒視 *nu*⁴*shi*⁴ [angrily + to look] ‘to glare, scowl, glower at’; 怒斥 *nu*⁴*chi*⁴ [angrily + to rebuke] ‘to rebuke angrily, renounce indignantly’; 怒放 *nu*⁴*fang*⁴ ‘to blossom wildly’.
- (91) 威 *wei*¹ ‘by force’: 威脅 *wei*¹*xie*² [by force + to coerce] ‘to threaten’; 威逼 *wei*¹*bi*¹ or 威迫 *wei*¹*po*⁴ [by force + to force] ‘to threaten by force, coerce, intimidate’; 威嚇 *wei*¹*he*⁴ [by force + to threaten] ‘to intimidate, bully’; 威懾 *wei*¹*she*⁴ [by force + to fear, be awed] ‘to terrorize with military power’.
- (92) 實 *shi*² ‘solid, true, actual’ (opposite of 虛 *xu*¹ ‘empty, false, virtual’): 實報 *shi*²*bao*⁴ [actual + to report] ‘to report actual expenses’; 實幹 *shi*²*gan*⁴ [actual + to work] ‘to do solid work’; 實踐 *shi*²*jian*⁴ [actual + to tread] ‘to put into actual practice’; 實習 *shi*²*xi*² [actual + to practice] ‘to do an internship, practicum’; 實現 *shi*²*xian*⁴ [actual + to appear] ‘to realize (e.g. a dream)’; 實行 *shi*²*xing*² [actual + to do] ‘to put into practice’; 實施

- shi*²*shi*¹ [actual + to do] ‘to implement’; 實說 *shi*²*shuo*¹ [actual + to say] ‘to tell the truth’; 實驗 *shi*²*yan*⁴ [actual + to test] ‘to do an experiment’.
- (93) 善 *shan*⁴ ‘good, well’: 善待 *shan*⁴*dai*⁴ ‘to treat well, kindly’; 善處 *shan*⁴*chu*³ ‘to treat discretely, conduct oneself well’.
- (94) 優 *you*¹ ‘good, favorable, preferred’: 優待 *you*¹*dai*⁴ [favorable + to treat] or 優遇 *you*¹*yu*⁴ [favorable + to meet] (more often 禮遇 *li*³*yu*⁴) ‘to give preferred treatment, priority’.
- (95) 歡 *huan*¹ ‘joyfully’: 歡迎 *huan*¹*ying*² [joyfully + to receive] ‘to welcome’; 歡唱 *huan*¹*chang*⁴ [joyfully + to sing] ‘to sing out joyfully’; 歡呼 *huan*¹*hu*¹ [joyfully + to shout] ‘to cheer’; 歡聚 *huan*¹*ju*⁴ [joyfully + to gather] ‘to join in a joyful gathering’; 歡度 *huan*¹*du*⁴ [joyfully + to celebrate a holiday] ‘to joyfully spend (a holiday)’; 歡慶 *huan*¹*qing*⁴ [joyfully + to celebrate] ‘to joyfully celebrate’; 歡送 *huan*¹*song*⁴ [joyfully + to send off] ‘to send off s.o.’; 歡宴 *huan*¹*yan*⁴ [joyfully + to banquet] ‘to entertain s.o. at dinner at a joyful occasion’; 歡躍 *huan*¹*yao*⁴ (or *yue*⁴) [joyfully + to jump] ‘to jump for joy’.
- (96) 悲 *bei*¹ ‘sadly, in misery’: 悲泣 *bei*¹*qi*⁴ [in misery + to weep] ‘to weep miserably’; 悲啼 *bei*¹*ti*² [sadly + to crow] ‘to sadly crow’; 悲哽 *bei*¹*geng*³ [sadly + to sob] ‘to sob in misery’.
- (97) 冷 *leng*³ ‘cold’ (metaphorical): 冷笑 *leng*³*xiao*⁴ [cold (metaphorical) + to laugh] ‘to laugh grimly, sardonically’; 冷落 *leng*³*luo*⁴ [cold + to fall] ‘to ignore and isolate s.o.’.
- (98) 閒 or 閑 *xian*² ‘idly, leisurely’: 閒談 *xian*²*tan*² [idly + to talk] ‘to chitchat’; 閒坐 *xian*²*zuo*⁴ [idly + to sit] ‘to sit idly’; 閒聊 *xian*²*liao*² [idly + to chat] ‘to chat leisurely’; 閒逛 *xian*²*guang*⁴ [idly + to wander about] ‘to wander about idly, walk and look around’; 閒話 *xian*²*hua*⁴ (as verb) [idly + to converse] ‘to chat leisurely’; 閒置 *xian*²*zhi*⁴ [idly + to be sitting in a place] ‘to leave unused’.
- (99) 傻 *sha*³ ‘foolishly, inflexibly, dazedly’: 傻等 *sha*³*deng*³ [foolishly + to wait] ‘to wait foolishly, interminably’; 傻看 *sha*³*kan*⁴ ‘to stare at blankly’; 傻笑 *sha*³*xiao*⁴ [foolishly + to laugh] ‘to laugh in a ridiculous way’.

2.1.9 Honorifics

There is a subcategory of “manner” prefixes which function as honorifics; these can be used straightforwardly in contexts where politeness is desirable or required, but also sometimes ironically, as when one is being overpolite for humorous effect or to be sarcastic. These expressions tend to be relatively

conventionalized and frozen, and some of the prefixes are borrowed from other parts of speech and functions.

- (100) 榮 *rong*² ‘with honor’; an honorific prefix: 榮獲 *rong*²*huo*⁴ [with honor + to receive, obtain] ‘to receive with great honor’; 榮退 *rong*²*tui*⁴ [with honor + to withdraw] ‘to retire with great honor’; 榮升 *rong*²*sheng*¹ [with honor + to ascend] ‘to be promoted with honor’; 榮歸 *rong*²*gui*¹ [with honor + to return] ‘to return in glory’; 榮任 *rong*²*ren*⁴ [with honor + to hold a post] ‘to be honored with a post’.
- (101) 敬 *jing*⁴ ‘with respect, respectfully’; this differs from the preceding in that it reflects a respectful attitude on the part of the speaker rather than the honor on its own terms of the person addressed or talked about: 敬請 *jing*⁴*qing*³ or 敬邀 *jing*⁴*yao*¹ [with respect + to invite] ‘to respectfully invite’; 敬告 *jing*⁴*gao*⁴ [with respect + to inform] ‘to respectfully inform’; 敬賀 *jing*⁴*he*⁴ [with respect + to congratulate] ‘to respectfully congratulate’; 敬禮 *jing*⁴*li*³ [with respect + to salute] ‘to respectfully salute’; 敬謝 *jing*⁴*xie*⁴ [with respect + to thank] ‘to respectfully thank’; 敬贈 *jing*⁴*zeng*⁴ [with respect + to give as a gift] ‘to respectfully give, present s.o. with’; 敬祝 *jing*⁴*zhu*⁴ [with respect + to wish] ‘to respectfully wish’; 敬挽 *jing*⁴*wan*³ [with respect + to pull, lament] ‘to respectfully offer condolences’.
- (102) 高 *gao*¹ ‘high, lofty, honored’; more often used as an honorific prefix for nouns: 高就 *gao*¹*jiu*⁴ [high + to approach, achieve] ‘to accept a higher, serve in a high position’.
- (103) 惠 *hui*⁴ ‘favor, kind(ly), gracious(ly)’: 惠存 *hui*⁴*cun*² [kindly + to keep] ‘to please (“kindly”) keep (e.g. a photograph)’; 惠允 *hui*⁴*yun*³ [kindly + to permit] ‘to be so kind as to permit one (to do s.t.)’; 惠賜 *hui*⁴*ci*⁴ [kindly + to bestow] ‘to kindly bestow, give (a vote, suggestions)’.
- (104) 拜 *bai*⁴ ‘to do obeisance, show respect’: This honorific is somewhat similar to 敬 *jing*⁴ ‘with respect, respectfully’; it suggests doing obeisance to honor another, and is prefixed to verbs to show respect by the speaker for the addressee. Technically it should more properly belong in section 2.3, Conjunctive subordination, since 拜 *bai*⁴ is a backgrounded action to the main action expressed in V2; however it seems to have become bleached, with little sense of actually doing a physical gesture of obeisance, and has come to function as an ordinary modifying prefix. Examples: 拜托 *bai*⁴*tuo*¹ [to show respect + to entrust] ‘to trouble s.o. to do s.t. for one’; 拜讀 *bai*⁴*du*² [to show respect + to read] ‘to respectfully read someone’s writing’; 拜聆 *bai*⁴*ling*² [to show respect + to listen] ‘to

have the honor of listening to'; 拜領 *bai⁴ling³* [to show respect + to pick up, accept] or 拜賜 *bai⁴ci⁴* [to show respect + to endow with] 'to have the pleasure of receiving (a gift), to receive with thanks'; 拜識 *bai⁴shi⁴* [to show respect + to become acquainted with] 'to have the pleasure of making s.o.'s acquaintance'; 拜賀 *bai⁴he⁴* [to show respect + to congratulate] 'to send one's congratulations'; 拜訪 *bai⁴fang³* [to show respect + to visit] 'to call on, pay a visit to'; 拜會 *bai⁴hui⁴* [to show respect + to visit] 'to pay a formal call on (often used in diplomacy)'; 拜見 *bai⁴jian⁴* [to show respect + to visit, see] or 拜候 *bai⁴hou⁴* [to show respect + to wait on] or 拜望 *bai⁴wang⁴* [to show respect + to look at] 'to pay a formal visit to'; even more formally, one can say: 拜謁 *bai⁴ye⁴* 'to pay a formal visit to'; 拜別 *bai⁴bie²* [to show respect + to take leave] 'to respectfully take one's leave.'

- (105) 奉 *feng⁴* 'to give or present with respect; respectfully': Though technically used in the following examples as a matrix verb meaning 'to give or present with respect', 奉 *feng⁴* has largely evolved into a simple honorific verbal prefix expressing deference to the recipient of the action of the V2, the literal meaning of e.g. 奉還 *feng⁴huan²* [to respectfully give + to return] 'to respectfully return s.t.' is something like 'I respectfully offer this returning to you'. 奉 *feng⁴* as a free morpheme is still alive in elevated language, e.g. 奉茶 *feng⁴cha²* 'to respectfully offer tea'. Compounds with 奉 *feng⁴* as an initial element perhaps currently constitute a borderline case between prefixed and embedded compound verbs. Examples: 奉告 *feng⁴gao⁴* [to respectfully give + to tell] 'to (respectfully) inform', sometimes used a bit ironically as in 不可奉告 *bu⁴ke³feng⁴gao⁴* [not + can + to bestow + to inform] 'no comment'; 奉陪 *feng⁴pei²* [to respectfully + to accompany] 'to respectfully accompany s.o.', sometimes used tongue-in-cheek as in 恕不奉陪 *shu⁴bu⁴feng⁴pei²* 'Forgive me for not accompanying you any longer'; 奉送 *feng⁴song⁴* or 奉贈 *feng⁴zeng⁴* [to respectfully give + to give as a gift] 'to respectfully give s.o. s.t.'; 奉迎 *feng⁴ying²* [to respectfully give + to receive] 'to respectfully welcome'.

2.1.10 Intensity, degree

- (106) 痛 *tong⁴* 'in pain, severely, violently, extremely, deeply, bitterly': 痛感 *tong⁴gan³* [sorely + to feel] 'to keenly feel' (cf. early English *sore* meaning 'very', as in *sore afraid*); 痛哭 *tong⁴ku¹* [violently + to cry] 'to cry bitterly'; 痛悼 *tong⁴dao⁴* [pained + to mourn] 'to mourn with deep

grief'; 痛罵 *tong⁴ma⁴* [violently + to scold] 'to severely scold, roundly curse' (a similar compound is: 臭罵 *chou⁴ma⁴* [stinky + to scold] 'to give s.o. a severe ['stinky'] scolding'); 痛責 *tong⁴ze²* [severely + to rebuke] 'severely rebuke, castigate'; 痛斥 *tong⁴chi⁴* [severely + to denounce] 'to severely attack, denounce'; 痛惡 *tong⁴wu⁴* [bitterly + to despise] 'to bitterly detest, abhor'; 痛打 *tong⁴da³* [violently + to beat] 'to beat someone soundly'; 痛擊 *tong⁴ji²* [violently + to strike] 'to deal a violent blow to'; 痛陳 *tong⁴chen²* [sorely + to state] 'to state in strong terms'; 痛悔 *tong⁴hui³* [bitterly + to regret] 'to regret deeply'; 痛惜 *tong⁴xi²* [deeply + to regret] 'to deeply regret, deplore'; 痛恨 *tong⁴hen⁴* [bitterly + to hate] 'to utterly despise, hate'; 痛飲 *tong⁴yin³* [extremely + to drink] 'to drink one's fill'.

- (107) 強 *qiang²* 'strong, powerful, by force' (強 *qiang²* in the meaning of 'to force' as opposed to 'strong' is occasionally though not consistently pronounced in the third tone *qiang³*): 強行 *qiang²xing²* [by force + to carry out] 'to force'; 強暴 *qiang²bao⁴* and 強奸 *qiang²jian¹* [by force + to violate] 'to rape'; 強記 *qiang²ji⁴* [force + to memorize] 'to force oneself to learn by rote'; 強調 *qiang²diao⁴* [strong + to intone] 'to emphasize'; 強攻 *qiang²gong¹* [force + to attack] 'to take by storm'; 強加 *qiang²jia¹* [by force + to impose] 'to forcibly impose on'; 強令 *qiang²ling⁴* [force + to order] 'to issue arbitrary orders'; 強似 *qiang²si⁴* [strongly + to resemble] 'to strongly resemble'; 強襲 *qiang²xi²* [force + to attack] 'to take by storm'; 強壓 *qiang²ya¹* [force + to oppress] 'to suppress, stifle'; 強佔 *qiang²zhan⁴* [force + to occupy] 'to forcibly occupy'; 強制 *qiang²zhi⁴* [force + to control] 'to force'; 強辯 *qiang²bian⁴* [force + to argue] 'to argue obstinately'.
- (108) 硬 *ying⁴* 'hard, insistently, inflexibly, persistently, forcibly, obstinately': 硬要 *ying⁴yao⁴* [insistently + to require] 'to insist on in a demanding way'; 硬說 *ying⁴shuo¹* [insistently + to say] 'to say insistently'; 硬撐 *ying¹cheng¹* [insistently + to hold on] 'to hang on persistently'; 硬挺 *ying⁴ting³* [insistently + to endure] 'to hold out with all one's might'; 硬幹 *ying⁴gan⁴* [insistently + to work] 'to work relentlessly, with determination'; 硬逼 *ying⁴bi¹* [insistently + to force] 'to insistently force'; 硬湊 *ying⁴cou⁴* [insistently + to put together] 'to pull together in a forced manner'; 硬行 *ying⁴xing²* [insistently + to go] 'to implement forcibly'; 硬加 *ying⁴jia⁴* [insistently + to add] 'to forcibly add'; 硬頂 *ying⁴ding³* [insistently + to push against with one's head] 'to resist stubbornly'; 硬拼 *ying⁴pin¹* [insistently + to fight] 'to fight recklessly'.

- (109) 堅 *jian*¹ ‘firmly, insistently’: 堅稱 *jian*¹*cheng*¹ [firmly + to claim] ‘to claim insistently’; 堅持 *jian*¹*chi*² [firmly + to maintain] ‘to insist’; 堅執 *jian*¹*zhi*² [firmly + to hold] ‘to hold fast to one’s views’; 堅守 *jian*¹*shou*³ [firmly + to hold] ‘to hold fast to’; 堅信 *jian*¹*xin*⁴ [firmly + to believe] ‘to firmly believe’.
- (110) 苦 *ku*³ ‘bitterly, arduously, painstakingly’: 苦等 *ku*³⁽²⁾*deng*³ [bitterly + to wait] ‘to wait fruitlessly and in misery’; 苦守 *ku*³⁽²⁾*shou*³ [bitterly + to stand guard] ‘to hold watch for a long time, with hardship’; 苦練 *ku*³*lian*⁴ [bitterly + to practice] ‘to practice long and hard’; 苦幹 *ku*³*gan*⁴ [bitterly + to work] ‘to work at doggedly’; 苦笑 *ku*³*xiao*⁴ [bitterly + to laugh] ‘to laugh sardonically’; 苦學 *ku*³*xue*² [bitterly + to study] ‘to study very hard’; 苦想 *ku*³⁽²⁾*xiang*³ [bitterly + to think] ‘to think hard’; 苦戰 *ku*³*zhan*⁴ [bitterly + to do battle] ‘to wage bitter battle’.
- (111) 毒 *du*² ‘poison, savagely’: 毒打 *du*²*da*³ ‘to beat savagely’.
- (112) 切 *qie*⁴ ‘earnestly’: 切盼 *qie*⁴*pan*⁴ [earnestly + to hope] ‘to earnestly hope, expect’; 切記 *qie*⁴*ji*⁴ [earnestly + to remember] ‘to be sure and remember’; 切忌 *qie*⁴*ji*⁴ [earnestly + to avoid] ‘to be sure to avoid’.
- (113) 確 *que*⁴ ‘with certainty, surely, certainly’: 確保 *que*⁴*bao*³ [with certainty + to protect] ‘to ensure’; 確定 *que*⁴*ding*⁴ [with certainty + to establish] ‘to make sure’; 確立 *que*⁴*li*⁴ [with certainty + to establish] ‘to firmly establish’; 確認 *que*⁴*ren*⁴ [with certainty + to recognize] ‘to confirm’; 確信 *que*⁴*xin*⁴ [with certainty + to believe] ‘to be confident of s.t.’; 確證 *que*⁴*zheng*⁴ [with certainty + to prove] ‘to prove with certainty’; 確守 *que*⁴*shou*³ [with certainty + to protect] ‘to staunchly defend’.
- (114) 熟 *shou*² (or *shu*²) ‘familiar, thoroughly, well-versed’: 熟讀 *shou*²*du*² [well-versed + to read] ‘to read thoroughly’; 熟記 *shou*²*ji*⁴ [well-versed + to remember] ‘to commit thoroughly to memory’; 熟練 *shou*²*lian*⁴ [well-versed + to practice] ‘to practice thoroughly’ (usually used as an adjective); 熟睡 *shou*²*shui*⁴ [thoroughly + to sleep] ‘to sleep soundly’; 熟思 *shou*²*si*¹ [thoroughly + to think] ‘to think deeply’; 熟知 *shou*²*zhi*¹ [thoroughly + to know] ‘to know well’; 熟信 *shou*²*xin*⁴ [thoroughly + to trust] ‘to trust deeply’; 熟悉 *shou*²*xi*¹ [thoroughly + to know] ‘to be very familiar with’; 熟諳 *shou*²*an*¹ [thoroughly + to know] ‘to know well’.
- (115) 暢 *chang*⁴ ‘smooth, unimpeded’; some productivity: 暢飲 *chang*⁴*yin*³ [unimpeded + to drink] ‘to drink freely’; 暢談 *chang*⁴*tan*² or 暢敘 *chang*⁴*xu*⁴ [freely + to chat] ‘to chat to one’s heart’s content’; 暢想 *chang*⁴*xiang*³ [unimpeded + to think] ‘to give free rein to one’s thoughts’; 暢行 *chang*⁴*xing*² [unimpeded + to pass through] ‘to pass through’.

- unimpeded'; 暢遊 *chang⁴you²* [unimpeded + to wander] 'to travel about freely'.
- (116) 漫 *man⁴* 'overflowing, freely, aimlessly, unrestrained': 漫話 *man⁴hua⁴* or 漫談 *man⁴tan²* [freely + to chat] 'to chat freely'; 漫滅 *man⁴mie⁴* [unrestrained + to wipe out] 'to wear away, obliterate'; 漫遊 *man⁴you²* [freely + to wander] 'to go on a pleasure trip'.
- (117) 熱 *re⁴* 'hot, ardent, passionate': 熱愛 *re⁴ai⁴* [hot + to love] 'to love ardently'; 熱望 *re⁴wang⁴* [ardently + to hope] 'to ardently hope'; 熱戀 *re⁴lian⁴* [ardently + to be in love with] 'to be passionately in love with'.
- (118) 死 *si³* 'dead, death, inflexibly, mechanically': 死等 *si³⁽²⁾deng³* [dead + to wait] 'to wait endlessly'; 死幹 *si³gan⁴* [dead + to work, perform] 'to work like crazy'; 死記 *si³ji⁴* or 死背 *si³bei⁴* [dead + to memorize] 'to memorize by rote, mechanically, verbatim, without comprehension'; 死守 *si³⁽²⁾shou³* [death + to defend] 'to defend to the death, rigidly adhere to'.
- (119) 大 *da⁴* 'large, vigorously': 大幹 *da⁴gan⁴* [vigorously + to work] 'to go all out, work energetically'; 大有 *da⁴you³* [big + to have] 'to have in great degree'; 大笑 *da⁴xiao⁴* [large + to laugh] 'to laugh loudly'; 大罵 *da⁴ma⁴* [large + to scold] 'to scold soundly'; 大鬧 *da⁴nao⁴* [greatly + to make a ruckus] 'to make a big ruckus'; 大吃 *da⁴chi¹* [big + to eat] 'to feast, pig out'; also: 大吃大喝 *da⁴chi¹da⁴he¹* [(big + to eat) + (big + to drink)]. Though verbs constructed with 大 *da⁴* 'large' do more or less fit into this verb type, 大 *da⁴* is often more analytic, like 白 *bai²* 'in vain', and frequently occurs in phrases with classifiers like 大吃一頓 *da⁴chi¹yi¹dun⁴* 'to have a huge meal'. 大 *da⁴* 'greatly' + V also has the expansion: 大大的(地) *da⁴da⁴de* + V 'to do s.t. in a big way'.
- (120) 小 *xiao³* 'small, under-': 小看 *xiao³kan⁴* [small + to view] 'to underestimate'; 小瞧 *xiao³qiao²* [small + to look at] or 小視 *xiao³shi⁴* [small + to look at] 'to look down on, to slight, to underestimate'; 小解 *xiao³⁽²⁾jie³* [small + to relieve] 'to pass water, urinate'; 小跑 *xiao³⁽²⁾pao³* [small + to run] 'to jog'; 小憩 *xiao³qi⁴* [little + to relax] 'to take a little rest'; 小睡 *xiao³shui⁴* [small + to sleep] 'to take a short nap'. Like 大 *da⁴* + V, 小 *xiao³* + V is also often followed by a verbal classifier or adverbial modifier 小睡一下 *xiao³shui⁴yi¹⁽²⁾xia⁴* or 小睡片刻 *xiao³shui⁴pian⁴ke⁴* 'to nap for a while'.
- (121) 細 *xi⁴* 'finely, closely, in detail, softly': 細讀 *xi⁴du²* [closely + to read] 'to read closely'; 細說 *xi⁴shuo¹* [in detail + to say] 'to tell in detail'; 細別 *xi⁴bie²* [finely + to distinguish] 'to make fine distinctions'; 細分 *xi⁴fen¹* [finely + to distinguish] 'to make fine distinctions'; 細看 *xi⁴kan⁴* [closely

- + to look at] ‘to look at closely’; 細想 *xi⁴xiang³* [finely + to think] ‘to think through carefully’; 細聽 *xi⁴ting¹* [closely + to listen] ‘to listen closely’; 細語 *xi⁴yu³* [softly + to speak] ‘to speak softly’.
- (122) 高 *gao¹* ‘high, lofty’; sometimes used as an honorific: 高昂 *gao¹ang²* [high + to raise] ‘to hold high’; 高估 *gao¹gu¹* [high + to estimate] ‘to overestimate’; 高歌 *gao¹ge¹* [high + to sing] ‘to sing heartily’; 高呼 *gao¹hu¹* [high + to call out] ‘cheer’; 高喚 *gao¹huan⁴* [high + to shout] or 高喊 *gao¹han³* [high + to shout] ‘to call out, shout loudly’; 高舉 *gao¹ju³* [high + to raise] ‘to raise high, aloft’; 高漲 *gao¹zhang³* [high + to swell] ‘to rise’; 高唱 *gao¹chang⁴* [high + to sing] a. ‘to sing spiritedly’; b. ‘to talk glibly about’; 高升 *gao¹sheng¹* [high + to ascend] ‘to be promoted’; 高攀 *gao¹pan¹* [high + to climb] ‘to climb the social ladder’; 高談 *gao¹tan²* [high + to talk] and 高論 *gao¹lun⁴* [high + to discuss] ‘to engage in lofty talk’; 高臥 *gao¹wo⁴* [high + to lie down] a. ‘to sleep with one’s head on a high pillow’; b. ‘to live in seclusion’ (metaphorical).
- (123) 低 *di¹* ‘low, under-’: 低估 *di¹gu¹* [low + to estimate] ‘to underestimate’; 低垂 *di¹chui²* [low + to hang] ‘to hang low, droop’; there are not nearly as many collocations with 低 *di¹* ‘low, under-’ as there are with 高 *gao¹* ‘high’, both literal and metaphorical.
- (124) 長 *chang²* ‘long’: 長嘆 *chang²tan⁴* [long + to sigh] ‘to sigh deeply’; 長傳 *chang²chuan²* [long + to transmit] ‘to make a long pass (in ball games)’.
- (125) 重 *zhong⁴* ‘heavy, heavily’: 重視 *zhong⁴shi⁴* [heavily + to view] ‘to consider important’; 重懲 *zhong⁴cheng²* [heavily + to punish] ‘to punish heavily’; 重辦 *zhong⁴ban⁴* [heavily + to punish] ‘to punish severely’; 重酬 *zhong⁴chou²* [heavily + to reward] ‘to reward heavily’; 重創 *zhong⁴chuang¹* [heavily + to injure] ‘to inflict heavy casualties on’; 重讀 *zhong⁴du²* [strongly + to read] ‘to stress’; 重用 *zhong⁴yong⁴* [heavily + to use] ‘to place in an important position’.
- (126) 輕 *qing¹* ‘lightly (in many senses)’: 輕看 *qing¹kan⁴* [lightly + to look] ‘to look down on someone’; 輕視 *qing¹shi⁴* [lightly + to look] ‘to look down on someone’; 輕取 *qing¹qu³* [lightly + to seize] ‘to claim an easy victory’; 輕放 *qing¹fang⁴* [lightly + to put down] ‘to set down lightly’; 輕信 *qing¹xin⁴* [lightly + to believe] ‘to easily believe’.
- (127) 微 *wei²* ‘small, tiny, fine, a little bit, micro-; very limited distribution: 微笑 *wei²xiao⁴* [faintly + to laugh] ‘to smile’; 微調 *wei²tiao²* [finely + to adjust, tune] ‘to fine-tune’ (calqued from English).
- (128) 嚴 *yan²* ‘strictly, severely’: 嚴辦 *yan²ban⁴* or 嚴懲 *yan²cheng²* [severely + to punish] ‘to deal with, punish severely’; 嚴防 *yan²fang²*

- [strictly + to prevent] ‘to take strict precautions against’; 嚴令 *yan²ling⁴* or 嚴命 *yan²ming⁴* [strictly + to command] ‘to give strict orders’; 嚴守 *yan²shou³* [strictly + to observe] ‘to strictly observe’.
- (129) 密 *mi⁴* ‘densely, tightly’ (see also the 2.1.8.2 (8) ‘secretly’): 密封 *mi⁴feng¹* [tightly + to seal] ‘to seal tightly’; 密布 *mi⁴bu⁴* [densely + to spread over] ‘to be covered densely with’; 密植 *mi⁴zhi²* [densely + to plant] ‘to plant close together’.
- (130) 深 *shen¹* ‘deeply’: 深入 *shen¹ru⁴* [deeply + to enter] ‘to go into s.t. deeply’; 深造 *shen¹zao⁴* [deep + to build] ‘to do further study’; 深思 *shen¹si¹* [deeply + to think] ‘to ponder, think deeply about’; 深談 *shen¹tan²* [deeply + to talk] ‘to discuss in depth’; 深通 *shen¹tong¹* [deeply + to understand] ‘to have a deep understanding of’; 深信 *shen¹xin⁴* [deeply + believe] ‘to deeply believe, be confident of’; 深悉 *shen¹xi¹* [deeply + to know] ‘to know very well’; 深望 *shen¹wang⁴* [deeply + to hope] ‘to sincerely hope’.
- (131) 暴 *bao⁴* ‘suddenly, violently, sharply, excessively’: 暴增 *bao⁴zeng¹* [sharply + to increase] ‘to increase sharply’; 暴漲 *bao⁴zhang³* [sharply + to rise, swell] ‘to rise, increase sharply’; 暴跌 *bao⁴die²* [sharply + to fall] ‘to plummet’; 暴走 *bao⁴zou³* [violently + to walk away] ‘to walk away abruptly in anger or disgust’; 暴湧 *bao⁴yong³* [suddenly + to gush] ‘to suddenly gush’ (e.g. tears); 暴斃 *bao⁴bi⁴* [suddenly + to die] ‘to suddenly die’; 暴投 *bao⁴tou²* [+ to pitch] ‘to pitch wildly’ (used in baseball); 暴傳 *bao⁴chuan²* [violently + to transmit] ‘to pass, throw to another player very rapidly, wildly’ (used in baseball); one example usually occurs in a four-syllable expression: 暴飲暴食 *bao⁴yin³bao⁴shi²* [excessively + to drink + excessively + to eat] ‘to overeat and overdrink’.
- (132) 飽 *bao³* ‘full, to satiety, to an extreme’: 飽餐 *bao³can¹* or 飽食 *bao³shi²* [full + to dine] ‘to eat one’s fill at a meal’; 飽讀 *bao³du²* [full + to read] ‘to read a lot, be well read’; 飽受 *bao³shou⁴* [full + to tolerate] ‘to have one’s fill of (a bad situation)’; 飽看 *bao³kan⁴* [full + to see] ‘to take a good look at’; 飽經 *bao³jing¹* [full + to experience] ‘to have one’s fill of (experience)’.
- (133) 倍 *bei⁴* ‘doubly, twice as much’: 倍感 *bei⁴gan³* and 倍覺 *bei⁴jue⁴* [doubly + to feel] ‘to feel all the more intensely’; 倍增 *bei⁴zeng¹* and 倍漲 *bei⁴zhang³* [doubly + to increase] ‘to double’; 倍受 *bei⁴shou⁴* [doubly + to receive, suffer] ‘to receive in double measure’.
- (134) 超 *chao¹* ‘over, exceeding a limit’: 超支 *hao¹zhi¹* [over + to expend] ‘to overspend’; 超產 *chao¹chan³* [over + to produce] ‘to exceed a production

quota'; 超載 *chao¹zai⁴* [over + to carry] 'to be carrying a weight over the established limit (e.g. of trucks, elevators)'.

From the large number of categories and examples above, most of which are fairly high-frequency, it should be clear that the contextual Adverb + Verb pattern of verbal prefixing is a major complex verb template in Chinese. Contrary to the popular idea that prefixing is not a prominent morphological process in Chinese, verbal prefixing is a basic, heavily relied-on, and productive strategy of verb creation in Chinese. Productivity issues will be further discussed at the end of the chapter.

2.2 DENOMINAL ADVERB + VERB COMPOUNDS

Apparently not much research has been done on Denominal Adverb + Verb compounds as such, though some authors mention them in the context of other points. Wang (1988:508ff) calls constructions of nouns or noun phrases plus verb 關係語 *guan¹xi⁴yu³* 'relative constructions'. His focus is on expressions modifying verbs, including prepositional phrases in different parts of the sentence, so he does not single out Denominal Adverb + Verb constructions as a separate type of compound verb. His approach points to a development from more expanded analytical constructions to abbreviated disyllabic verb formations, highlighting the relationship between the two. Citing examples from Classical Chinese, Wang notes that denominal adverbs added directly onto verbs are most commonly **temporal** (e.g. 日哭 *ri⁴ku¹* [day + to cry] 'crying daily'), **locative** (e.g. 郊迎 *jiao¹ying²* [suburbs + to receive] 'to receive in the city outskirts'), and **instrumental** (e.g. 劍斬 *jian⁴zhan³* [sword + to chop] 'to chop off with a sword') in nature. Zhang (1994:215) lists several Denominal Adverb + Verb examples in passing: e.g. 巷戰 *xiang⁴zhan⁴* 'to wage a neighborhood war, urban war, street-fight', 蛇行 *she²xing²* 'to weave in and out in a snakelike manner'; he also mixed in some Denominal Adverb + Adjective examples, like 天大 *tian¹da⁴* 'as vast as the sky'. Again, no further analysis is offered. Lü (1985:25) lists a few examples, e.g. 目笑 *mu⁴xiao⁴* [eyes + to laugh] 'to laugh with one's eyes'.

Chao (1968:403) gives some good examples of compounds with Denominal Adverb + Verb composition, like 油印 *you²yin⁴* [oil + to print] 'to print (using oil-based ink)' and 風行 *feng¹xing²* [wind + to walk, to be current] 'to be popular (as a wind blowing across society)'. Chao did not further analyze his examples, but these particular two are representative of the two

main categories of Denominal Adverb + Verb formations. They are similar in composition to ordinary Adverb + Verb prefixed compound verbs, but we will categorize them separately and not call them prefixed compounds, because the first element is mainly **instrumental** or **metaphorical** in nature rather than a direct adverbial description of manner, intensity, and so on. Being nominal, the initial element in these compounds also leans considerably closer to the “content” and more idiosyncratic end of the “function-content” spectrum of morphemes that can be added before verb heads. Productivity is accordingly much lower overall than for the more purely adverbial prefixes described in the preceding sections.

2.2.1 Instrumentals

These instrumental formations describe in lexical form what material, tool, or means is used to realize the action designated by the verb. They could alternatively be realized by the syntactic construction 用 *yong*⁴ N V ‘to use N to V’ (shown after arrow):

- (1) 水洗 *shui*³⁽²⁾*xi*³ ‘to wash in water’
 e.g. 只能乾洗，不能水洗 *zhi*³ *neng*² *gan*¹*xi*³, *bu*⁴ *neng*² *shui*³⁽²⁾*xi*³
 ‘It can only be dry-cleaned, it can’t be washed in water’.
 → e.g. 用水洗 *yong*⁴ *shui*³⁽²⁾*xi*³ ‘to use water to wash’
- (2) 手寫 *shou*³⁽²⁾*xie*³ ‘to write by hand, to handwrite’
 e.g. 一切文字都不要手寫 *yi*¹⁽²⁾ *qie*⁴ *wen*²*zi*⁴ *dou*¹ *bu*⁴⁽²⁾ *yao*⁴ *shou*³⁽²⁾*xie*³
 ‘None of the words have to be handwritten’
 → 用手寫 *yong*⁴ *shou*³⁽²⁾*xie*³ ‘to use one’s hand to write’.

Sometimes the denominal adverb is used to mean ‘in the role of’ rather than ‘using X to do Y’, as in 客居 *ke*⁴*ju*¹ [guest + to reside] ‘to live as an expatriate’, or it is a locative, as in 巷戰 *xiang*⁴*zhan*⁴ [alley + to fight] ‘to engage in street fighting’. These are thus instrumentals in a very broad and loose sense of the word; the denominal adverb in many cases simply expresses some object or person that plays an important role in the context of a particular action.

English often uses a bare noun as a denominal verb: one says ‘to shoulder’. In Mandarin one would more likely use a verb compound composed of an instrumental noun plus a verb, such as 肩負 *jian*¹*fu*⁴ to ‘shoulder-carry’ responsibility. The action or actions that can be referred to with a bare

denominal verb in English are often limited to just one or a few kinds, e.g. *to hand* means only ‘to pass over to’. If we wish to specify how the hands are used to do a range of other specific actions, we can tack *hand* onto a specialized verb, as in Chinese, for example, *to hand-wash*, *to hand-paint*, *to hand-knit*, *to hand-stamp*. Other examples of Denominal Adverb + Verb compounds in English are *to air-dry*, *to baby-sit*, *to barhop*, *to belly flop*, *to body-surf*, *to bottle-feed*, *to candy-coat*, *to daydream*, *to finger-paint*, *to head-hunt*, *to lip-read*, *to machine wash*, *to pan fry*, *to problem-solve*, *to shadow box*, *to shipwreck*, *to skydive*, *to student teach*, *to sunbathe*, *to tape record*, *to toe dance*, *to towel-dry*, *to typeset*, *to valet park*, and *to window-shop*. Note that many English compounds like this are generally used only in their past participle form as adjectives: e.g. *handmade*, *store-bought*.

Denominal Adverb + Verb formations seem to constitute a somewhat productive pattern which allows for novel coinages in both Chinese and English. This announcement was heard over an airport P.A. system: *Flight 46 to Baltimore has now gate-changed to E14*; this sentence was seen in a natural foods newsletter: *Choosing to support farms that caretake the environment and the animals they raise in an ethical manner, is a very positive way to spend your food dollar*. In some cases these expressions are written as one word, in others they are hyphenated, attesting to a popular sense that these are indeed compounds, or at least are closely bound to each other, that they are somehow “one word”, while inconsistencies in usage suggest a lack of clarity about the precise categorization of this compound type. Some feel a bit ad hoc, as though they were coined on the spot for one-time use. Also, the noun element is not always a straightforward “instrument”; it can be a direct object. Incorporating the direct object into the verb enables the verb to take a further direct object, e.g. ‘to caretake the environment’, rather than using a prepositional phrase as in ‘to take care of the environment’. We will see in Chapter V that this is often done in Chinese with an inseparable VO compound, like 消毒 *xiao¹du²* [to kill + poison, microbe] ‘to sterilize’, e.g. 消毒針頭 *xiao¹du² zhen¹tou²* ‘to sterilize hypodermic needles’.

Below follow some common Chinese examples of instrumental Denominal Adverb + Verb compounds. Note the use of body parts, both in English and Chinese. Some items are more typically used as nouns, but all are used as verbs. The examples are arranged in loosely related semantic groups.

- | | | | |
|-------|---|-------------------|--------------------|
| (135) | 風乾 <i>feng¹gan¹</i> | [wind + to dry] | ‘to air dry’ |
| (136) | 水洗 <i>shui³⁽²⁾xi³</i> | [water + to wash] | ‘to wash in water’ |

- (137) 水煮 *shuǐ³⁽²⁾zhǔ³* [water + to cook] ‘to cook by boiling’
 (138) 碳燒 *tàn⁴shāo¹* or [coal + to cook] ‘to cook over charcoal’
 碳烤 *tàn⁴kǎo³* [coal + to bake] (cf. English *charcoal-broiled* or *char-broiled*)
- (139) 火燒 *huǒ³shāo¹* [fire + to burn] ‘to destroy by fire’
 (140) 火葬 *huǒ³zàng⁴* [fire + to entomb] ‘to cremate’
 (141) 土葬 *tǔ³zàng⁴* [earth + to entomb] ‘to bury (as opposed to cremation)’
- (142) 雷鳴 *léi²míng²* [thunder + to sound] ‘to thunder’
 (143) 粉刷 *fěn³shuā¹* [powder + to brush] ‘to paint (with water-based paint)’
- (144) 粉飾 *fěn³shì⁴* [powder + to decorate] ‘to whitewash (metaphorical), cover up’
 (145) 油漆 *yóu²qī¹* [oil + to paint] ‘to paint (with oil-based paint)’ (could also be interpreted as a denominal verb)
- (146) 油印 *yóu²yìn⁴* [oil + to print] ‘to print with oil-based ink’
- (147) 油炸 *yóu²zhā^{4/2}* [oil + to deep-fry] ‘to deep-fry’
 (148) 草編 *cǎo³biān¹* [grass + to weave] ‘to weave from straw’
 (149) 炮轟 *pào⁴hōng¹* [canon + to bombard] ‘to bombard, to criticize harshly’
- (150) 鞭打 *biān¹dǎ³* [whip + to strike] ‘to whip’ (to strike with a whip)
- (151) 巷戰 *xiàng⁴zhàn⁴* [alley + to fight] ‘to engage in street fighting’
- (152) 路過 *lù⁴guò⁴* [road + to pass] ‘to pass by’
 (153) 手送 *shǒu³sòng⁴* [hand + to send, deliver] ‘to hand feed (paper into a photocopier)’
- (154) 手寫 *shǒu³⁽²⁾xiě³* [hand + to write] ‘to write by hand’
 (155) 筆答 *bǐ³dǎ²* [pen + to answer] ‘to reply in writing’
 (156) 筆算 *bǐ³suan⁴* [pen + to calculate] ‘to do calculations on pen and paper’
- (157) 心算 *xīn¹suan⁴* [mind + to calculate] ‘to do calculations in one’s head’
 (158) 電傳 *diàn⁴chuan²* [electricity + to transmit] ‘to send electronically’

(159) 溝通 <i>gou¹tong¹</i>	[ditch + to connect]	‘to communicate’ (connect as a ditch connects two places)
(160) 影印 <i>ying³yin⁴</i>	[shadow, image + to print]	‘to photocopy’
(161) 影抄 <i>ying³chao¹</i>	[image + to copy]	‘to make an exact copy of a rare book’
(162) 影寫 <i>ying³⁽²⁾xie³</i>	[image + to write]	‘to make a tracing of’
(163) 根除 <i>gen¹chu²</i>	[root + to remove]	‘to eradicate’
(164) 面試 <i>mian⁴shi⁴</i>	[face + to test]	‘to interview’
(165) 面洽 <i>mian⁴qia⁴</i>	[face + to discuss]	‘to discuss in person’
(166) 面議 <i>mian⁴yi⁴</i>	[face + to discuss]	‘to discuss in person’
(167) 面謝 <i>mian⁴xie⁴</i>	[face + to thank]	‘to thank in person’
(168) 面對 <i>mian⁴dui⁴</i>	[face + to be turned]	‘to face up to’ (also metaphorical), towards
(169) 客串 <i>ke⁴chuan⁴</i>	[guest + to perform]	‘to be a guest performer’
(170) 客居 <i>ke⁴ju¹</i>	[guest + to reside]	‘to live as an expatriate’
(171) 客死 <i>ke⁴si³</i>	[guest + to die]	‘to die far away from home’
(172) 首肯 <i>shou³⁽²⁾ken³</i>	[head + to assent to]	‘to nod’
(173) 智勝 <i>zhi⁴sheng⁴</i>	[wits + to win]	‘to gain advantage through one’s wits’
(174) 智取 <i>zhi⁴qu³</i>	[wits + to take]	‘to take by strategy’
(175) 口服 <i>kou³fu²</i>	[mouth + to take]	‘to take medicine orally’
(176) 口述 <i>kou³shu⁴</i>	[mouth + to narrate]	‘to give an oral account’
(177) 目送 <i>mu⁴song⁴</i>	[eyes + to send off]	‘to follow someone with one’s eyes as they leave’
(178) 目睹 <i>mu⁴du³</i>	[eyes + to see]	‘to witness’
(179) 目測 <i>mu⁴ce⁴</i>	[eyes + to measure]	‘to examine s.t. visually to determine price, weight, etc. (e.g. at a cafeteria)’
(180) 耳聞 <i>er³wen²</i>	[ear + to hear]	‘to hear about s.t.’ (sometimes contrasted with 眼見 <i>yan³jian⁴</i> [eye + to see] ‘to see s.t.’, which is now usually used adverbially to mean ‘in an instant, right away’)
(181) 肩負 <i>jian¹fu⁴</i>	[shoulder + to carry]	‘to shoulder’

- (182) 掌握 *zhang³wo⁴* [palm + to hold] ‘to grasp, know well’
 (183) 掌管 *zhang³⁽²⁾guan³* [palm + to manage] ‘to be in charge of, administer over’
 (184) 掌理 *zhang³⁽²⁾li³* [palm + to manage] ‘to manage’
 (185) 脈動 *mai⁴dong⁴* [pulse + to move] ‘to throb, pulsate’
 (186) 步行 *bu⁴xing²* [step + to walk] ‘to go on foot’
 (187) 波動 *bo¹dong⁴* [wave + to move] ‘to undulate, fluctuate’
 (188) 背對 *bei⁴dui⁴* [back + to face towards] ‘to have one’s back towards’
 (189) 尾隨 *wei³sui²* [tail + to follow] ‘to tail someone’
 (190) 身受 *shen¹shou⁴* [body + to experience] ‘to experience firsthand’
 (191) 體罰 *ti³fa²* [body + to punish] ‘to administer corporal punishment’
 (192) 力求 *li⁴qiu²* [power + to strive for] ‘to strive for with great effort’
 (193) 利用 *li⁴yong⁴* [profit + to use] ‘to use for one’s own benefit’
 (194) 量產 *liang⁴chan³* [quantity + to produce] ‘to mass-produce’
 (195) 獎勵 *jiang³li⁴* [reward + to encourage] ‘to encourage with a reward’
 (196) 資助 *zi¹zhu⁴* [money + to help] ‘to give financial assistance’
 (197) 空運 *kong¹yun⁴* [air + to transport] ‘to airlift, ship by air’
 (198) 農耕 *nong²geng¹* [agriculture + to till] ‘to cultivate land’
 (199) 票選 *piao⁴xuan³* [ballot + to choose] ‘to elect (by ballot)’
 (200) 民選 *min²xuan³* [people + to choose] ‘to choose by popular election’
 (201) 世傳 *shi⁴chuan²* [generation + to transmit] ‘to pass down to the generations’
 (202) 謠傳 *yao²chuan²* [gossip + to transmit] ‘to spread through the grapevine’
 (203) 歌頌 *ge¹song⁴* [song + to praise] ‘to praise in song’
 (204) 歌唱 *ge¹chang⁴* [song + to sing] ‘to sing (in song)’
 (205) 聲張 *sheng¹zhang¹* [sound + to extend] ‘to let word out, disclose’
 (206) 聲請 *sheng¹qing³* [voice + to request] ‘to formally/politely request’
 (207) 函請 *han²qing³* [letter + to invite] ‘to send a formal invitation to’

(208)	禮讓 <i>li³rang⁴</i>	[courtesy + to yield to]	‘to courteously yield to’
(209)	類推 <i>lei⁴tui¹</i>	[category + to deduce]	‘to deduce, generalize by analogy’
(210)	規避 <i>gui¹bi⁴</i>	[rule + to avoid]	‘to avoid, evade’
(211)	法辦 <i>fa³ban⁴</i>	[law + to process]	‘to deal with according to the law’
(212)	毒害 <i>du²hai⁴</i>	[poison + to harm]	‘to poison someone’
(213)	槍斃 <i>qiang¹bi⁴</i>	[gun + to die]	‘to execute by shooting’
(214)	陣亡 <i>zhen⁴wang²</i>	[battle array + to die]	‘to die in battle’
(215)	死別 <i>si³bie²</i>	[death + to part]	‘to be parted by death’

The nominal element 電 *dian⁴* ‘electricity, electronically’ is somewhat productive: 電燙 *dian⁴tang⁴* [electricity + to heat] ‘to get a permanent [wave]’; 電鍍 *dian⁴du⁴* [electricity + to plate] ‘to electroplate’; 電洽 *dian⁴qia⁴* [telephone + to consult] ‘to discuss over the phone’; 電復 *dian⁴fu⁴* [electricity + repeat] ‘to reply electronically (e.g. by telephone)’; and 電匯 *dian⁴hui⁴* [electricity + to transfer money] ‘to transfer funds electronically’; most of the other initial elements have fairly restricted productivity.

面 *mian⁴* ‘face’ is used to mean ‘in person’ in a number of combinations, making it marginally productive, though some of these compounds are used only in very terse styles, such as advertisements for jobs.

Modern political news reporting has given us the instrumental 蛋洗 *dan⁴xi³* [egg + to wash] ‘to pelt with eggs’; for example, the television news once reported 居民蛋洗建商住宅 *ju¹min² dan⁴xi³ jian⁴shang¹ zhu⁴zhai²* ‘Residents pelted the homes of the construction contractors with eggs (in protest)’; Google gives over 5,000 hits for this item as of this writing, with some in quote marks.

2.2.2 Manner via metaphor

Rather than being instrumental, the noun element of formations in this subcategory offers a graphic metaphorical image suggesting some salient characteristic, such as the rolling up of a mat, the cutting of a melon, or ice melting, to enhance the listener’s or reader’s mental picture of the action referred to by the verb. Quite a few are colorful animal and plant metaphors, along with an assortment of varied objects. Lü (1985:25) lists some examples, e.g. 人立 *ren²li⁴* [person + to stand] ‘to stand like a man’ (said of pigs), without much comment except that they are examples of denominal adverbs modifying verbs. Somewhat similar are English Denominal Adverb + Verb

expressions in which something is ‘verbed’ after the manner of the ‘noun’ in a literal or metaphorical way, like *to chain-smoke* (to smoke as though the cigarettes were connected in a chain), *to bunny-hop* (to hop in the manner of a bunny, e.g. *The girl bunny-hopped across the room*), *to dog-paddle*, *to manhandle*, *to carpet-bomb*, *to pinpoint*, *to cherry-pick* (e.g. *We cherry-pick American art-house and foreign films*; in this case, one picks something in the manner of picking cherries, selecting carefully), *to earmark*, and *to ghostwrite*. The metaphorical nature of the formation, provided either by the nominal element alone or both the noun and verb, gives these compounds a literary feel, though some are nevertheless commonly used in colloquial speech; and the images chosen are often highly culture-bound. These are not as plentiful as the instrumental type. Some common examples:

- | | | | |
|-------|---|----------------------------------|---|
| (216) | 針對 <i>zhen¹dui⁴</i> | [needle + to point at, to face] | ‘to refer to, to face squarely’
(‘pointedly’, ‘as a needle’) |
| (217) | 風傳 <i>feng¹chuan²</i> | [wind + to transmit] | ‘to hear through the grapevine’ |
| (218) | 雲集 <i>yun²ji²</i> | [clouds + to gather] | ‘to gather in crowds, converge’ |
| (219) | 履行 <i>lü³xing²</i> | [shoe + to walk, practice] | ‘to carry out’ |
| (220) | 膽敢 <i>dan³⁽²⁾gan³</i> | [gall + to dare] | ‘to dare’ |
| (221) | 血拚 <i>xie³xue³pin¹</i> | [blood + to struggle] | ‘to struggle hard, like crazy’ |
| (222) | 篩選 <i>shai¹xuan³</i> | [sieve + to choose] | ‘to screen, pre-select’ |
| (223) | 瓜分 <i>gua¹fen¹</i> | [melon + to divide] | ‘to divide up, to divvy up’ |
| (224) | 瓦解 <i>wa³⁽²⁾jie³</i> | [tile, rubble + to disintegrate] | ‘to collapse’ |
| (225) | 冰釋 <i>bing¹shi⁴</i> | [ice + to release] | ‘to dissolve away, melt away as ice’ |
| (226) | 湮滅 <i>yan¹mie⁴</i> | [smoke + to extinguish] | ‘to annihilate; to vanish’ |
| (227) | 洞察 <i>dong⁴cha²</i> | [hole, cave + to examine] | ‘to have a clear insight into’ |
| (228) | 管窺 <i>guan³kui⁴</i> | [tube + to peek] | ‘to get a limited view’ |
| (229) | 鐵定 <i>tie³ding⁴</i> | [iron + to set, to establish] | ‘to establish an inflexible rule’ |
| (230) | 席捲 <i>xi²juan³</i> | [straw mat + to curl] | ‘to sweep (the country)’ |
| (231) | 囊括 <i>nang²kuo⁴</i> | [pocket + to include] | ‘to include (as in a bag), |

(232) 鬼混 <i>gui³hun⁴</i>	[devil + to fool around]	encompass' 'to fool around'
(233) 鬼笑 <i>gui³xiao⁴</i>	[devil + to laugh]	'to laugh mysteriously, mischievously'
(234) 敵視 <i>di²shi⁴</i>	[enemy + to view]	'to be hostile, antagonistic towards'
(235) 狐疑 <i>hu²yi²</i>	[fox + to suspect]	'to be suspicious'
(236) 蛇行 <i>she²xing²</i>	[snake + to go]	'to crawl, follow a curvy path, weave in and out'
(237) 蟬聯 <i>chan²lian²</i>	[cicada + to join]	'to continue to hold (a title)' (probably refers to a cicada shedding its skin)
(238) 鯨吞 <i>jing¹tun¹</i>	[whale + to swallow]	'to devour (like a whale)'
(cf. 狼吞虎咽 <i>lang²tun¹hu³yan⁴</i>)	[(wolf + to gulp) + (tiger + to swallow)]	'to devour'
(239) 虎視 <i>hu³shi⁴</i>	[tiger + to watch]	'to eye menacingly'
occurs almost exclusively in:		
(240) 虎視眈眈 <i>hu³shi⁴dan¹dan¹</i>	[tiger + to watch + to gaze + to gaze]	'to eye covetously or menacingly, as a tiger does his prey'
(241) 兔脫 <i>tu⁴tuo¹</i>	[hare + to escape]	'to run like a rabbit'
(242) 鼠竄 <i>shu³cuan⁴</i>	[rat + to scurry]	'to scurry away (like a rat)' (also:
(243) 抱頭鳥竄 <i>bao⁴tou²niao³cuan⁴</i>	[(hold + head) + (bird + to scatter)]	'to scatter like a flock of birds'
(244) 蜂擁 <i>feng¹yong³</i>	[bee + to gather]	'to swarm'
(245) 蜂起 <i>feng¹qi³</i>	[bee + to rise]	'to rise in a swarm'
(246) 鼎立 <i>ding³li⁴</i>	[bronze tripod + to erect]	'to form a tripartite power structure'
(247) 鶴立 <i>he⁴li⁴</i>	[crane (bird) + to stand]	'to stand stick straight'
(248) 壁立 <i>bi⁴li⁴</i>	[wall + to stand]	'to stand bolt upright'
(249) 筆立 <i>bi³li⁴</i>	[pen + to stand]	'to stand erect'
(250) 木立 <i>mu⁴li⁴</i>	[wood + to stand]	'to stand motionless'
(251) 林立 <i>lin²li⁴</i>	[forest + to stand]	'to cover an area (like trees in a forest)'

Most of these formations are idiosyncratic; their nominal element is generally restricted either to just one compound or a very few. Some can be pinned to a specific source, e.g. Chang (2000:61) traces 席捲 *xi²juan³* [straw mat + to curl] ‘to sweep [the country]’ to the 戰國策 *Zhan⁴guo² Ce⁴*, *Stratagems of the Warring States* by Liu Xiang (Liu² Xiang⁴) 劉向 of the 1st century B.C. Some of the denominal adverb elements in this category have wider application, such as the metaphorical 草 *cao³* ‘grass’, which since early times has had an extended meaning of ‘rough(ly), to draft’, and is used in such combinations as 草擬 *cao³⁽²⁾ni³* [grass + to draft] ‘to draw up a rough draft’; 草簽 *cao³qian¹* [grass + to sign] ‘to initial’; 草寫 *cao³⁽²⁾xie³* [grass + to write] ‘to write in the cursive style’; 草測 *cao³ce⁴* [grass + to sound] ‘to make a preliminary survey’; 草創 *cao³chuang⁴* [grass + to create] ‘to start (an enterprise)’.

洞 *dong⁴* ‘hole, cave’ of 洞察 *dong⁴cha²* ‘to have clear insight into’ has been used as a metaphor of ‘insight’ to the point that it appears in related verbs with the same meaning, and has become verbal itself in certain contexts. Examples: 洞悉 *dong⁴xi¹* [cave + to know] ‘to know clearly’; 洞徹 *dong⁴che⁴* [cave + thoroughly] and 洞穿 *dong⁴chuan¹* [cave + to go through], are both lexical resultative compounds meaning ‘to understand thoroughly’. This kind of shift in semantics and grammatical category seems to begin once at least one such usage is established in the language. For example, once 洞察 *dong⁴cha²* became current, the association of ‘holes’ or ‘caves’ with ‘depth of insight’ enabled the morpheme to be used analogously in other formations with a related meaning.

Although Noun + Verb → Instrumental Verb is an established morphological process in Chinese, one cannot really say that lexical instrumentals are a regular grammatical category in Chinese. The pattern is productive, but only to a limited extent; productivity of the pattern in Chinese seems roughly comparable to that in English. New compounds can be invented, but normally a period of time will be required to determine whether they will be more widely accepted or not. In some cases analogous formations may follow in their wake. Usually syntactic means are used to express instrumental relationships: 用 *yong⁴* (instrument) (來 *lai²*) + V ‘use (instrument) to V’, as in 用毛筆寫字 *yong⁴ mao²bi³⁽²⁾ xie³zi⁴* ‘to use a brush pen to write characters’ or ‘to write with a brush pen’. Although instrumental and metaphorically descriptive Denominal Adverb + Verb compounds are somewhat erratic in their appearance, they constitute an important, representative and colorful Chinese morphological type.

2.3 CONJUNCTIVE SUBORDINATION

We will now turn to another type of subordinate compound verb, namely complex verbs involving syntactic or sentence-level-type subordination, rather than a relationship of simple adverbial modification, as is the case with the prefixed subordinate compound verbs discussed in the preceding. There is no contradiction between the terms “conjunctive” and “subordination”; two concurrent though discrete actions are referred to, with one more central and important than the other, which is backgrounded.

Compounds of this type are in essence abbreviations of a V1 + 著 *zhe* + V2 phrase: ‘A V2s while doing V1’, or ‘While doing V1, A V2s’. They are nevertheless inseparable, and thus are lexical compounds. The two verbs always share the same subject; it would not be possible in Chinese for two verb morphemes in this kind of morphosyntactic relationship to have different subjects. We will use an expansion with 著 *zhe* after V1 as a test to determine membership in this class of verb compounds with syntactic subordination; for example, 坐等 *zuo⁴deng³* [to sit + to wait] ‘to wait while seated’ could also be accurately expressed as 坐著等 *zuo⁴zhe deng³*. We may come up with some expanded constructions that would not actually occur (perhaps because of the existence of the abbreviated form) or sound awkward, but we will admit them if they are plausible and an accurate semantic description of the event referred to. If the test produces nonsense, e.g. *公著布 *gong¹zhebu⁴* (from 公布 *gong¹bu⁴* ‘to promulgate’), or *確著定 *que⁴zheding⁴*, (from 確定 *que⁴ding⁴* ‘to make sure’); or the wrong meaning, e.g. *偷著聽 (from 偷聽 *tou¹ting¹*; this would translate as *‘to listen while stealing’ rather than the intended ‘to eavesdrop’), then we know that it does not belong to this type.

Fang (2000:44) points out that in V1 + 著 *zhe* + V2 constructions, V1 usually describes a **manner** in which V2 is done, or an action accompanying the action referred to by V2. So instead of subordination of a morpheme because it modifies the verb head, we have a conjunctive type of subordination in which one action is **backgrounded** against the main, or foregrounded, action. In some of these compounds, V1 seems more incorporated into or part of V2 than in others; in some the V1 seems syntactically relatively separate from the V2.

Conjunctive subordination is in many ways similar to subordinate compounds in which a verb is modified by a deverbal adverb, e.g. 偷聽 *tou¹ting¹* ‘to eavesdrop’, since both have a foregrounded main verb, and also a second verb that provides additional background information. As mentioned earlier in this chapter, it is sometimes difficult to draw a line between the two.

We will, however, distinguish the two by including in this category those compounds in which V1 retains much or all of its original verbal force, function, and meaning, and has not evolved into an ordinary adverb. For example, in 圍觀 *wéi²guān¹* [to encircle, surround + to look at] ‘to gather around something and look at it’, ‘to surround’ is the backgrounded action which sets the stage for the main action, ‘to look at’. The emphasis is not on sequentiality, though the two actions may sometimes occur one after the other; and it is not a Verb + Verb Object relationship; but rather two co-occurring actions, of which one is primary and the other secondary. And they differ from “related actions” in that the two actions involved are **not** necessarily closely related to each other. Examples of related activities are 修補 *xiū¹bū³*, ‘building’ and ‘repairing’, or 飲食 *yīn³shì²* ‘eating’ and ‘drinking’; they are similar, parallel actions in the same semantic field. In conjunctively combined actions, however, we get two different types of activities, for example, 聚餐 *jù⁴cān¹* ‘gathering’ and ‘eating’. There is no direct connection between the two; however one can ‘eat’ while ‘gathered together’, and combining the two morphemes ‘gather together’ and ‘eat’ provides a fairly precise description of the event.

Lü (1985:390) cites a number of examples from classical Chinese, which he describes as ‘omitting the particle 著 *zhe*’. The first is a series of conjunctive subordinate compounds, apparently taken from 聊齋誌異 *Liao²zhai¹ zhi⁴yi⁴* *Strange Stories from a Chinese Studio*; in the other two, individual compounds appear in lines of poetry: (1) 坐食 *zuò⁴shí²* ‘to eat while sitting’; 臥治 *wò⁴zhì⁴* ‘to rule while lying down’; 馳告 *chí²gào⁴* ‘to rush to announce’; 哭訴 *kū¹sù⁴* ‘to complain while crying’; (2) 兒童相見不相識, 笑問客從何處來 *Er²tóng² xiāng¹jiàn⁴ bù⁴ xiāng¹shí⁴, xiào⁴wèn⁴ kè⁴ cong² hé²chū⁴ lái²* ‘The children saw me but did not recognize me; **laughing, they asked** where I was from.’ (from the poem 回鄉偶書 *Huí² xiāng¹ ǒu³ shū¹* by 賀知章 *Hè⁴ Zhī¹zhāng¹*); (3) 天階夜色涼如水, 臥看牽牛織女星 *Tiān¹jiē¹ yè⁴se⁴ liáng² rú² shuǐ³, wò⁴kān⁴ qiān¹niú² zhī¹nǚ³ xīng¹* ‘The Big Dipper evening sky is as cool as water; **lying down, I gaze at** the Herd-boy (Altair) and Weaving Maid (Vega) stars’ (from the poem 秋夕 *Qiū¹ xī⁴* by 杜牧 *Dù⁴ Mù⁴*).

Illustrative examples from modern Chinese follow.

2.3.1 Physical position and actions

In these examples, V1 describes a physical position or state in or with which V2 is performed, but it can also imply an **attitude**; cf. the English ‘to take

something sitting down'. The V1s in these examples are more independent and less incorporated than in the other examples. The "movement" examples seem more incorporated.

- (252) 坐 *zuo*⁴ 'to sit': 坐視 *zuo*⁴*shi*⁴ [to sit + to watch] 'to watch s.t. sitting down, passively, without reacting'; 坐等 *zuo*⁴*deng*³ or 坐待 *zuo*⁴*dai*¹ [to sit + to wait] 'to wait for s.t. sitting down, passively'; 坐守 *zuo*⁴*shou*³ [to sit + to defend] 'to defend tenaciously'; also, 坐 *zuo*⁴ with the meaning of 'to wait passively' appears in such four-character phrases as 坐吃山空 *zuo*⁴*chi*¹ *shan*¹*kong*¹ [(to sit + to eat) + (mountain + empty)] 'to eat up a mountain sitting down', i.e. 'you will quickly eat up all your savings without an income'; 坐失良機 *zuo*⁴*shi*¹ *liang*²*ji*¹ [(to sit + to lose) + (good + opportunity)] 'to let an opportunity slip by'; 坐收漁利 *zuo*⁴*shou*¹ *yu*²*li*⁴ [(to sit + to receive) + (fisherman + profit)] 'to reap benefits from the conflicts of others'. Although both a literary and colloquial vocabulary item, 坐 *zuo*⁴ 'to sit' usually must take the expanded form when backgrounding another action, e.g. 坐著寫 *zuo*⁴*zhe* *xie*³ 'to write while sitting down', if it is not one of the few established compounds.
- (253) 立 *li*⁴ 'to stand': 立等 *li*⁴*deng*³ or 立候 *li*⁴*hou*⁴ [to stand + to wait] 'to stand while waiting, wait in a standing position'; if 立 *li*⁴ is replaced by the colloquial 站 *zhan*⁴, it normally must expand to 站著等 *zhan*⁴*zhe* *deng*³, 'to wait while standing up', since 站 *zhan*⁴, as a more colloquial form, is freer and more analytic and unable to tightly bond directly to the primary action.
- (254) 跪 *gui*⁴ 'to kneel': 跪拜 *gui*⁴*bai*⁴ 'to kneel down in reverence'.
- (255) 遊 *you*² 'to walk, wander about': 游說 *you*²*shui*⁴ [to wander about + to persuade] 'to lobby'; 遊覽 *you*²*lan*³ and 遊賞 *you*²*shang*³ [to wander about + to view] 'to browse, wander about and look'; 游牧 *you*²*mu*⁴ [to wander about + to herd] 'to lead a nomadic lifestyle'; 游擊 *you*²*ji*² [to wander + to strike] 'to engage in guerilla warfare'; 遊學 *you*²*xue*² [to wander about + to study] 'to go abroad for a short term course of study'; this contrasts with 留學 *liu*²*xue*² [to stay + to study] 'to study abroad (on a long-term basis)', which also belongs in this category.
- (256) 夢 *meng*⁴ 'to dream': 夢遊 *meng*⁴*you*² [dream + to wander] 'to walk in one's sleep'.

- (257) 笑 *xiao*⁴ ‘to laugh, smile’: 笑看 *xiao*⁴*kan*⁴ [to laugh, smile + to look] ‘to view lightly’, e.g. 笑看生命 *xiao*⁴*kan*⁴ *sheng*¹*ming*⁴ ‘not to take life/oneself too seriously’; 笑稱 *xiao*⁴*cheng*¹ [to laugh + to call, name] ‘to call s.t. (by some term) in jest’; 笑道 *xiao*⁴*dao*⁴ [to laugh + to say] ‘to say laughingly’; 笑納 *xiao*⁴*na*⁴ [to laugh, smile + to accept] ‘to accept something with a smile, gracefully’; 笑罵 *xiao*⁴*ma*⁴ [to laugh + to scold] ‘to ridicule’.

2.3.2 Gathering, interchange, alternation, separation

These V1s denote togetherness, interchange, alternation of turns, or separation during the execution of an action.

- (258) 會 *hui*⁴ ‘to meet’: 會商 *hui*⁴*shang*¹ [to meet + to discuss] ‘to hold a group discussion’; 會簽 *hui*⁴*qian*¹ [to meet + to sign] ‘to jointly sign’; 會餐 *hui*⁴*can*¹ [to meet + to dine] ‘to have a meal together’.
- (259) 聚 *ju*⁴ ‘to gather’: 聚餐 *ju*⁴*can*¹ [to gather + to dine] ‘to get together for a meal’; 聚居 *ju*⁴*ju*¹ [to gather in one place + to reside] ‘to live as a community’; 聚殲 *ju*⁴*jian*¹ [to gather up + to annihilate] ‘to round up and massacre’.
- (258) 圍 *wei*² ‘to encircle, surround’: 圍觀 *wei*²*guan*¹ [to encircle + to look at] ‘to gather around to look at s.t.’; 圍困 *wei*²*kun*⁴ [to surround + to thwart] ‘to besiege’; 圍捕 *wei*²*bu*³ ‘to surround and arrest’; 圍護 *wei*²*hu*⁴ [to surround + to protect] ‘to surround and protect someone’.
- (259) 陪 *pei*² ‘to accompany’: 陪住 *pei*²*zhu*⁴ [to accompany + to live, lodge] ‘to stay by a patient’s hospital bedside to care for him/her’; 陪葬 *pei*²*zang*⁴ [to accompany + to bury] ‘to be buried alive with s.o.’.
- (260) 押 *ya*¹ ‘to escort’: 押送 *ya*¹*song*⁴ or 押解 *ya*¹*jie*³ [to escort + to send] ‘to send a prisoner under escort’; 押運 *ya*¹*yun*⁴ [to escort + to transport] ‘to send goods under escort’.
- (261) 交 *jiao*¹ ‘to intersect, exchange, cross over, hand over, communicate, reciprocate’: 交談 *jiao*¹*tan*² [to intersect + to chat] ‘to chat with s.o.’; 交流 *jiao*¹*liu*² [to intersect + to flow] ‘to exchange’; 交換 *jiao*¹*huan*⁴ [to intersect + to change] ‘to exchange’; 交集 *jiao*¹*ji*² [to intersect + to

gather in one place] ‘to co-occur, have mixed (feelings)’; 交加 *jiao¹jia¹* [to intersect + to add, occur] ‘to co-occur, occur simultaneously’; 交織 *jiao¹zhi¹* [to intersect + to weave] ‘to interweave’; 交涉 *jiao¹she⁴* [to intersect + to wade, experience, involve] ‘to negotiate’; 交往 *jiao¹wang³* [to intersect + to go with] ‘to date, go with s.o.’; 交遊 *jiao¹you²* [to intersect + to go wandering] ‘to go on an outing together’.

(262) 輪 *lun²* ‘to alternate, take turns’: 輪流 *lun²liu²* [to alternate + to flow] ‘to take turns’; 輪替 *lun²ti⁴* [to alternate + to replace] ‘to take turns’; 輪換 *lun²huan⁴* [to alternate + to change] ‘to take turns’; 輪訓 *lun²xun⁴* [to alternate + to train] ‘to train in rotation’; 輪值 *lun²zhi²* [to alternate + to be on duty] ‘to be on duty in shifts’; 輪唱 *lun²chang⁴* [to alternate + sing] ‘to sing in alternation’; 輪教 *lun²jiao¹* [to alternate + to teach] ‘to take turns teaching’; 輪牧 *lun²mu⁴* [to alternate + to graze animals] ‘to graze fields in alternation’; 輪暴 *lun²bao⁴* [to alternate + to violate] ‘to gang-rape’.

(263) 分 *fen¹* ‘to separate, divide up’: 分居 *fen¹ju¹* [to separate + to live] ‘to live separately, to be separated (said of a married couple)’; 分擔 *fen¹dan¹* [to divide up + to bear responsibility] ‘to divide up, share the responsibility’; 分發 *fen¹fa¹* [to divide + to issue] ‘to distribute’; 分撥 *fen¹bo¹* [to divide up + to issue] ‘to allocate’; 分赴 *fen¹fu⁴* [to separate + to go] ‘to go to different destinations’; 分派 *fen¹pai⁴* [to divide up + to send] ‘to apportion’; 分租 *fen¹zu¹* [to divide up + to rent] ‘to rent a flat together’.

2.3.3 Imitation, emulation

‘Doing something in exactly the same manner’ is expressed by the prefix 照 *zhao⁴*, originally, ‘to shine’, but by extension, ‘to mirror’, i.e. ‘to mirror (or faithfully repeat) an action’, mirroring or imitating another thing while doing something; and 仿 *fang³* ‘to imitate’ is added before a verb to express ‘imitation’ of an action:

(264) 照 *zhao⁴*, ‘to shine, to mirror an action, according to the original’: 照辦 *zhao⁴ban⁴* [to mirror + to execute] ‘to do s.t. in the same way as before, act in accordance with’; 照搬 *zhao⁴ban¹* [to mirror + to move] ‘to indiscriminately copy (another’s work)’; 照發 *zhao⁴fa¹* [to mirror + to issue] ‘to issue as before’; 照收 *zhao⁴shou¹* [to mirror + to accept] ‘to

accept everything just as it is given to one'; 照登 *zhao⁴deng¹* [to mirror + to publish] 'to publish s.t. unedited'; 照准 *zhao⁴zhun³* [to mirror + to approve] 'to give permission (exactly as requested)'.
 (265) 仿 *fang³* 'to imitate': 仿造 *fang³zao⁴* [to imitate + to make] and 仿制 *fang³zhi⁴* [to imitate + to manufacture] 'to imitate', 仿效 *fang³xiao⁴* 'to imitate, emulate'; one compound puts this morpheme and (1) together in one compound: 仿照 *fang³zhao⁴* [to imitate + to reflect] 'to emulate'.

2.3.4 Emergency, forced and tentative action

There is a verbal equivalent of the adverbial 快 *kuai⁴* 'fast', namely 搶 *qiang³* 'to grab, vie for, scramble for', which can function as a V1 to impart a sense of urgency to save a desperate situation. 逼 *bi¹* 'to force' is used to express a forced action. The verb 試 *shi⁴* 'to try to' attaches to many verbs to indicate tentative action, a testing to see whether something will work. All have the V1 著 *zhe* V2 expansion:

(266) 搶 *qiang³* 'to do s.t. in great haste or in a race against the clock (literally: to steal, snatch)': 搶修 *qiang³xiu¹* [to rush + to repair] 'to rush to do repairs'; 搶答 *qiang³da²* [to rush + to answer] 'to try to be the first to give an answer'; 搶救 *qiang³jiu⁴* [to rush + to save] 'to rush in to rescue'; 搶購 *qiang³gou⁴* [to rush + to purchase] 'to rush to purchase (fearing scarcity)'.

(267) 逼 *bi¹* 'to use force to do s.t.': 逼問 *bi¹wen⁴* [to force + to ask] 'to question somebody in a forceful way'; 逼使 *bi¹shi³* [to force + to cause to do] 'to force s.o. to do s.t.; to get s.o. to do s.t. by use of force'.

(268) 試 *shi⁴* 'to try, attempt to, test': 試用 *shi⁴yong⁴* [to test + to use] 'to try s.t. out, test-use'; 試吃 *shi⁴chi¹* [to try + to eat] 'to sample (a food)'; 試辦 *shi⁴ban⁴* [to test + to conduct] 'to implement a new procedure on a trial basis, run a pilot scheme'; 試行 *shi⁴xing²* [to test + to implement] 'to test-implement'; 試賣 *shi⁴mai⁴* [to test + to sell] 'to conduct a trial selling period'; 試製 *shi⁴zhi⁴* [to test + to manufacture] 'to trial-manufacture'; 試飛 *shi⁴fei¹* [to test + to fly] 'to test fly, do a test flight'; 試航 *shi⁴hang²* [to test + to navigate] 'to take a trial voyage'; 試播 *shi⁴bo¹* [to test + to broadcast] 'to run a trial broadcast'; 試看 *shi⁴kan⁴* [to try + to look] 'to have a look, try watching'; 試想 *shi⁴xiang³* [to try + to think] 'to imagine,

try thinking, “Just think!”; 試射 *shì⁴shè⁴* [to test + to fire] ‘to test fire, initiate trial fire’; 試演 *shì⁴yǎn³* [to test + to perform] ‘to give a trial performance’.

2.3.5 Borrowing, accepting hospitality, doing something in the stead of/ on behalf of another

These VIs determine the basis on which an action is performed: borrowing from another, often implying a temporary action; imposing temporarily on another for some kind of service; and doing something on behalf of another, or in another’s stead.

(269) 借 *jiè⁴* ‘to borrow’: 借讀 *jiè⁴dú²* [to borrow + to read, study] ‘to study at a school on a temporary basis’; 借調 *jiè⁴diào⁴* [to borrow + to transfer] ‘to temporarily transfer’; 借宿 *jiè⁴sù⁴* [to borrow + to lodge] ‘to stay overnight at’; 借住 *jiè⁴zhù⁴* [to borrow + to live, reside] ‘to lodge at’.

(270) 寄 *jì⁴* ‘to send, depend on, entrust, attach oneself to, be a parasite’: 寄讀 *jì⁴dú²* [to attach oneself to + to study] ‘to study at a school without being a regular student’; 寄住 *jì⁴zhù⁴* [to attach oneself to + to reside] ‘to live with someone as a regular guest’; 寄宿 *jì⁴sù⁴* [to attach oneself to + to lodge at] ‘to lodge with someone, crash’; 寄放 *jì⁴fàng⁴* [to entrust + to place] ‘to leave an article with someone temporarily; check in a package’; 寄養 *jì⁴yǎng³* [to attach oneself to + to raise, rear] ‘to stay with someone as a foster child’.

(271) 代 *dài⁴* ‘to act in another’s stead’: 代辦 *dài⁴bàn⁴* [to act in another’s stead + to carry out a task] ‘to do s.t. on another’s behalf’; 代表 *dài⁴biào³* [to act in another’s stead + to show, present] ‘to represent, act as a delegate for’; 代購 *dài⁴gòu⁴* [to act in another’s stead + to purchase] ‘to act as a purchasing agent for’; 代勞 *dài⁴láo²* [to act in another’s stead + to labor] ‘to do s.t. on another’s behalf’; 代理 *dài⁴lǐ³* [to act in another’s stead + to manage] ‘to act as an agent, proxy for another’; 代售 *dài⁴shòu⁴* [to act in another’s stead + to sell] ‘to serve as an agent for’; 代收 *dài⁴shòu¹* [to act in another’s stead + to receive] ‘to accept, receive s.t. in another’s stead’; 代用 *dài⁴yòng⁴* [to replace + to use] ‘to use as a replacement for’.

2.3.6 Verbal partitives

V1s in verbal partitives involve a selection process, an action of choosing some and not others. Here we again have morphemes that include several homonyms. 點 *dian*³ means ‘to touch on lightly, touch on here and there’; but it may also mean ‘to count, take inventory of (e.g. money), to expose, to light a fire’. In addition to the meaning of ‘to select’, 挑 *tiao*¹ can mean ‘to carry’. 抽 *chou*¹ as used here means ‘to select’, but also means ‘to pull, draw, contract, sob’ in other contexts.

(272) 點 *dian*³ ‘to touch on lightly, touch on here and there, spot’: 點綴 *dian*³*zhuì*⁴ [to touch + to compose, decorate] ‘to embellish’; 點射 *dian*³*shè*⁴ [to touch + to shoot] ‘to fire in bursts’; 點染 *dian*³⁽²⁾*ran*³ [to touch + to dye] ‘to touch up a painting, add details’ (cf. 挑染 *tiao*¹*ran*³ ‘to streak (hair)’; see below); 點焊 *dian*³*han*⁴ [to touch + to weld] ‘to spot (or point) weld’.

(273) 抽 *chou*¹ ‘to draw, randomly select, spot’: 抽查 *chou*¹*cha*² [to select + to check] ‘to spot-check’; 抽調 *chou*¹*diao*⁴ [to select + to transfer] ‘to transfer selected troops’; 抽換 *chou*¹*huan*⁴ [to select + to change] ‘to change part of a whole’; 抽背 *chou*¹*bei*⁴ [to select + to recite] ‘to randomly select people to recite in class’; 抽印 *chou*¹*yin*⁴ [to select + to print] ‘to make offprints’.

Verbal partitives are still being created in modern Chinese, for example, 點選 *dian*³⁽²⁾*xuan*³ [to touch + to choose] ‘to point and click (with a mouse; i.e. to selectively activate)’; 挑染 *tiao*¹*ran*³ is ‘to highlight, streak (the hair with dye)’; also, from physics, the process of ‘sputtering’, which involves electroplating by bombardment of a target material by plasma, is called 濺鍍 *jian*⁴*du*⁴ [to splash + to electroplate]; these last two examples are similar in structure to the 點 *dian*³ compounds in (1) above.

2.4 PRODUCTIVITY

There are many different levels of productivity among all morphemes and words in a language, prefixes included. In English, *re-* can be added to a broad range of action verbs: *redo*, *rethink*, *redesign*, *reinstall*, *replay the song*, *remop the floor*, *rehang the picture* are all felicitous. *re-* prefixing works better with

simple rather than phrasal verbs: *retry on a dress* or *recook up a meal* are odd and very marked, if acceptable at all – which may have to do with the telic nature of phrasal verbs, as well as prosodic issues. The productivity of *pre-*, while high, is not as quite that of *re-*: *pretaste*, *prethink*, *pretype*, *prepick* are all possible; but *pre-eat*, *pre-sit* (though the causative *pre-seat* is fairly common, e.g. in the context of concerts), and *pre-sleep* are odd.

We find similar patterns in Chinese. Of the prefixes indicating repetition of an action, 重 *chong*² has almost unlimited productivity; it is used in the sense of ‘doing something again’ or a second time, something that can be decided on the spur of the moment because, for example, it didn’t work the first time. 重 *chong*² tends to be used with verbs in which the idea of repetition is not a central or inherent characteristic, but simply one possible situation of many that may, or may not, come up. The less productive 複/復 *fu*⁴, on the other hand, will more often refer to a planned action in which repetition is an inherent part of a process, e.g. photocopying, reviving, getting revenge, and so on. Thus the difference in applicability and productivity in “on the fly” compositions using this prefix.

Productivity depends on a number of factors. For a given prefix, a potential verb head must, first of all, make sense in combination with the modifier.

Second, prefixes with higher “content” value and/or more specialized meanings tend to attract verb heads with related meanings, since they are the ones likely to fit the best semantically. Adverbial prefixes often tend to affix to heads in clusters in the same semantic field. Thus we find groups of semantically related verbs, for example, compounds formed with 密 *mi*⁴ ‘secretly’, under “manner” are often matched with verbal heads meaning ‘to report’, since conveying information is something that one might want to do ‘secretly’; and heads paired with 嚴 *yan*² ‘strictly’ will usually have something to do with ‘enforcement’. So there is, or in many cases once was, more room for creative collocations of these initial-position modifiers within certain semantic fields. Productivity is quantal; there are big jumps between a prefix mainly restricted to a group of established combinations, like 篤 *du*³ ‘sincerely, earnestly’ (as in 篤信 *du*³*xin*⁴ ‘to devoutly believe’, 篤學 *du*³*xue*² ‘to study earnestly’), but in few other combinations, and such widely applicable ones as 重 *chong*² ‘re’- and 誤 *wu*⁴ ‘mis-, mistakenly’. This is true of English as well; note the productivity of *juxta-* – the only somewhat common word prefixed with it is *juxtapose* – as compared to *mis-*, which attaches easily to many verb bases.

For a number of “manner” prefixes, we find many pairs of semantic opposites: high/low, strong/weak, deep/shallow. Often, however, only one of

the pair is used extensively as a prefix, e.g. while 深 *shen*¹ ‘deep’ is a fairly common prefix, few verb compounds are formed with the prefix 淺 *qian*³ ‘shallow’, and the few there are tend to be nominalized, e.g. 淺說 *qian*³ *shuo*¹ [shallow + to say] ‘a brief/simplified introduction’. This is often because of a need to express the “larger” version of the verb base rather than a “smaller” version of it. Unless there is some compelling need for the “small” version of the verb, prefixed forms tend to be lopsided in the direction of the “large” version. The “smaller” version tends to be the default and unmarked. This is simply a reflection of semantic need based on real world experience. The same principle applies to the degree-changing deadjectival compound verbs described in Chapter V, 5.4.

One notable difference between English and Chinese prefixes is that in Chinese the meaning is more transparent since morphemes are used intact in any position, even in less emphasized or less prominent positions, while in English prefixes tend to be bound morphemes, and they are often phonologically reduced.

We are not likely to come up with a clear index of statistical productivity (which has recently been given its own mathematical symbol \mathcal{P} in Bauer (2001:148ff) and other works) of each individual prefix. Productivity depends on need and semantics, and very much on established convention. Yet there is still room for creativity and new coinages. In general, the closer a new coinage is in structure and semantics to an established one, the more likely it is to be used, accepted in individual cases, and perhaps eventually adopted for more general use.

SUMMARY

Contrary to the popular impression, Chinese does have a well-developed system of verbal prefixes, with varying levels of productivity. Semantic fields encompassed by verbal prefixes include repetition; reflexivity and reciprocity; temporal duration, sequence, and frequency; entirety or partitiveness; location and orientation; and state, manner and attitude; with substantial subcategories for surreptitious and reckless action; honorifics; and intensity and degree.

The second key type of subordinate compound in Chinese includes two subtypes: lexical instrumentals, and lexical metaphorical description, each consisting of a denominal adverb plus a verb. The first type provides a lexical alternative to analytic instrumentals formed with markers like 用 *yong*⁴ ‘to use’, and are structurally similar to the English *to sunbathe*. The second type,

manner via metaphor, calls up the image of a physical object which graphically suggests how the action denoted by the following verb is performed.

Finally, there is a category of conjunctive subordinate compound verbs composed of a backgrounded V1 plus a foregrounded V2, for example one 'gathers around' to 'look' at something, with 'looking' being the primary action and 'gathering around' the backgrounded or subordinate one. These compounds could be expanded as V1 著 *zhe* V2, 'to do V2 while doing V1'. This provides a structure to express such concepts as physical position, gathering or separation, hurrying to do something, and borrowing or doing something in another's stead; there is also a subcategory of verbal partitives.

The chapter concludes with a discussion of factors contributing to the productivity of the different types of verb prefixes.

CHAPTER III: COORDINATE COMPOUND VERBS

In this chapter we will discuss and exemplify the various types of coordinate compound verbs in Mandarin. We will also address the phenomenon of semantic head, and note ordering tendencies of morphemes used in forming coordinate compound verbs.

A coordinate compound verb in Chinese is defined as a headless verb consisting usually of two morphemes which belong to the same default and contextual part of speech and which are closely semantically related. The morphemes may be:

- (1) **synonyms** or **near synonyms**;
- (2) **related actions**, with no particular sequential order;
- (3) sequential actions which form a **serial verb**;
- (4) an action and its converse, or **antonyms**;
- (5) phonetically similar syllables, forming **sound symbolism compounds**.

The components of a coordinate compound verb have equal morphosyntactic weight, that is, neither is grammatically subordinate to the other. This contrasts with subordinate compounds, in which a modifier or modifiers precede(s) the final element of the compound, the morphosyntactic head.

A test can be applied to determine whether the two elements are morphosyntactically equal: the order of the two elements can be reversed to see whether the compound still belongs to the same construction or compound type and retains the same basic meaning. If the components are in a syntactic or morphosyntactic relationship of modifier + modified or other structure, then the order of the components cannot be reversed without changing the part of speech, structural type, and/or meaning of the combination as a whole, if it makes any sense at all. When this test is applied, a few prefixed verbs become resultative, directional, or some other kind of construction; for example, if the subordinate prefixed compound 下放 *xia⁴fang⁴* [below + to place] ‘to transfer to a lower level, to exile’ is reversed it becomes 放下 *fang⁴xia⁴* [to release + below] ‘to set down’, a base verb + directional verb satellite. Most, however, become ungrammatical and incomprehensible; for example, if 互訪 *hu⁴fang³* [mutually + to visit] ‘to exchange visits’ is reversed, it becomes 訪互 *fang³hu⁴*,

which does not and **could** not occur, because a grammatical modifier in a compound cannot follow its head and still make sense.

Though the components of coordinate compound verbs do usually have set orders (this will be addressed below), and reversing their order may produce a string that does not occur in actual language use, it still can be processed and understood, and such a reversal will **not** affect overall meaning. Reversing the order of the elements in the coordinate compound 編織 *bian¹zhi¹* [to plait + to weave] ‘to weave’, for example, produces *織編 *zhi¹bian¹*, which does not occur, but it is interpretable by its elements, has a meaning similar to 編織 *bian¹zhi¹*, and it is still a verb. Using either one of the elements alone would also yield approximately the same meaning, both in or out of context. Such compounds are headless, since the concept of head is meaningful only in contexts in which there are morphosyntactic modifying elements, which is not the case here; neither dominates the other grammatically. As Gao (2001:122) puts it: “A reversed order may not look as conventional as such, but still it is basically acceptable to change, say, [敲打門] *qiao¹da³men²* ‘knock-hit door’ to [打敲門] *da³qiao¹men²* ‘hit-knock door’ [‘to knock at a door’] or [修補車胎] *xiu¹bu³che¹tai¹* ‘repair-patch tyre’ to [補修車胎] *bu³xiu¹che¹tai¹* ‘patch-repair tyre.’ [‘to patch a tire’]”.

3.1 PROSODIC CONSIDERATIONS

In casual speech, one tends to use general, high-frequency, monosyllabic verbs, such as 吃 *chi¹* ‘to eat’, 喝 *he¹* ‘to drink’, 睡 *shui⁴* ‘to sleep’, 說 *shuo¹* ‘to say’, 聽 *ting¹* ‘to listen’, 懂 *dong³* ‘to understand’, 走 *zou³* ‘to walk, go’, 坐 *zuo⁴* ‘to sit’, and 做 *zuo⁴* ‘to do’, which cannot be easily replaced by disyllabic or polysyllabic ones without changing the meaning or register of the original expression (Dong 1992:63-64). In addition to monosyllabic verbs like these, a number of high-frequency disyllabic compound verbs, such as 喜歡 *xi³huan¹* ‘to like’, 決定 *jue²ding⁴* ‘to decide’, 收拾 *shou¹shi²* ‘to pick up’, are also relied on heavily.

The monosyllabic verbs referred to above combine easily with objects to form VO phrases, e.g. 吃飯 *chi¹fan⁴* ‘to eat (rice)’, 聽話 *ting¹hua⁴* ‘to listen to (speech)’; with particles such as 了 *le*; and with resultative and directional complements such as 到 *dao⁴* (indicating achievement) and 下來 *xia⁴lai²* ‘down (indicating downward motion towards the speaker or “origo”’. Some are also used in subordinate compounds, e.g. 偷聽 *tou¹ting¹* ‘to eavesdrop’, 側睡 *ce⁴shui⁴* ‘to sleep on one’s side’; in related action verbs, 吃喝 *chi¹he¹* ‘to

eat and drink’, especially in reduplicatives like 吃吃喝喝 *chi¹chi¹he¹he¹* ‘to eat and drink a lot, here and there’; and in aspectual verb compounds, such as the initiatory inceptive 出走 *chu¹zou³* ‘to up and leave’. But we find that very few synonymous coordinate compound verbs are formed with these particular morphemes in initial position. Many have one or two stereotyped disyllabic or cognate counterparts, e.g. the very high-frequency 睡覺 *shui⁴jiao⁴* [to sleep + sleep] ‘to sleep, go to bed’ (覺 *jiao⁴* is difficult to analyze; it originally meant ‘to awaken’, but behaves more like an object or measure word than a verb synonymous with 睡 *shui⁴*, as in 睡一覺 *shui⁴yi¹⁽²⁾jiao⁴* ‘to sleep (one session, one stretch)’), 走動 *zou³dong⁴* ‘to walk around, walk about’, and the formal-sounding compound 吃食 *chi¹shi²* [to eat + (archaic word for) to eat] ‘to eat’ is occasionally seen; but one or two examples are about as far as these basic verbs go in terms of synonymous coordinate compounds. Dong (1992:68) observes that among basic, high-frequency vocabulary items, monosyllables maintain a desirable stylistic contrast with disyllabic compounds, due to their simplicity, directness, and lack of peripheral meanings and implications. Another possible reason for the large number of monosyllabic verbs with basic meanings is the lack of an “empty” affix, comparable to the nominal suffix 子 *zi*, to form disyllabic verbs from monosyllabic ones. Furthermore, making these items disyllabic would threaten their status as “basic” vocabulary. The most common monosyllables, which more or less form a closed class, are apparently sufficient onto themselves, unlike slightly less frequent items. Wang (1986a:311) makes a similar observation. This is not true of all basic monosyllabic verbs, but it is a strong tendency within a core collection of them.

In more formal speech, and in writing, e.g. on signs, disyllabic words tend to be favored, both stylistically and rhythmically. However, very often one still wants to express only a simple concept. In this case one will likely turn to synonymous compounds, in which the two elements are extremely close in meaning. There is no need here to introduce nuances or delicate shades of meaning; the purpose is disyllabicity almost as an end in itself. Wang (1986a:304-6) estimates that about 70 to 80 percent of all polysyllabic words in Chinese consist of synonymous elements. Here are three examples of uses of synonymous disyllabic coordinate compounds in signs:

小心碰撞 *xiao³xin¹peng⁴zhuang⁴* [(little + mind) + (to bump + to hit)]
 ‘Watch out for your head’ (‘Be careful not to bump (your head)’)
 (on a low overhang in an MRT station)

碰 *peng*⁴ and 撞 *zhuang*⁴ are very close in meaning and both are very common.

禁止停放車輛 *jin*⁴ *zhi*³ *ting*² *fang*⁴ *che*¹ *liang*⁴
 [(to forbid + to stop) + (to park + to put) + (vehicle + (measure word for 'vehicle'))]
 ('It is forbidden to park vehicles'; sign in front of the main entrance of a university)
 'No parking.'

This phrase consists of two coordinate verb compounds, a coordinate noun compound, and two adjacent monosyllabic morphemes:

上下電梯請勿奔跑 *shang*⁴ *xia*⁴ *dian*⁴ *ti*¹ *qing*³ *wu*⁴ *ben*¹ *pao*³
 [(to ascend + to descend) + (electric + stairs) + please + do-not + (to dash + to run)]
 'Please do not run (up and down) on the escalators.' (posted in an MRT station)

奔 *ben*¹ and 跑 *pao*³ are almost identical in meaning; both mean 'to run'. 奔 *ben*¹ is the less common and more marked of the two, but combined with 跑 *pao*³ it forms a very normal, if somewhat formal, compound meaning 'to run' that is not much different from the simplex verb 跑 *pao*³ except stylistically and prosodically, and in that it is more stable and will not require further syllable weight in contexts where a single syllable would be awkward, such as the above one which consists mostly of disyllabic compounds.

Because of the stylistic and syllabic weight needs of certain styles of language use, sometimes including casual conversation, speakers of Chinese – at least more sophisticated ones – need to have a ready stock of two-syllable versions of common simplex verbs. These will typically be synonymous coordinate compound verbs, since they tend to not change the meaning of the simplex verb much if at all, and thus they can be confidently inserted in the context of the original simplex verb without much concern over introducing often undesired shades or detail of meaning. Some of the elements are free morphemes (like 試 *shi*⁴ 'to try'), some are bound (like 侃 *kan*³ 'upright, outspoken, to chat'), but most are semibound (like 飾 *shi*⁴ 'to decorate, portray'). Native speakers have a feel for which combinations are allowed and which are not, based on patterns of conventional usage, whether they choose a common established usage or coin their own compound.

Because of their great practical utility, examples of synonymous coordinate compound verbs are plentiful and easy to collect. Some have a variant with the morphemes in reverse order and largely the same meaning; some have variants with a homophonous written character replacing one of the morphemes.

- | | | |
|--|--------------------------------------|------------------------------|
| (1) 嘗試 <i>chang²shi⁴</i> | [to taste + to try] | ‘to try (out)’ |
| (2) 抗拒 <i>kang⁴ju⁴</i> | [to resist + to refuse] | ‘to resist, defy’ |
| (3) 逃避 <i>tao²bi⁴</i> | [to flee + to avoid] | ‘to avoid, run away from’ |
| (4) 居住 <i>ju¹zhu⁴</i> | [to reside + to live] | ‘to reside in’ |
| (5) 容納 <i>rong²na⁴</i> | [to contain + to receive] | ‘to hold’ |
| (6) 植栽 <i>zhi²zai¹</i> | [to plant + to insert] | ‘to plant’; also: |
| 栽植 <i>zai¹zhi²</i> | | |
| (7) 保護 <i>bao³hu⁴</i> | [to protect + to protect] | ‘to protect’ |
| (8) 連結 <i>lian²jie²</i> | [to connect + to bind] | ‘to join’ |
| (or 聯結) | [to join + to tie] | |
| (9) 游泳 <i>you²yong³</i> | [to swim + to swim] | ‘to swim’ |
| (10) 使用 <i>shi³yong⁴</i> | [to employ + to use] | ‘to use’ |
| (11) 具有 <i>ju⁴you³</i> | [to possess + to have] | ‘to have, possess’ |
| (12) 觸摸 <i>chu⁴mo¹</i> | [to come in contact with + to touch] | ‘to touch’ |
| (13) 收縮 <i>shou¹suo¹</i> | [to pull inwards + to shrink] | ‘to contract’ |
| (14) 切割 <i>qie¹ge¹</i> | [to cut + to cut] | ‘to cut’ |
| (15) 搖晃 <i>yao²huang⁴</i> | [to rock + to sway] | ‘to sway, shake’ |
| (16) 領取 <i>ling³⁽²⁾qu³</i> | [to pick up + to take] | ‘to pick up, get’ |
| (17) 審查 <i>shen³cha²</i> | [to examine + to check] | ‘to examine for approval’ |
| (18) 顯示 <i>xian³shi⁴</i> | [to appear + to show] | ‘to appear, show’ |
| (19) 誕生 <i>dan⁴sheng¹</i> | [to be born + to be born] | ‘to come forth, be born’ |
| (20) 牽引 <i>qian¹yin³</i> | [to pull along + to pull] | ‘to draw, tow’ |
| (21) 克制 <i>ke⁴zhi⁴</i> | [to overcome + to restrict] | ‘to overcome, control’ |
| (22) 噴發 <i>pen¹fa¹</i> | [to spray + to emit] | ‘to erupt, throw out’ |
| (23) 遴選 <i>lin²xuan³</i> | [to select + to choose] | ‘to select’ |
| (24) 允許 <i>yun³⁽²⁾xu³</i> | [to allow + to permit] | ‘to permit’ |
| (25) 遷徙 <i>qian¹xi³</i> | [to move + to move] | ‘to move (to another place)’ |
| (26) 考驗 <i>kao³yan⁴</i> | [to test + to examine] | ‘to test’ |

- (27) 迎接 *ying²jie¹* [to welcome + to receive] ‘to receive (s.o.)’
 (28) 承接 *cheng²jie¹* [to assume + to receive] ‘to take on’
 (29) 創始 *chuang⁴shi³* [to start + to begin] ‘to initiate, launch’
 (30) 賭博 *du³bo²* [to bet + to gamble] ‘to gamble’

Coordinate compound verbs are good candidates for nominalization. Some examples: 奮鬥 *fen⁴dou⁴* [to arouse oneself + to fight] ‘to struggle; a struggle’; 缺乏 *que¹fa²* [to lack + to be scarce] ‘to lack; a lack, scarcity’; 振動 *zhen⁴dong⁴* [to shake + to move] ‘to vibrate; vibration(s)’; 遴選 *lin²xuan³* ‘to select; a selection process’, e.g. 參加遴選 *can¹jia¹lin²xuan³* ‘to participate in the selection process’; here the monosyllabic 選 *xuan³* would not be grammatical. Other parts of speech, such as nouns and adjectives, are often compounded to form disyllabic words, even when they are free forms, for similar reasons: disyllabic formations may fit in more contexts in a more stable and reliable way than free forms. Example nouns: 店 *dian⁴* ‘store, shop’ → 店鋪 *dian⁴pu⁴* [shop + shop] ‘store(s), shop(s)’; 隊 *dui⁴* ‘line, row’ → 隊伍 *dui⁴wu³* [line + rank] ‘line, rank’; adjectives: 大 *da⁴* ‘big, large’ → 龐大 *pang²da⁴* [huge + large] ‘enormous’ or 巨大 *ju⁴da⁴* [giant + large] ‘huge’; 軟 *ruan³* ‘soft’ → 柔軟 *rou²ruan³* [flexible + soft] ‘pliable’ or 鬆軟 *song¹ruan³* [loose + soft] ‘soft, fluffy’. In these examples, more nuance and specialization of meaning are introduced in the adjectives than in the nouns or verbs.

3.2 ORDERING OF COMPONENTS

Coordinate compound verbs composed of synonyms or near synonyms are the most numerous of the five types listed at the beginning of this chapter. If the two elements are indeed synonyms, or nearly so, one might think that the order in which they occur will be governed mainly by convention. Convention certainly plays an important role, but there are other determining factors.

It is very seldom that two words are perfectly synonymous; there is usually some small difference to justify the existence of two morphemes instead of one for a concept. This difference may be due to a refinement of meaning, specialization of function, level of formality, status as an archaism vs. a more recent expression, or frequency of occurrence. And all of these factors contribute to the ordering of elements, both historically and synchronically, in a synonymous coordinate verb compound.

There are four major tendencies as regards the order of synonymous coordinate compounds, each resulting in a discernible subtype of this compound type.

(1) Pure synonymous coordinate compound verbs: For many morphemes used to form synonymous coordinate compounds, word order seems to be determined by a “preference” or tendency of each individual morpheme for either the initial or final position of the compound. So we find categories of morphemes that tend to appear in the initial position in coordinate verb compounds, and those that usually appear in final position. Of course, sometimes a conflict arises when two morphemes which both “prefer” the same position are combined; in this case, the stronger of the two – however that is defined or comes about – wins. This situation may have something to do with the emergence of a third “mixed” category of morphemes which appear in both positions. We will see that in some cases involving this third category we are actually dealing with polysemous morphemes, which have distinct but closely related meanings, and homonyms, morphemes that are pronounced the same, written with the same character, and that have the same origin, but which have branched off separately and acquired discrete specialized meanings which are no longer felt to be closely related. In some cases the different respective meanings of these individual homonyms are distinguished through their “preference” for different relative positions when they occur in compounds. We offer some initial examples, discussed in greater detail below, formed from 理 *li*³, which can mean ‘reason (n.)’, ‘to manage’, and ‘to pay attention to’: 處理 *chu*³⁽²⁾*li*³ [to manage + to manage] ‘to process, take care of’; 理會 *li*³*hui*⁴ [to pay attention to + to understand] ‘to understand; to pay attention to’; 理喻 *li*³*yu*⁴ [reason + to make clear] ‘to reason with s.o.’. Type **(1)** could be considered the “purest” type of synonymous coordinate compound verb.

(2) Specific + generic coordinate compound verbs: In the second main type of ordering in synonymous coordinate verbs, a relatively specific verb precedes, and thus after a fashion modifies, one with a more general meaning. Morphosyntactically, the relationship is not a canonical modifier-modified relationship, since both are contextual verbs, and the expression is thus headless. But semantically, the initial element provides information that further narrows down the final element; this is called **semantic modification**, as opposed to syntactic or morphosyntactic modification, and the “head” of this type of compound is a **semantic head**. Examples are the following three kinds of ‘making’: 鑄造 *zhu*⁴*zao*⁴ [to cast + to make, manufacture] ‘to cast (metal)’; 塑造 *su*⁴*zao*⁴ [to sculpt + to make, manufacture] ‘to form, mold,

sculpt’, and 釀造 *niang⁴zao⁴* [to brew + to make, manufacture] ‘to brew’. In each case, the initial element has a much more specific and precise meaning than the final element, making the final element a semantic but not morphosyntactic head.

The specific verb in initial position provides greater precision; the more generic one in final position mainly fills out a syllabic requirement, i.e. for disyllabicity, but it also classifies or delimits the action in a broad or general way. Element ordering in this subtype is a further confirmation of the overwhelming tendency of Chinese to put any modified element on the **right**, even in constructions in which there is technically no syntactic or morphosyntactic modifier-modified relationship.

(3) Quasi-resultative coordinate compound verbs: Sometimes a morpheme, although a synonym of the other element in the compound, carries resultative force. The two together still form a synonymous coordinate verb, though its structure, i.e. word order, follows that of a resultative construction. The morpheme with resultative force will occur on the **right**, the fixed position for the resultative satellite in a true resultative construction. Examples are 穿刺 *chuan¹ci⁴* [to go through + to poke through] ‘to poke through’ and 解脫 *jie³tuō¹* [to undo + to extricate oneself from] ‘to free, extricate oneself from’, in which the final element, while synonymous with the initial component, also carries resultative force.

(4) Coordinate compound verbs influenced by aspectual verb compounds: Another set of coordinate compound verbs has a verb with aspectual meaning in initial position and a near synonym in final. Examples are 停放 *ting²fang⁴* [to stop + to put] ‘to park’ and 開放 *kai¹fang⁴* [to begin + to release] ‘to open up, liberalize’. The ordering of elements in this subtype is influenced by aspectual verb compounds with embedding, such as 停辦 *ting²ban⁴* [to stop + to administer] ‘to discontinue administering’, in which there is an aspectual verb, or matrix verb, in first position, and a verbal complement in second (see Chapter IV). In this verb type, however, the second element is a synonym rather than a complement of the first verb; thus the resulting compound is a full-fledged synonymous coordinate compound verb and not an aspectual compound verb. There is sometimes further influence from an additional construction type, the resultative construction, when the second element suggests a resulting resting state of the first, as in 停靠 *ting²kao⁴* [to stop + to lean against] ‘to pull over (to the curb)’.

These four types will be discussed in detail and further exemplified below.

3.2.1 Type (1): Relative position of elements is decided largely by “preference” of individual morpheme

With synonymous coordinate compounds we find a **strong tendency for a morpheme to assume one accustomed place, either initial or final**; there is a third group that seems more flexible in that it appears in **both positions** in significant numbers of compounds. It should be noted that a morpheme with a relatively set place in a synonymous coordinate compound verb may appear freely in the other position when it occurs in a **non-coordinate compound**, such as in prefixed or other adverb-verb compounds, verb-object constructions, resultative constructions, aspectual compound verbs, and lexical serial verbs. Alternatively, a morpheme may appear in different positions in coordinate compound verbs if it is being used in two different senses, i.e. it is either polysemous or two separate homonyms; though in many of these cases (see 調 *tiao*² below) it may retain the same position throughout. It may also become another contextual part of speech, particularly a noun. The relative stability of position of a morpheme is a notable characteristic of coordinate verb compounds. It will be illustrated with examples below.

Let us look first at morphemes that “prefer” the initial spot in a compound. The morpheme 保 *bao*³ means ‘to keep, retain, protect, guarantee’. Here are some common coordinate compounds in which it occurs:

- | | | |
|---|----------------------------------|------------------------|
| (31) 保持 <i>bao</i> ³ <i>chi</i> ² | [to keep + to hold] | ‘to maintain’ |
| (32) 保藏 <i>bao</i> ³ <i>cang</i> ² | [to keep + to store] | ‘to store, preserve’ |
| (33) 保存 <i>bao</i> ³ <i>cun</i> ² | [to keep + to preserve] | ‘to keep, preserve’ |
| (34) 保管 <i>bao</i> ³⁽²⁾ <i>guan</i> ³ | [to keep + to look after] | ‘to take care of’ |
| (35) 保護 <i>bao</i> ³ <i>hu</i> ⁴ | [to keep + to protect] | ‘to protect’ |
| (36) 保留 <i>bao</i> ³ <i>liu</i> ² | [to keep + to retain] | ‘to keep, retain’ |
| (37) 保衛 <i>bao</i> ³ <i>wei</i> ⁴ | [to keep + to defend] | ‘to defend’ |
| (38) 保佑 <i>bao</i> ³ <i>you</i> ⁴ | [to keep + to bless,
protect] | ‘to bless and protect’ |
| (39) 保有 <i>bao</i> ³⁽²⁾ <i>you</i> ³ | [to keep + to have] | ‘to possess’ |

In all cases, 保 *bao*³ occurs in the initial position. The few verb compounds or constructions where it occurs in second position are not coordinate, but either prefixed compounds, or verb-verb complement constructions, e.g.: 擔保 *dan*¹*bao*³ [to bear + to protect] ‘to guarantee, vouch for’ (verb-verb complement); 確保 *que*⁴*bao*³ [with certainty + to guarantee] ‘to assure’ (prefixed). There are also VO constructions that begin with 保 *bao*³, e.g. 保

胃 *bao³wei⁴* ‘to protect the stomach’, which we will not consider here.

Much like 保 *bao³* ‘to hold’, the bound morpheme 思 *si¹* ‘to think’ also appears consistently in the initial position, as in 思考 *si¹kao³* ‘to ponder’, 思索 *si¹suo³* ‘to think, ponder’, 思念 *si¹nian⁴* ‘to think of with longing’, and so forth. It also appears in various VO constructions such as 思鄉 *si¹xiang¹* ‘to be homesick’. Wherever 思 *si¹* appears in final position, it is in prefixed verbs such as 深思 *shen¹si¹* ‘to think over something deeply’, or 相思 *xiang¹si¹* ‘to think about, long for’; or in compounds such as 尋思 *xun²(or xin²)si¹* ‘to think to oneself’, which could be analyzed as a VO or conjunctive subordinate compound.

Similarly, 建 *jian⁴*, a morpheme meaning ‘to build, construct’, also occurs almost exclusively in initial position in coordinate compounds; 建 *jian⁴* in final position in verbs usually signals an aspectual verb compound, like 興建 *xing¹jian⁴* [to launch, initiate + to construct] ‘to launch construction of’, 創建 *chuang⁴jian⁴* [to create + to build] ‘to found, establish’, or a prefixed compound, e.g. 重建 *chong²jian⁴* [again + to build] ‘to rebuild’.

Here are a number of further examples, with occasional exceptions noted:

- (40) 編 *bian¹* ‘to edit, compile, weave’: 編織 *bian¹zhi¹* ‘to weave’; 編纂 *bian¹cuan⁴* ‘to compile’; 編排 *bian¹pai²* ‘to do layout’; 編撰 *bian¹zhuan⁴* ‘to author’; 編造 *bian¹zao⁴* ‘to make up, invent’; 編湊 *bian¹cou⁴* ‘to fabricate, invent’; 編寫 *bian¹xie³* ‘to write, compose’; 編輯 *bian¹ji²* ‘to edit’; 編制 *bian¹zhi⁴* ‘to draw up’; 編著 *bian¹zhu⁴* ‘to write, author’.
- (41) 飛 *fei¹* ‘to fly, go fast’: 飛翔 *fei¹xiang²* ‘to hover’; 飛躍 *fei¹yue⁴* ‘to leap’; 飛揚 *fei¹yang²* ‘to fly upward’; 飛行 *fei¹xing²* ‘to fly’; 飛奔 *fei¹ben¹* ‘to dash’; 飛馳 *fei¹chi²* ‘to speed along’.
- (42) 防 *fang²* ‘to prevent, guard against, defend’: 防備 *fang²bei⁴* ‘to guard against’; 防範 *fang²fan⁴* ‘to take precautions’; 防護 *fang²hu⁴* ‘to protect, shelter’; 防衛 *fang²wei⁴* ‘to defend’; 防禦 *fang²yu⁴* ‘to defend, guard’; 防止 *fang²zhi³* ‘to prevent’; 防治 *fang²zhi⁴* ‘to prevent’; this morpheme follows the patterns of 保 *bao³* quite closely, and it is similar in meaning; it occurs in second position in subordinate, serial and aspectual compound verbs.
- (43) 分 *fen¹* ‘to separate, distinguish, distribute, share’; examples: 分辨 *fen¹bian⁴* ‘to distinguish’; 分別 *fen¹bie²* ‘to distinguish’; 分發 *fen¹fa¹* ‘to assign, distribute’; 分佈 *fen¹bu⁴* ‘to distribute’; 分割 *fen¹ge¹* ‘to separate’; 分隔 *fen¹ge²* ‘to keep separate’; 分撥 *fen¹bo¹* ‘to allocate, group into batches’; 分解 *fen¹jie³* ‘to dissolve’; 分離 *fen¹li²* ‘to separate, part’; 分裂 *fen¹lie⁴* ‘to split’; 分散 *fen¹san⁴* ‘to scatter’; 分配 *fen¹pei⁴* ‘to

distribute'; 分析 *fen¹xi¹* 'to analyze'; 分攤 *fen¹tan¹* 'to share (the cost, burden)'; 分送 *fen¹song⁴* 'to distribute'; 分派 *fen¹pai⁴* 'to assign'; 區分 *qu¹fen¹* [area + to divide] 'to differentiate' is a subordinate compound; 劃分 *hua⁴fen¹* [to differentiate + to divide] 'to divide up, differentiate' seems to be a conjunctive subordinate compound. Note the difference between these examples and the conjunctive subordinate compounds with 分 *fen¹* in Chapter III.

- (44) 廢 *fei⁴* 'to abolish, discard'; 廢棄 *fei⁴qi⁴* 'to discard'; 廢止 *fei⁴zhi³* 'to nullify, abolish'; 廢置 *fei⁴zhi⁴* 'to set aside as useless'; 廢除 *fei⁴chu²* 'to abolish'; 廢黜 *fei⁴chu⁴* 'to dethrone'.
- (45) 調 *tiao²* a. 'to adjust' b. 'to tease': a. 調整 *tiao²zheng³* 'to adjust, regulate'; 調節 *tiao²jie²* 'to adjust'; 調適 *tiao²shi⁴* 'to adjust to'; 調教 *tiao²jiao⁴* 'to educate and guide'; 調處 *tiao²chu³* 'to arbitrate'; 調理 *tiao²li³* 'to look after one's health'; 調攝 *tiao²she⁴* 'to take care of oneself'; 調養 *tiao²yang³* 'to take care of one's health'; 調治 *tiao²zhi⁴* 'to recuperate'. b. 調侃 *tiao²kan³* 'to jeer at'; 調戲 *tiao²xi⁴* 'to tease, take liberties with'; 調弄 *tiao²nong⁴* 'to tease'; 調笑 *tiao²xiao⁴* 'to tease'. Exception: 烹調 *peng²tiao²* 'to cook'.

We will now consider example compounds formed with the polysemous high-frequency morpheme, 修 *xiu¹*, meaning respectively, 'to repair, decorate, build, cultivate, trim, write/compile'.

In the meaning of 'to repair', we have:

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|---|-------------------------------|--------------------------------------|
| (46) 修補 <i>xiu¹bu³</i> | [to repair + to patch] | 'to repair, patch up' |
| (47) 修改 <i>xiu¹gai³</i> | [to repair + to change] | 'to alter (clothing), alter, revise' |
| (48) 修葺 <i>xiu¹qi⁴</i> | [to repair + to thatch, mend] | 'to repair, renovate' |
| (49) 修整 <i>xiu¹zheng³</i> | [to repair + to regularize] | 'to repair and maintain' |
| (50) 修繕 <i>xiu¹shan⁴</i> | [to repair + to mend] | 'to repair, renovate' |
| (51) 修治 <i>xiu¹zhi⁴</i> | [to repair + to order] | 'to repair and renovate' |

In the meaning of 'to build':

- | | | |
|--|---------------------------|-----------------------|
| (52) 修蓋 <i>xiu¹gai⁴</i> | [to build + to construct] | 'to build, construct' |
| (53) 修建 <i>xiu¹jian⁴</i> | [to build + to construct] | 'to build, construct' |
| (54) 修造 <i>xiu¹zao⁴</i> | [to build + to make] | 'to make, construct' |
| (55) 修浚 <i>xiu¹jun⁴</i> | [to build + to dredge] | 'to dredge (a canal)' |

In the meaning of ‘to decorate’:

- (56) 修飾 *xiu¹shi⁴* [to decorate + to decorate] ‘to decorate, mollify’

In the meaning of ‘to trim’:

- (57) 修剪 *xiu¹jian³* [to trim + to cut] ‘to cut and trim’
 (58) 修整 *xiu¹zheng³* [to trim + to rectify] ‘to trim neatly’

In the meaning of ‘to cultivate’:

- (59) 修煉 *xiu¹lian⁴* [to cultivate + to refine] ‘to cultivate one’s spirit’

In the meaning of ‘write, compile’:

- (60) 修潤 *xiu¹run⁴* [to compile + to polish] ‘to polish (writing)’
 (61) 修纂 *xiu¹cuan⁴* [to compile + to compile] ‘to compile’
 (62) 修訂 *xiu¹ding⁴* [to compile + to finalize] ‘to revise’

There are fewer examples of coordinate compounds with 修 *xiu¹* in second position, though they are very common:

- (63) 檢修 *jian³xiu¹* [to examine + to repair] ‘to examine and repair, overhaul’
 (64) 維修 *wei²xiu¹* [to maintain + to repair] ‘to maintain and repair’
 (65) 整修 *zheng³xiu¹* [to rectify + to repair] ‘to rebuild, renovate, recondition’
 (66) 裝修 *zhuang¹xiu¹* [to install + to repair] ‘to fit up’
 (67) 翻修 *fan¹xiu¹* [to turn inside out + to repair] ‘to disassemble and renovate’

These examples can mostly be classified as serial verbs with iconic temporal sequence, or closely related activities. In any case, although there is a marked tendency for many morphemes to gravitate toward a fixed position in a compound, some do seem to be more flexible.

Let us now look at a morpheme that tends to occur in second position in synonymous coordinate compounds: 留 *liu²* ‘to stay, remain, keep’. It is not far removed semantically from the morpheme 保 *bao³* ‘to keep’. There seem

to be two main motivations behind 留 *liu*² tending to occur in final position. (1) It is a more general type of verb which naturally assumes final position, as mentioned in the preceding, coming after a more specific verb (see type (2)); and (2) 留 *liu*² tends to assume a resultative function, and thus it appears in final position, the same as a resultative satellite (see type (3)). Examples:

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|--|---------------------------------|---|
| (68) 保留 <i>bao</i> ³ <i>liu</i> ² | [to retain + to keep] | ‘to keep, retain’ |
| (69) 滯留 <i>zhi</i> ⁴ <i>liu</i> ² | [to be detained + to keep] | ‘to be detained, held up’ |
| (70) 收留 <i>shou</i> ¹ <i>liu</i> ² | [to receive + to keep] | ‘to take in (a guest)’ |
| (71) 容留 <i>rong</i> ² <i>liu</i> ² | [to accommodate +
to keep] | ‘to take in, give shelter to’ |
| (72) 停留 <i>ting</i> ² <i>liu</i> ² | [to stop + to keep] | ‘to stay in a place’ |
| (73) 拘留 <i>ju</i> ¹ <i>liu</i> ² | [to detain + to keep] | ‘to detain, hold in
custody’ |
| (74) 居留 <i>ju</i> ¹ <i>liu</i> ² | [to reside + to stay] | ‘to establish residency in a
place’ |
| (75) 扣留 <i>kou</i> ⁴ <i>liu</i> ² | [to detain + to keep] | ‘to detain, hold in custody,
arrest’ |
| (76) 存留 <i>cun</i> ² <i>liu</i> ² | [to preserve + to stay] | ‘to keep, to stay’ |
| (77) 逗留 <i>dou</i> ⁴ <i>liu</i> ² | [to stop, stay + to stay] | ‘to stay, loiter’ |
| (78) 遺留 <i>yi</i> ² <i>liu</i> ² | [to leave behind +
to leave] | ‘to leave something
behind’ |

Note that the elements of example (9) above, 存留 *cun*²*liu*² [to preserve + to stay] ‘to keep, to stay’, also occur in reverse order with a somewhat different meaning:

- (79) 留存 *liu*²*cun*² [to keep + to preserve] ‘to keep, retain, preserve’

In some cases, one generic verb – in this case 有 *you*³ ‘to have’ and 用 *yong*⁴ ‘to use’ – can overrule another generic verb, in this case 留 *liu*², and assume final position, perhaps by being even more semantically general than the other morpheme; and the order may also be influenced by temporal sequentiality. Sequentiality also seems to be a motivating force. Examples:

- (80) 留有 *liu*²*you*³ [to keep + to have] ‘to retain’

- (81) 留用 *liu² yong⁴* [to keep + to use] ‘to keep for use’; this is probably better analyzed as a serial verb

Below are listed further morphemes that almost inevitably appear on the **right**, i.e. in **final** position in synonymous coordinate compounds:

- (82) 驗 *yan⁴* ‘to examine, check, test’: 測驗 *ce⁴ yan⁴* ‘to test, put to a test’; 查驗 *cha² yan⁴* ‘to check, examine’; 經驗 *jing¹ yan⁴* ‘to experience’; 試驗 *shi⁴ yan⁴* ‘to test, do an experiment’; 考驗 *kao³ yan⁴* ‘to put to a test’; 檢驗 *jian³ yan⁴* ‘to examine’.
- (83) 靠 *kao⁴* ‘to lean on, rely on, depend on’: 停靠 *ting² kao⁴* ‘to pull over (to the curb)’; 依靠 *yi¹ kao⁴* ‘to rely on’; 倚靠 *yi³ kao⁴* ‘to rely on’.
- (84) 量 *liang²* ‘to measure’: 測量 *ce⁴ liang²* ‘to survey, measure, gauge’; 比量 *bi³ liang²* ‘to take rough measurements (by comparison)’; 端量 *duan¹ liang²* ‘to give s.o. the once-over, check s.o. out’; 估量 *gu¹ liang²* ‘to estimate’; 丈量 *zhang⁴ liang²* ‘to measure (land)’; 商量 *shang¹ liang²* ‘to discuss’; 衡量 *heng² liang²* ‘to measure, consider, weigh the options’.
- (85) 望 *wang⁴* ‘to watch, look’: 探望 *tan⁴ wang⁴* ‘to look about; see, visit’; 看望 *kan⁴ wang⁴* ‘to call on, visit’; 盼望 *pan⁴ wang⁴* ‘to hope for, look forward to’; 希望 *xi¹ wang⁴* ‘to hope, wish, expect’; 冀望 *ji⁴ wang⁴* ‘to hope’; 瞭望 *liao² wang⁴* ‘to watch for, look out’; 企望 *qi⁴ wang⁴* ‘to expect, hope for’; 祈望 *qi² wang⁴* ‘to wish, hope for’; 瞻望 *zhan¹ wang⁴* ‘to look ahead’; 眺望 *tiao⁴ wang⁴* ‘to gaze afar’; 觀望 *guan¹ wang⁴* ‘to look around; wait and see’.
- (86) 罰 *fa²* ‘to punish, penalize’: 懲罰 *cheng^{3/2} fa²* ‘to punish, penalize’; 處罰 *chu³ fa²* ‘to punish, penalize’; 責罰 *ze² fa²* ‘to punish’.
- (87) 備 *bei⁴* ‘to prepare’: 籌備 *chou² bei⁴* ‘to prepare, arrange’; 儲備 *chu³ bei⁴* ‘to store up (in preparation)’; 防備 *fang² bei⁴* ‘to take precautions against’; 裝備 *zhuang¹ bei⁴* ‘to equip, fit out, outfit’; 配備 *pei⁴ bei⁴* ‘to provide, equip, fit out, outfit’; 守備 *shou³ bei⁴* ‘to stand guard, be on garrison duty’; 具備 *ju⁴ bei⁴* ‘to have, possess, be provided with’.

We now move on to the third subtype, morphemes that appear in many compounds in both positions.

First, we must make sure we are identifying the compound type correctly. Some morphemes occur in one or the other position in synonymous coordinate compounds, but will appear elsewhere in different compound types. Morpheme behavior in other compound types does not interest us in this

chapter, but we will give a few examples to clarify the point.

啓 *qi*³ ‘to open, begin’ occurs in final position in a synonymous coordinate compound with 開 *kai*¹ ‘to open’ in 開啓 *kai*¹*qi*³, meaning ‘to open’; if it occurs in initial position it will usually be an inchoative, e.g. 啓用 *qi*³*yong*⁴ [to begin + to use] ‘to begin to use (a building)’. This happens with many morphemes with aspectual application, such as 止 *zhi*³ ‘to stop’: 止 *zhi*³ occurs in first position in the aspectual 止付 *zhi*³*fu*⁴ [to stop + to pay] ‘to stop payment’ and 止痛 *zhi*³*tong*⁴ [to stop + to hurt] ‘to kill pain’, but in final position in the coordinate compound verbs 停止 *ting*²*zhi*³ [to stop + to stop] ‘to stop’ and 休止 *xiu*¹*zhi*³ [to cease + to stop] ‘to stop’.

Other morphemes form a resultative construction when in second position, such as 完 *wan*² ‘to finish’; so they may be used to create synonymous coordinate compounds only in the initial position, e.g. 完成 *wan*²*cheng*² [to finish + to complete] ‘to complete’; or 破 *po*⁴ ‘to break’: 破擊 *po*⁴*ji*² ‘to smash’ meets our criteria; 爆破 *bao*⁴*po*⁴ ‘to explode (and shatter)’ is a resultative construction. Some morphemes, e.g. 偷 *tou*¹ ‘to steal’, naturally tend to form subordinate prefixed verbs, in this case because of the morpheme’s extended meaning of ‘secretly’, so one must take care to distinguish compounds like 偷拍 *tou*¹*pai*¹ [to steal, secretly + to film] ‘to secretly film’ from 偷竊 *tou*¹*qie*⁴ [to steal + to pilfer] ‘to steal’. Others easily produce serial verbs, e.g. 收 *shou*¹ ‘to receive’, which in final position forms compounds like 簽收 *qian*¹*shou*¹ ‘to sign and accept’, and in first position ones like 收購 *shou*¹*gou*⁴ ‘to receive and purchase’, though it can also form coordinate verbs such as 收容 *shou*¹*rong*² [to receive + to accommodate] ‘to take in’. Each compound must be carefully considered to identify its correct compound type.

Second, the different position of a morpheme may correspond to different meanings. The morpheme 理 *li*³ occurs in second position in:

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|------|--|---------------------------------|-------------------------------|
| (88) | 處理 <i>chu</i> ³⁽²⁾ <i>li</i> ³ | [to take care of + to manage] | ‘to take care of, to process’ |
| (89) | 整理 <i>zheng</i> ³⁽²⁾ <i>li</i> ³ | [to put into order + to manage] | ‘to put into order, tidy up’ |
| (90) | 護理 <i>hu</i> ⁴ <i>li</i> ³ | [to care for + to manage] | ‘to tend and protect’ |

but in initial position in:

- | | | | |
|------|--|--|-----------------------|
| (91) | 理睬 <i>li</i> ³⁽²⁾ <i>cai</i> ³ | [to pay attention to + to pay mind to] | ‘to pay attention to’ |
|------|--|--|-----------------------|

- (92) 理會 *li³hut⁴* [to pay attention to + to fix attention on] ‘to pay attention to’

The morpheme 理 *li³* has a number of specialized meanings which developed from its original meaning of ‘texture, pattern, grain (as of wood or meat)’. The ones which concern us here are, as already mentioned briefly in the earlier part of this chapter, (1) ‘to manage, to take care of, to organize’; and (2) ‘to pay attention to, to pay something mind’; 理 *li³* also has the meanings of (3) ‘truth, reason, rationality, science’.

With this in mind, we find that 理 *li³* tends to occur in initial position when it means ‘to pay attention to’, and in final position when it has the meaning of ‘to manage’. It would be difficult to speculate on why one meaning tended to one position and the other meaning to the other position; this may in fact have been quite arbitrary. The important thing is that once a pattern is established, language users have analogy as a guide in forming new compounds with a given morpheme, in order to accurately suggest the meaning they intend to express, when the morpheme has more than one possible meaning.

Further compounds with 理 *li³* in initial position include 理解 *li³jie³* [reason + to dissolve, dismantle] ‘to comprehend’ and 理喻 *li³yu⁴* [reason + explain] ‘to reason with someone’. These seem to be instrumental denominal adverb + verb compounds (thus belonging in Chapter II), and not coordinate compounds; they mean literally ‘to use reason to analyze’ and ‘to use reason to explain something to someone’. So 理 *li³* is in initial position in compounds like these because it modifies the verbal head, which comes in the expected final position.

Sometimes the varying relative position of morphemes is not a function of different compound types, nor of the different meanings of discrete homonyms. One such flexible morpheme is 商 *shang¹* ‘to discuss, consult’. In first position we have these common compounds:

- (93) 商量 *shang¹liang²* [to consult + to evaluate] ‘to discuss, talk over’
 (94) 商討 *shang¹tao³* [to consult + to discuss] ‘to deliberate over’
 (95) 商議 *shang¹yi⁴* [to consult + to discuss] ‘to discuss, confer with’
 (96) 商榷 *shang¹que⁴* [to consult + to discuss] to discuss, deliberate’
 (97) 商談 *shang¹tan²* [to consult + to chat] ‘to exchange views, confer with’

- (98) 商洽 *shang¹qia⁴* [to consult + to confer] ‘to arrange with s.o., take up a matter with s.o.’
- (99) 商計 *shang¹ji⁴* [to consult + to plan, calculate] ‘to consult and discuss’
- (100) 商酌 *shang¹zhuo²* [to consult + to consider] ‘to discuss and consider’

In second position we have these:

- (101) 籌商 *chou²shang¹* [to plan + to confer] ‘to plan and confer’ (this could be analyzed as a serial verb)
- (102) 磋商 *cuo¹shang¹* [to grind bone or horn into a tool, consult + to confer] ‘to confer’
- (103) 參商 *can¹shang¹* [to consult + to confer] ‘to confer’
- (104) 洽商 *qia⁴shang¹* [to consult + to confer] ‘to confer with’

There are many prefixed verbs with 商 *shang¹* as a second element, some mentioned in Chapter II, such as 相商 *xiang¹shang¹* ‘to confer with’ (using a dummy pronoun as a filler), and 協商 *xie²shang¹* ‘to discuss with others’. It would seem that this morpheme does tend more toward first position in synonymous coordinate compounds, though second is also possible. So the tendency of a morpheme to one place is indeed only a tendency, more pronounced in some morphemes than others, one that admits exceptions. Difference in relative position of this particular morpheme does not seem to distinguish separate meanings.

Below follow a few more examples of morphemes that appear on both the (i) **left (initial)** or (ii) **right (final)** position in synonymous coordinate compounds, with little significant difference in meaning:

- (105) 查 *cha²* ‘to examine, check, survey’:
- (i) In initial position: 查看 *cha²kan⁴* ‘to look over, examine’; 查驗 *cha²yan⁴* ‘to check, examine’; 查考 *cha²kao³* ‘to investigate’; 查找 *cha²zhao³* ‘to look for’; 查究 *cha²jiu⁴* ‘to investigate’; 查詢 *cha²xun²* ‘to inquire about’; 查問 *cha²wen⁴* ‘to inquire about,

- interrogate'; 查閱 *cha²yue⁴* 'to check a reference'; 查勘 *cha²kan¹* 'to survey, prospect'.
- (ii) In final position: 檢查 *jian³cha²* 'to examine'; 調查 *diao⁴cha²* 'to survey'; 審查 *shen³cha²* 'to examine for approval'; 偵查 *zhen¹cha²* 'to investigate'; 巡查 *xun²cha²* 'to go on a tour of inspection'; 稽查 *ji¹cha²* 'to check (for smuggling)'; 搜查 *sou¹cha²* 'to search (a body)'.
(This morpheme seems to appear frequently in both initial and final position.)
- (106) 積 *ji¹* 'to accumulate, pile up':
- (i) In initial position: 積儲 *ji¹chu³* 'to store up, lay up, stockpile'; 積存 *ji¹cun²* 'to store up, lay up, stockpile'; 積聚 *ji¹ju⁴* 'to gather, accumulate, build up'; 積累 *ji¹lei³* 'to accumulate'; 積蓄 *ji¹xu⁴* 'to put aside, save up, accumulate'; 積壓 *ji¹ya¹* 'to keep long in stock'; 積攢 *ji¹zan³* 'to gather bit by bit'.
- (ii) In final position: 沉積 *chen²ji¹* 'to deposit'; 堆積 *dui¹ji¹* 'to pile up, heap up'; 囤積 *tun²ji¹* 'to hoard'; 蓄積 *xu⁴ji¹* 'to store up'; 淤積 *yu¹ji¹* 'to silt up, deposit'.
(This morpheme seems especially flexible as to relative position in a compound; note that a number of pairs of identical elements occur in both orders, with approximately the same meanings, though in initial position it tends to refer to a more **active** action involving **intention**, and in final position a more **passive** one that happens of its own accord, due to influence from aspectual compounds and resultative constructions.)
- (107) 選 *xuan³* 'to choose, select, opt for':
- (i) In initial position: 選擇 *xuan³ze²* 'to choose'; 選拔 *xuan³ba²* 'to select finalists'; 選舉 *xuan³(2)ju³* 'to hold an election'.
- (ii) In final position: 挑選 *tiao¹xuan³* 'to choose (selectively)'; 揀選 *jian³(2)xuan³* 'to pick'; 競選 *jing⁴xuan³* 'to run for election'; 篩選 *shai¹xuan³* 'to screen'; 遴選 *lin²xuan³* 'to choose'.
(This morpheme can perhaps be considered a semantically general verb when in final position.)
- (108) 遊 *you²* 'to wander about':
- (i) In initial position: 遊蕩 *you²dang⁴* 'to loiter about, wander'; 游動 *you²dong⁴* 'to move about from place to place'; 遊離 *you²li²* 'to drift away'; 遊覽 *you²lan³* 'to go sight-seeing'; 遊移 *you²yi²* 'to waver, vacillate'; 遊散 *you²san⁴* 'to take a stroll'; 游行 *you²xing²* 'to march in a parade'.

- (ii) In final position: 旅遊 *lǚ³you²* ‘to travel’; 巡遊 *xun²you²* ‘to stroll about, ramble.’
(This morpheme seems to have a stronger tendency to occur in initial position; the two examples given may be influenced by the subordinate pattern.)
- (109) 顧 *gu⁴* ‘to watch, look at, look after’:
- (i) In initial position: 顧念 *gu⁴nian⁴* ‘to think, be concerned about’; 顧盼 *gu⁴pan⁴* ‘to look about’; 顧惜 *gu⁴xi²* ‘to take of, look after, value’.
- (ii) In final position: 看顧 *kan⁴gu⁴* ‘to look after’; 照顧 *zhao⁴gu⁴* ‘to care for, look after’; 眷顧 *juan⁴gu⁴* ‘to care about’; 瞻顧 *zhan¹gu⁴* ‘to consider carefully’.
- (110) 運 *yun⁴* ‘to move, run’:
- (i) In initial position: 運動 *yun⁴dong⁴* ‘to move, exercise’; 運輸 *yun⁴shu¹* ‘to transport’; 運送 *yun⁴song⁴* ‘to ship’; 運行 *yun⁴xing²* ‘to be in motion’; 運用 *yun⁴yong⁴* ‘to use, wield, apply’; 運轉 *yun⁴zhuan³* ‘to run (as a machine)’.
- (ii) In final position: 營運 *ying²yun⁴* ‘to run (a business)’; 搬運 *ban²yun⁴* ‘to move (goods)’; 駁運 *bo²yun⁴* ‘to transport (by barge)’; 漕運 *cao²yun⁴* ‘to transport by water’.
(The examples in (6) (ii) tend towards subordinate structures; thus 運 *yun⁴* probably occurs more often in initial position.)

We find that among the morphemes that can occur in either initial or final position, many still “prefer” one particular position; and when they occur in the other, there is often an identifiable reason for it.

Below are collections of common verb morphemes categorized according to the relative position they usually occupy in a **synonymous coordinate compound**. Only very simple glosses are given to identify the morphemes. Note that many of the morphemes occur in other positions in other compound and construction types.

Table 3.1: Common verb elements that typically appear in initial position in synonymous compound verbs, arranged alphabetically according to Pinyin spelling:

拔 <i>ba</i> ² ‘to pull up’	分 <i>fen</i> ¹ ‘to divide’
罷 <i>ba</i> ⁴ ‘to cease’	封 <i>feng</i> ¹ ‘to seal’
搬 <i>ban</i> ¹ ‘to move’	負 <i>fu</i> ⁴ ‘to carry’
頒 <i>ban</i> ¹ ‘to bestow’	革 <i>ge</i> ² ‘to change’
幫 <i>bang</i> ¹ ‘to help’	供 <i>gong</i> ¹ ‘to provide’
包 <i>bao</i> ¹ ‘to enwrap’	關 <i>guan</i> ¹ ‘to close’
保 <i>bao</i> ³ ‘to protect’	觀 <i>guan</i> ¹ ‘to look at’
奔 <i>ben</i> ¹ ‘to run, dash’	寄 <i>ji</i> ⁴ ‘to send, impose on’
逼 <i>bi</i> ¹ ‘to coerce’	交 <i>jiao</i> ¹ ‘to intersect’
比 <i>bi</i> ³ ‘to compare’	教 <i>jiao</i> ¹⁽⁴⁾ ‘to teach’
必 <i>bi</i> ⁴ ‘must’	進 <i>jin</i> ⁴ ‘to advance’
編 <i>bian</i> ¹ ‘to weave, compile’	驚 <i>jing</i> ¹ ‘to surprise’
變 <i>bian</i> ⁴ ‘to change’	經 <i>jing</i> ¹ ‘to pass’
辯 <i>bian</i> ⁴ ‘to debate’	開 <i>kai</i> ¹ ‘to open’
辨 <i>bian</i> ⁴ ‘to distinguish’	考 <i>kao</i> ³ ‘to give a test’
表 <i>biao</i> ³ ‘to show’	克 <i>ke</i> ⁴ ‘to overcome’
猜 <i>cai</i> ¹ ‘to guess’	恐 <i>kong</i> ³ ‘to fear, frighten’
參 <i>can</i> ¹ ‘to participate’	聯 <i>lian</i> ² ‘to join’
操 <i>cao</i> ¹ ‘to manipulate’	旅 <i>lv</i> ³ ‘to travel’
差 <i>chai</i> ¹ ‘to send on a mission’	埋 <i>mai</i> ² ‘to bury’
超 <i>chao</i> ¹ ‘to exceed’	破 <i>po</i> ⁴ ‘to break’
嚐 <i>chang</i> ² ‘to taste, try’	起 <i>qi</i> ³ ‘to rise’
懲 <i>cheng</i> ² ‘to punish’	勸 <i>quan</i> ⁴ ‘to advise’
稱 <i>cheng</i> ¹ ‘to say, name’	缺 <i>que</i> ¹ ‘to lack’
創 <i>chuang</i> ⁴ ‘to create’	認 <i>ren</i> ⁴ ‘to recognize’
辭 <i>ci</i> ² ‘to decline, take leave’	數 <i>shu</i> ³ ‘to list’
等 <i>deng</i> ³ ‘to wait’	思 <i>si</i> ¹ ‘to think’
抵 <i>di</i> ³ ‘to resist’	死 <i>si</i> ³ ‘to die’
調 <i>diao</i> ⁴ ‘to investigate’	提 <i>ti</i> ² ‘to carry, lift’
頂 <i>ding</i> ³ ‘to push with the head’	調 <i>tiao</i> ² ‘to adjust’
端 <i>duan</i> ¹ ‘to estimate’	跳 <i>tiao</i> ⁴ ‘to jump’
堆 <i>dui</i> ¹ ‘to pile up’	聽 <i>ting</i> ¹ ‘to listen, obey’
防 <i>fang</i> ² ‘to prevent’	停 <i>ting</i> ² ‘to stop’
飛 <i>fei</i> ¹ ‘to fly’	偷 <i>tou</i> ¹ ‘to steal’
廢 <i>fei</i> ⁴ ‘to discard’	推 <i>tui</i> ¹ ‘to push’
	退 <i>tui</i> ⁴ ‘to retreat’

完 <i>wan</i> ² ‘to finish’	怨 <i>yuan</i> ⁴ ‘to complain’
圍 <i>wei</i> ² ‘to surround’	增 <i>zeng</i> ¹ ‘to increase’
希 <i>xi</i> ¹ ‘to hope’	站 <i>zhan</i> ⁴ ‘to stand’
信 <i>xin</i> ⁴ ‘to trust’	招 <i>zhao</i> ¹ ‘to greet’
省 <i>xing</i> ³ ‘to examine’	知 <i>zhi</i> ¹ ‘to know’
學 <i>xue</i> ² ‘to study’	執 <i>zhi</i> ² ‘to carry out’
研 <i>yan</i> ² ‘to grind, study’	指 <i>zhi</i> ³ ‘to point, direct’
要 <i>yao</i> ¹ ‘to require’	追 <i>zhui</i> ¹ ‘to chase, pursue’
飲 <i>yin</i> ³ ‘to drink’	組 <i>zu</i> ³ ‘to organize’

Table 3.2: Common verb elements that typically appear in final position in synonymous compound verbs:

辦 <i>ban</i> ⁴ ‘to carry out’	絕 <i>jue</i> ² ‘to sever’
備 <i>bei</i> ⁴ ‘to prepare’	靠 <i>kao</i> ⁴ ‘to get close to’
閉 <i>bi</i> ⁴ ‘to close’	刻 <i>ke</i> ¹ ‘to carve’
佈 <i>bu</i> ⁴ ‘to spread, announce’	立 <i>li</i> ⁴ ‘to stand, establish’
藏 <i>cang</i> ² ‘to hide’	令 <i>ling</i> ⁴ ‘to order’
察 <i>cha</i> ² ‘to examine’	量 <i>liang</i> ² ‘to measure’
唱 <i>chang</i> ⁴ ‘to sing’	留 <i>liu</i> ² ‘to keep, retain’
從 <i>cong</i> ² ‘to follow’	買 <i>mai</i> ³ ‘to buy’
存 <i>cun</i> ² ‘to preserve’	賣 <i>mai</i> ⁴ ‘to sell’
達 <i>da</i> ² ‘to arrive, reach’	忙 <i>mang</i> ² ‘to be busy, help’
待 <i>dai</i> ⁴ ‘to wait, treat’	免 <i>mian</i> ³ ‘to remove, avoid’
奪 <i>duo</i> ² ‘to snatch away’	沒 <i>mo</i> ⁴ ‘to sink’
犯 <i>fan</i> ⁴ ‘to commit (a wrong)’	念 <i>nian</i> ⁴ ‘to read aloud’
費 <i>fei</i> ⁴ ‘to use up’	弄 <i>nong</i> ⁴ ‘to tease, fiddle with’
復 <i>fu</i> ⁴ ‘to return’	怕 <i>pa</i> ⁴ ‘to fear’
怪 <i>guai</i> ⁴ ‘to blame’	跑 <i>pao</i> ³ ‘to run’
害 <i>hai</i> ⁴ ‘to harm’	求 <i>qiu</i> ² ‘to ask for’
好 <i>hao</i> ⁴ ‘to like’	讓 <i>rang</i> ⁴ ‘to yield, give up’
恨 <i>hen</i> ⁴ ‘to hate’	掃 <i>sao</i> ³ ‘to sweep’
畫 <i>hua</i> ⁴ ‘to draw, mark’	始 <i>shi</i> ³ ‘to begin’
還 <i>huan</i> ² ‘to return’	識 <i>shi</i> ⁴ ‘to recognize’
換 <i>huan</i> ⁴ ‘to change’	受 <i>shou</i> ⁴ ‘to be affected by’
及 <i>ji</i> ² ‘to reach’	屬 <i>shu</i> ³ ‘to belong to’
究 <i>jiu</i> ⁴ ‘to study, follow up on’	說 <i>shuo</i> ¹ ‘to say’
舉 <i>ju</i> ³ ‘to hold up’	送 <i>song</i> ⁴ ‘to send’

算 <i>suan</i> ⁴ ‘to calculate’	續 <i>xu</i> ⁴ ‘to continue’
隨 <i>sui</i> ² ‘to follow’	疑 <i>yi</i> ² ‘to suspect, be suspicious’
投 <i>tou</i> ² ‘to cast’	議 <i>yi</i> ⁴ ‘to discuss’
亡 <i>wang</i> ² ‘to die’	用 <i>yong</i> ⁴ ‘to use’
望 <i>wang</i> ⁴ ‘to gaze at, hope’	造 <i>zao</i> ⁴ ‘to make, manufacture’
問 <i>wen</i> ⁴ ‘to ask’	織 <i>zhi</i> ¹ ‘to weave, bring together’
惡 <i>wu</i> ⁴ ‘to dislike, hate’	止 <i>zhi</i> ³ ‘to stop’
息 <i>xi</i> ² ‘to rest’	證 <i>zheng</i> ⁴ ‘to prove’
習 <i>xi</i> ² ‘to practice’	種 <i>zhong</i> ⁴ ‘to plant’
現 <i>xian</i> ⁴ ‘to appear’	助 <i>zhu</i> ⁴ ‘to assist’
曉 <i>xiao</i> ³ ‘to know’	走 <i>zou</i> ³ ‘to walk, go’
寫 <i>xie</i> ³ ‘to write’	坐 <i>zuo</i> ⁴ ‘to sit’
許 <i>xu</i> ³ ‘to allow’	作 <i>zuo</i> ⁴ ‘to do, make’

Table 3.3: Common verb elements that may appear in both positions in synonymous compound verbs:

愛 <i>ai</i> ⁴ ‘to love’	浮 <i>fu</i> ² ‘to float’
敗 <i>bai</i> ⁴ ‘to lose, fail’	改 <i>gai</i> ³ ‘to change’
拜 <i>bai</i> ⁴ ‘to give reverence’	蓋 <i>gai</i> ⁴ ‘to build, cover’
辦 <i>ban</i> ⁴ ‘to carry out’	隔 <i>ge</i> ² ‘to separate’
抱 <i>bao</i> ⁴ ‘to embrace’	顧 <i>gu</i> ⁴ ‘to look, care for’
補 <i>bu</i> ³ ‘to supplement’	掛 <i>gua</i> ⁴ ‘to hang’
查 <i>cha</i> ² ‘to check’	管 <i>guan</i> ³ ‘to manage’
產 <i>chan</i> ³ ‘to produce’	呼 <i>hu</i> ¹ ‘to call’
遲 <i>chi</i> ² ‘to be delayed’	護 <i>hu</i> ⁴ ‘to protect’
除 <i>chu</i> ² ‘to remove’	懷 <i>huai</i> ² ‘to cherish’
處 <i>chu</i> ³ ‘to deal with’	獲 <i>huo</i> ⁴ ‘to obtain’
觸 <i>chu</i> ⁴ ‘to touch, make contact’	積 <i>ji</i> ¹ ‘to accumulate’
穿 <i>chuan</i> ¹ ‘to poke through’	記 <i>ji</i> ⁴ ‘to remember, record’
傳 <i>chuan</i> ² ‘to transmit’	計 <i>ji</i> ⁴ ‘to calculate’
答 <i>da</i> ² ‘to reply’	減 <i>jian</i> ³ ‘to decrease’
擔 <i>dan</i> ¹ ‘to bear’	講 <i>jiang</i> ³ ‘to speak’
定 <i>ding</i> ⁴ ‘to establish’	叫 <i>jiao</i> ⁴ ‘to call’
動 <i>dong</i> ⁴ ‘to move’	接 <i>jie</i> ¹ ‘to catch, touch’
斷 <i>duan</i> ⁴ ‘to break off’	結 <i>jie</i> ² ‘to bind’
放 <i>fang</i> ⁴ ‘to release, put’	解 <i>jie</i> ³ ‘to separate’
奉 <i>feng</i> ⁴ ‘to give respectfully’	借 <i>jie</i> ⁴ ‘to borrow’

禁 <i>jin</i> ⁴ 'to prohibit'	試 <i>shi</i> ⁴ 'to test, try'
敬 <i>jing</i> ⁴ 'to respect'	收 <i>shou</i> ¹ 'to receive'
救 <i>jiu</i> ⁴ 'to save'	守 <i>shou</i> ³ 'to hold'
就 <i>jiu</i> ⁴ 'to assume a place'	訴 <i>su</i> ⁴ 'to tell, complain'
居 <i>ju</i> ¹ 'to live, reside'	談 <i>tan</i> ² 'to talk, chat'
覺 <i>jue</i> ² 'to feel, become aware of'	逃 <i>tao</i> ² 'to flee'
看 <i>kan</i> ⁴ 'to look, look after'	討 <i>tao</i> ³ 'to ask for, discuss'
哭 <i>ku</i> ¹ 'to cry'	脫 <i>tuo</i> ¹ 'to become free of'
拉 <i>la</i> ¹ 'to pull'	玩 <i>wan</i> ² , <i>wan</i> ⁴ 'to play, play with'
勞 <i>lao</i> ² 'to labor'	往 <i>wang</i> ³ 'to go'
離 <i>li</i> ² 'to leave, to distance'	忘 <i>wang</i> ⁴ 'to forget'
理 <i>li</i> ³ 'manage, pay attention to'	吸 <i>xi</i> ¹ 'to suck'
憐 <i>lian</i> ² 'to love with compassion'	想 <i>xiang</i> ³ 'to think'
料 <i>liao</i> ⁴ 'to reckon, prepare'	消 <i>xiao</i> ¹ 'to get rid of'
列 <i>lie</i> ⁴ 'to line up'	效 <i>xiao</i> ⁴ 'to imitate, devote'
領 <i>ling</i> ³ 'to lead'	修 <i>xiu</i> ¹ 'to repair'
流 <i>liu</i> ² 'to flow'	宣 <i>xuan</i> ¹ 'to spread'
論 <i>lun</i> ⁴ 'to discuss'	選 <i>xuan</i> ³ 'to choose'
拿 <i>na</i> ² 'to take'	尋 <i>xun</i> ² 'to search for'
排 <i>pai</i> ² 'to arrange'	演 <i>yan</i> ³ 'to perform'
派 <i>pai</i> ⁴ 'to assign, dispatch'	驗 <i>yan</i> ⁴ 'to test'
憑 <i>ping</i> ² 'to rely on'	養 <i>yang</i> ³ 'to raise, nurture'
請 <i>qing</i> ³ 'to request'	搖 <i>yao</i> ² 'to rock'
忍 <i>ren</i> ³ 'to tolerate'	引 <i>yin</i> ³ 'to lead'
任 <i>ren</i> ⁴ 'to appoint, give responsibility'	約 <i>yue</i> ¹ 'to restrain, make an appointment with'
容 <i>rong</i> ² 'to accommodate'	越 <i>yue</i> ⁴ 'to cross'
散 <i>san</i> ⁴ 'to scatter'	責 <i>ze</i> ² 'to blame, scold'
殺 <i>sha</i> ¹ 'to kill'	張 <i>zhang</i> ¹ 'to extend'
傷 <i>shang</i> ¹ 'to harm'	爭 <i>zheng</i> ¹ 'to struggle with'
燒 <i>shao</i> ¹ 'to burn, cook'	整 <i>zheng</i> ³ 'to rectify, fix'
賞 <i>shang</i> ³ 'to appreciate'	制 <i>zhi</i> ⁴ 'to limit, control'
設 <i>she</i> ⁴ 'to establish'	置 <i>zhi</i> ⁴ 'to place'
生 <i>sheng</i> ¹ 'live, be born'	轉 <i>zhuan</i> ³ 'to turn'
省 <i>sheng</i> ³ 'to save, economize'	裝 <i>zhuang</i> ¹ 'to fit out, pretend'
失 <i>shi</i> ¹ 'to lose'	準 <i>zhun</i> ³ 'to permit'
使 <i>shi</i> ³ 'to use, carry out'	捉 <i>zhuo</i> ¹ 'to capture'
示 <i>shi</i> ⁴ 'to show, demonstrate'	

Saying that some morphemes appear almost exclusively in initial, some in final, and some in both positions of compounds is not “saying nothing” or that “anything goes”; it is significant that some morphemes have very set positions, either initial or final, and others are more flexible, sometimes in order to distinguish polysemous variations or homonyms, or due to influence from the component ordering rules of subordinate or aspectual verb compounds, or of the resultative or directional construction. It is a notable finding that even in the case of relatively pure synonymous coordinate compounds, the more flexible morphemes seem to occur mainly in one or the other position, and to exhibit some degree or type of meaning difference.

3.2.2 Type (2): Specific + generic coordinate compound verbs

Many synonymous coordinate compound verbs – as mentioned in Chapter I – exhibit the overall head-final nature of Chinese, even though the two elements are morphosyntactic equals, and the compound is thus headless. The emergence of semantic headedness tendencies in coordinate compound verbs is due to semantic inequality; the orders are not determined simply by arbitrary convention. Su (1990:96) notes that verb morphemes with a more general, unmarked, and broadly applicable meaning, like 視 *shì*⁴ ‘to see’, more easily form disyllabic compounds with a verb head than verb morphemes with a very specific meaning, such as 察 *chá*² ‘to examine’ and 顧 *gù*⁴ ‘to attend to’, and that the semantically more general morphemes most often occur in final position.

Specifically, these compound verbs consist of a verb morpheme in final position with a very general meaning, such as 用 *yòng*⁴ ‘to use’, which in Chinese may be used to describe a broad range of activities, including ‘eating’, ‘hiring’, ‘renting’, ‘choosing’ and ‘quoting’. In each case, the action could in theory be expressed by either element. Either element alone in the compound 食用 *shì²yòng⁴* ‘to eat’, for example, could be used to mean ‘to eat’; that 用 *yòng*⁴ can be used to mean ‘to eat’ is illustrated by the VO phrase 用餐 *yòng⁴cān¹* [use + meal] which means ‘to take, eat a meal’, synonymous with 吃飯 *chī¹fàn⁴* ‘to eat (a meal)’. In this case, the semibound morpheme 食 *shì*² ‘to eat’ is more specific than 用 *yòng*⁴ ‘to use’. Genericity is, however, a relative thing; what is generic in one context may be relatively specific in another. In another context, 食 *shì*² ‘to eat’ is more general than 吞 *tūn*¹ ‘to swallow’, which refers to a specific motion involved in eating, so it is the **final** element in the verb for ‘to ingest’, 吞食 *tūn¹shì²* [to swallow + to eat], and ‘to chew (gum, betel nuts)’ 嚼食 [to chew + to eat] *jiào²shì²*.

Because the first verb is more specific and greatly narrows down the scope of the action referred to by the second, generic verb, the verb in final position can be said to be the **semantic head** of the compound, though the compound remains morphosyntactically headless.

Packard (2000:94) describes the phenomenon thus: “There are also [V₁ V₂]V forms in which V₁ and V₂ occur in a hierarchical modification structure. In this structure, the modified verb retains its general characteristics but takes on the attributes of the modifying verb, since the modified verb is the more general activity.” Here Packard gives 飛行 *fei¹xing²* [to fly + to go] ‘to fly’ as an example. This phenomenon was also noted by Gao (2001:122-3): “...some compounds that describe striking actions, such as, [敲打] *qiao¹da³* ‘knock-hit’, [槌打] *chui²da³* ‘pound-hit’, and [踢打] *ti¹da³*, ‘kick-hit’, hold a semantically hierarchical relation between V1 and V2, for instance, specifying the manner, the body part that performs the action, and the instrument applied...it appears that V2 is not very much “predictive of verbal features”...instead, it is simply a description of the general feature of the V1 action.”

Judging from the Sinica Corpus, the most productive final-position generic verb seems to be 動 *dong⁴* ‘to move’, something not unexpected among action verbs. Verbs with 動 *dong⁴* as a second element often have the meaning of ‘scattered moving about’ rather than the simple action of the first element, which might be a morpheme like 振 *zhen⁴* ‘to vibrate’ or 浮 *fu²* ‘to float’; thus 振動 *zhen⁴dong⁴* [to vibrate + to move] ‘to vibrate’ and 浮動 *fu²dong⁴* [to float + to move] ‘to float’. See table below for a collection of examples. Also extremely productive is 取 *qu³* ‘to get, obtain’, which functions much like a lexical equivalent – because it forms inseparable compounds – of the widely applicable morpheme 到 *dao⁴* ‘to arrive’, a resultative used syntactically which can follow almost any Chinese action verb to indicate completion or accomplishment of an action, as in 做到 *zuo⁴dao⁴* [to do + to arrive] ‘to carry something through’. Other common generic verbs that appear in final position in a wide range of coordinate compound verbs include 行 *xing²* ‘to go, walk, move’, 作 *zuo⁴* ‘to do’, 造 *zao⁴* ‘to make, manufacture’, 理 *li³* ‘to take care of, manage’, 弄 *nong⁴* ‘to play with’, 置 *zhi⁴* ‘to place’, 送 *song⁴* ‘to send’, 問 *wen⁴* ‘to ask’, and 打 *da³* ‘to strike’. These are only some prominent and typical examples; the list is far from exhaustive.

Although the more generic verb tends to appear in final position, there are exceptions, and this perhaps is evidence of the morphosyntactic headlessness of this compound type. 問訊 *wen⁴xun⁴* ‘to inquire’ (generic + specific verb) occurs seven times in the Sinica Corpus; its inverse, 訊問 *xun⁴wen⁴* ‘to question’ (specific + generic verb), occurs five times; and 置放 *zhi⁴fang⁴* ‘to

put' (7), is the inverse of the much more common 放置 *fang⁴zhi⁴* 'to put' (83). The pairs of morphemes in these two particular compounds are very close synonyms.

An example of an outright exception to the rule, which is not the inverse of a more common compound, is 行駛 *xing²shi³* [to go + to drive] 'to drive' (88). Reversing the order yields *駛行 *shi³xing²*, which does not occur. There is a possibility that it was influenced by the sound of homophonous compound 行使 *xing²shi³* 'to exercise (e.g. authority)' (66), which does follow the usual pattern.

行 *xing²* is found in initial position in a number of Verb + Verb compounds. 行進 *xing²jin⁴* [to walk + to advance] 'to march (said of an army)' can be analyzed as a directional construction rather than coordinate compound verb. In many other compounds in which it occurs in initial position, it does not mean 'to go' but rather 'to carry out, execute an action', as in the 行使 *xing²shi³* 'to exercise' example, and thus is to be analyzed as an aspectual or VO compound, for example 行刺 *xing²ci⁴* [to carry out + to stab/a stabbing] 'to assassinate' and 行騙 *xing²pian⁴* [to carry out + to deceive/deception] 'to practice fraud'. This compound type is discussed in Chapter IV.

Table 3.4: Examples of synonymous coordinate compound verbs with a more generic verb in final position

(1) 用 *yong⁴* 'to use' (No synonymous coordinate compound verbs seem to use 用 *yong⁴* in initial position.)

施用 *shi¹yong⁴* 'to implement'
 使用 *shi³yong⁴* 'to use'
 運用 *yun⁴yong⁴* 'to use'
 應用 *ying⁴yong⁴* 'to apply'
 採用 *cai³yong⁴* 'to adopt'
 享用 *xiang³yong⁴* 'to enjoy (the use of)'
 佔用 *zhan⁴yong⁴* 'to occupy'
 花用 *hua¹yong⁴* 'to spend'
 支用 *zhi¹yong⁴* 'to expend'

任用 *ren⁴yong⁴* 'to appoint'
 錄用 *lu⁴yong⁴* 'to employ'
 僱用 *gu⁴yong⁴* 'to hire'
 聘用 *pin⁴yong⁴* 'to hire'
 調用 *diao⁴yong⁴* 'to transfer'
 食用 *shi²yong⁴* 'to eat'
 飲用 *yin³yong⁴* 'to drink'
 服用 *fu²yong⁴* 'to take (medicine)'
 敷用 *fu¹yong⁴* 'to apply (topically)'

(2) 動 *dong*⁴ ‘to move’ (There are very few synonymous coordinate compound verbs with 動 *dong*⁴ in initial position: 動蕩 *dong*⁴*dang*⁴ ‘to be turbulent’; 動搖 *dong*⁴*yao*² ‘to waver’; 動彈 *dong*⁴*tan*² ‘to be able to move [often in negative, e.g. 動彈不得 *dong*⁴*tan*² *bu*⁴*de*² ‘cannot move a bit’]; 動用 *dong*⁴*yong*⁴ ‘to call into service; this seems to be inceptive.)

振動 *zhen*⁴*dong*⁴ ‘to vibrate’
 震動 *zhen*⁴*dong*⁴ ‘to quake’
 運動 *yun*⁴*dong*⁴ ‘to exercise’
 行動 *xing*²*dong*⁴ ‘to take action’
 游動 *you*²*dong*⁴ ‘to move about’
 走動 *zou*³*dong*⁴ ‘to walk about’
 感動 *gan*³*dong*⁴ ‘to move (someone emotionally)’
 轟動 *hong*¹*dong*⁴ ‘to make a stir’
 拂動 *fu*²*dong*⁴ ‘to brush against’
 移動 *yi*²*dong*⁴ ‘to move to a different place’
 悸動 *ji*⁴*dong*⁴ ‘to palpitate nervously’
 流動 *liu*²*dong*⁴ ‘to flow’
 浮動 *fu*²*dong*⁴ ‘to float about, drift’
 擺動 *bai*³*dong*⁴ ‘to move’
 搖動 *yao*²*dong*⁴ ‘to rock’
 勞動 *lao*²*dong*⁴ ‘to labor’
 晃動 *huang*⁴*dong*⁴ ‘to sway’
 慫動 *song*³*dong*⁴ ‘to act with agitation’
 調動 *diao*⁴*dong*⁴ ‘to transfer, shift’
 煽動 *shan*¹*dong*⁴ ‘to incite’
 渙動 *huan*⁴*dong*⁴ ‘to disappear’
 鼓動 *gu*³*dong*⁴ ‘to agitate’
 滾動 *gun*³*dong*⁴ ‘to roll, trundle’
 撼動 *han*⁴*dong*⁴ ‘to shake’
 躍動 *yao*⁴*dong*⁴ ‘to quiver’
 牽動 *qian*¹*dong*⁴ ‘to affect’
 揮動 *hui*¹*dong*⁴ ‘to brandish’
 跳動 *tiao*⁴*dong*⁴ ‘to pulsate’
 閃動 *shan*³*dong*⁴ ‘to flash, flicker’
 抽動 *chou*¹*dong*⁴ ‘to twitch’

抖動 *dou*³*dong*⁴ ‘to shake’
 變動 *bian*⁴*dong*⁴ ‘to change’
 舞動 *wu*³*dong*⁴ ‘to wave, brandish’
 騷動 *sao*¹*dong*⁴ ‘to be in a tumult’
 更動 *geng*¹*dong*⁴ ‘to alter’
 轉動 *zhuan*³*dong*⁴ ‘to turn, revolve’
 蠢動 *chun*³*dong*⁴ ‘to wriggle’
 蠕動 *ru*²*dong*⁴ ‘to wriggle’
 顫動 *zhan*⁴*dong*⁴ ‘to vibrate, quiver’
 扭動 *niu*³*dong*⁴ ‘to sway, writhe’
 擾動 *rao*³*dong*⁴ ‘to be in turmoil’
 觸動 *chu*⁴*dong*⁴ ‘to touch and move something’
 搬動 *ban*¹*dong*⁴ ‘to move’
 搖動 *yao*²*dong*⁴ ‘to rock’
 勞動 *lao*²*dong*⁴ ‘to labor’
 晃動 *huang*⁴*dong*⁴ ‘to sway’
 慫動 *song*³*dong*⁴ ‘to act with agitation’
 調動 *diao*⁴*dong*⁴ ‘to transfer, shift’
 煽動 *shan*¹*dong*⁴ ‘to incite’
 渙動 *huan*⁴*dong*⁴ ‘to disappear’
 鼓動 *gu*³*dong*⁴ ‘to agitate’
 滾動 *gun*³*dong*⁴ ‘to roll, trundle’
 撼動 *han*⁴*dong*⁴ ‘to shake’
 躍動 *yao*⁴*dong*⁴ ‘to quiver’
 牽動 *qian*¹*dong*⁴ ‘to affect’
 揮動 *hui*¹*dong*⁴ ‘to brandish’
 跳動 *tiao*⁴*dong*⁴ ‘to pulsate’
 閃動 *shan*³*dong*⁴ ‘to flash, flicker’
 抽動 *chou*¹*dong*⁴ ‘to twitch’
 抖動 *dou*³*dong*⁴ ‘to shake’
 變動 *bian*⁴*dong*⁴ ‘to change’
 舞動 *wu*³*dong*⁴ ‘to wave, brandish’

騷動 *sao¹ dong⁴* 'to be in a tumult'
 更動 *geng¹ dong⁴* 'to alter'
 轉動 *zhuan³ dong⁴* 'to turn, revolve'
 蠢動 *chun³ dong⁴* 'to wriggle'
 蠕動 *ru² dong⁴* 'to wriggle'
 顫動 *zhan⁴ dong⁴* 'to vibrate, quiver'
 扭動 *niu³ dong⁴* 'to sway, writhe'

擾動 *rao³ dong⁴* 'to be in turmoil'
 觸動 *chu⁴ dong⁴* 'to touch and move (s.t.)'
 搬動 *ban¹ dong⁴* 'to move, disturb'
 捲動 *juan³ dong⁴* 'to swirl'
 驅動 *qu¹ dong⁴* 'to drive (s.t.)'

(3) 取 *qu³* 'to get, obtain' (取 *qu³* in initial position usually forms an aspectual or VO compound or construction; in final position as here it may also include a resultative sense, but these examples are classified as coordinate compounds because the two elements are fairly close synonyms.)

領取 *ling³⁽²⁾ qu³* 'to pick up'
 爭取 *zheng¹ qu³* 'to aspire to and obtain'
 索取 *suo³⁽²⁾ qu³* 'to solicit and obtain'
 竊取 *qie⁴ qu³* 'to pilfer'
 盜取 *dao⁴ qu³* 'to steal'
 剽取 *piao¹ qu³* 'to plunder'
 榨取 *zha⁴ qu³* 'to squeeze, extort'
 拾取 *shi² qu³* 'to pick up'
 選取 *xuan³⁽²⁾ qu³* 'to select'
 求取 *qiu² qu³* 'to get through pursuit'
 吸取 *xi¹ qu³* 'to absorb'
 獲取 *huo⁴ qu³* 'to obtain'
 聽取 *ting¹ qu³* 'to get by listening'
 換取 *huan⁴ qu³* 'to exchange'
 讀取 *du² qu³* 'to (machine-)read'
 錄取 *lu⁴ qu³* 'to hire'
 贏取 *ying² qu³* 'to win'
 存取 *cun² qu³* 'to keep'
 賺取 *zhuan⁴ qu³* 'to earn'

收取 *shou¹ qu³* 'to receive'
 挖取 *wa¹ qu³* 'to excavate'
 抽取 *chou¹ qu³* 'to draw off'
 進取 *jin⁴ qu³* 'to go after aggressively'
 沾取 *zhan¹ qu³* 'to be stained by'
 萃取 *cui⁴ qu³* 'to extract'
 擇取 *ze² qu³* 'to select'
 擷取 *xie² qu³* 'to pick'
 奪取 *duo² qu³* 'to seize'
 攫取 *jue² qu³* 'to snatch, grab'
 記取 *ji⁴ qu³* 'to remember, store in memory'
 撈取 *lao¹ qu³* 'to scoop/fish out'
 採取 *cai³⁽²⁾ qu³* 'to adopt'
 劫取 *jie² qu³* 'to rob, mug, kidnap'
 獵取 *lie⁴ qu³* 'to hunt down'
 攝取 *she⁴ qu³* 'to absorb, take in'
 攻取 *gong¹ qu³* or 襲取 *xi² qu³* 'to take by attack'

(4) 行 *xing*² ‘to go, walk, carry out’ (There are very few synonymous coordinate compound verbs with 行 *xing*² in initial position: 行走 *xing*²*zou*³ ‘to walk’; 行駛 *xing*²*shi*³ ‘to drive’; 行動 *xing*²*dong*⁴ ‘to take action’ are notable exceptions.)

飛行 *fei*¹*xing*² ‘to fly’
 爬行 *pa*²*xing*² ‘to crawl, creep’
 航行 *hang*²*xing*² ‘to navigate, sail’
 滑行 *hua*²*xing*² ‘to slide, coast’
 進行 *jin*⁴*xing*² ‘to be in progress, advance, march, carry out’
 游行 *you*²*xing*² ‘to march in a parade, demonstrate’
 執行 *zhi*²*xing*² ‘to implement, carry out, enforce’

施行 *shi*¹*xing*² ‘to implement’
 銷行 *xiao*¹*xing*² ‘to make available for sale’
 巡行 *xun*²*xing*² ‘to go on an inspection tour’
 潛行 *qian*²*xing*² ‘to move underwater, slink’
 拖行 *tuo*¹*xing*² ‘to drag along’
 旅行 *lv*³*xing*² ‘to travel’
 舉行 *ju*³*xing*² ‘to hold (an event)’

(5) 作 *zuo*⁴ ‘to do’ (There are very few synonymous coordinate compound verbs with 作 *zuo*⁴ in initial position; one is 作弄 *zuo*⁴*nong*⁴ ‘to tease’.)

製作 *zhi*⁴*zuo*⁴ ‘to produce, make’
 創作 *chuang*⁴*zuo*⁴ ‘to create’
 運作 *yun*⁴*zuo*⁴ ‘to run, function’
 操作 *cao*¹*zuo*⁴ ‘to operate, manipulate’
 寫作 *xie*³*zuo*⁴ ‘to write (literature)’
 造作 *zao*⁴*zuo*⁴ ‘to manufacture’

耕作 *geng*¹*zuo*⁴ ‘to plow, cultivate’
 做作 *zuo*⁴*zuo*⁴ ‘to act affectedly’
 振作 *zhen*⁴*zuo*⁴ ‘to display vigor, be peppy’
 炒作 *chao*³*zuo*⁴ ‘to manipulate (real estate, stock) prices’
 編作 *bian*¹*zuo*⁴ ‘to edit’

(6) 造 *zao*⁴ ‘to make’ (There are very few synonymous coordinate compound verbs with 造 *zao*⁴ in initial position: 造就 *zao*⁴*jiu*⁴ ‘to train’; 造訪 *zao*⁴*fang*³ ‘to call on’, which may be inceptive.)

建造 *jian*⁴*zao*⁴ ‘to construct’
 營造 *ying*²*zao*⁴ ‘to construct’
 創造 *chuang*⁴*zao*⁴ ‘to create’
 製造 *zhi*⁴*zao*⁴ ‘to manufacture’
 編造 *bian*¹*zao*⁴ ‘to compile, make up (a story)’
 捏造 *nie*¹*zao*⁴ ‘to fabricate (a story)’

鑄造 *zhu*⁴*zao*⁴ ‘to cast (metal)’
 模造 *mo*²*zao*⁴ ‘to cast (moldings)’
 塑造 *su*⁴*zao*⁴ ‘to form, mold, sculpt’
 堆造 *dui*¹*zao*⁴ ‘to build by stacking up’
 締造 *di*⁴*zao*⁴ ‘to found, create’
 釀造 *niang*⁴*zao*⁴ ‘to brew’

(7) 理 *lǐ*³ ‘to manage’ (The few synonymous coordinate compound verbs with 理 *lǐ*³ in initial position usually have the meaning of ‘to pay attention to, understand’: 理睬 *lǐ*³⁽²⁾*cǎi*³ ‘to pay attention to’; in 理會 *lǐ*³*huì*⁴ ‘to understand, [also, ‘to pay attention to’], 理解 *lǐ*³⁽²⁾*jiě*³ ‘to understand’, 理論 *lǐ*³*lùn*⁴ ‘to argue’, and 理喻 *lǐ*³*yù*⁴ ‘to reason with’, 理 *lǐ*³ means ‘reason’)

辦理 *bàn*⁴*lǐ*³ ‘to conduct, process’
 處理 *chǔ*³⁽²⁾*lǐ*³ ‘to process’
 管理 *guǎn*³⁽²⁾*lǐ*³ ‘to manage’
 整理 *zhěng*³⁽²⁾*lǐ*³ ‘to organize’
 修理 *xiū*¹*lǐ*³ ‘to repair’
 梳理 *shū*¹*lǐ*³ ‘to comb, arrange the hair’

經理 *jīng*¹*lǐ*³ ‘to manage, oversee’
 清理 *qīng*¹*lǐ*³ ‘to clean, tidy up’
 料理 *liào*⁴*lǐ*³ ‘to take care of’
 調理 *tiào*²*lǐ*³ ‘to take care of’
 治理 *zhì*⁴*lǐ*³ ‘to administer, govern’
 論理 *lùn*⁴*lǐ*³ ‘to reason with’
 審理 *shěn*³⁽²⁾*lǐ*³ ‘to try (a case)’

(8) 問 *wèn*⁴ ‘to ask, question, greet’ (There are very few synonymous coordinate compounds with 問 *wèn*⁴ in initial position: one is 問訊 *wèn*⁴*xùn*⁴ ‘to inquire’, inverse of 訊問 *xùn*⁴*wèn*⁴ ‘to question’.)

詢問 *xún*²*wèn*⁴ ‘to inquire, ask for information’
 訊問 *xùn*⁴*wèn*⁴ ‘to question’
 訪問 *fǎng*³*wèn*⁴ ‘to visit, interview’
 查問 *chá*²*wèn*⁴ ‘to inquire into’
 考問 *kǎo*³*wèn*⁴ ‘to examine orally’
 聘問 *pìn*⁴*wèn*⁴ ‘to visit as an envoy’
 盤問 *pán*²*wèn*⁴ ‘to cross-examine’
 叮問 *dīng*¹*wèn*⁴ ‘to make a detailed inquiry’
 詰問 *jié*²*wèn*⁴ ‘to interrogate’

推問 *tuī*¹*wèn*⁴ ‘to cross-examine’
 探問 *tàn*⁴*wèn*⁴ ‘to make curious inquiries into’
 質問 *zhì*²*wèn*⁴ ‘to interrogate’
 審問 *shěn*³*wèn*⁴ ‘to examine critically’
 責問 *zé*²*wèn*⁴ ‘to call someone to account’
 慰問 *wèi*⁴*wèn*⁴ ‘to extend one’s regards to’

(9) 置 *zhì*⁴ ‘to place, purchase’ (There are very few synonymous coordinate compound verbs with 置 *zhì*⁴ in initial position: one is 置放 *zhì*⁴*fàng*⁴ ‘to put’, inverse of the more common 放置 *fàng*⁴*zhì*⁴ ‘to put’.)

購置 *gòu*⁴*zhì*⁴ ‘to purchase’
 裝置 *zhuāng*¹*zhì*⁴ ‘to install’
 設置 *shè*⁴*zhì*⁴ ‘to set up, establish’
 放置 *fàng*⁴*zhì*⁴ ‘to put in a place’

堆置 *duī*¹*zhì*⁴ ‘to pile up’
 留置 *liú*²*zhì*⁴ ‘to set aside’
 佈置 *bù*⁴*zhì*⁴ ‘to decorate, set up’
 闢置 *pì*⁴*zhì*⁴ ‘to establish’

配置 *pei⁴zhi⁴* 'to deploy'
 處置 *chu³zhi⁴* 'to dispose of'
 棄置 *qi⁴zhi⁴* 'to discard, abandon'
 懸置 *xuan²zhi⁴* 'to leave hanging'
 擱置 *ge¹zhi⁴* 'to set aside, shelve'
 建置 *jian⁴zhi⁴* 'to construct, establish'

排置 *pai²zhi⁴* 'to arrange'
 藏置 *cang²zhi⁴* 'to put into storage'
 廢置 *fei⁴zhi⁴* 'to set aside as useless'
 添置 *tian¹zhi⁴* 'to acquire, add to one's possessions'
 澆置 *jiao¹zhi⁴* 'to pour a (concrete) foundation'

(10) 送 *song⁴* 'to send, deliver, bring' (There are very few if any synonymous coordinate compound verbs with 送 *song⁴* in initial position.)

輸送 *shu¹song⁴* 'to transport'
 贈送 *zeng⁴song⁴* 'to give as a gift'
 運送 *yun⁴song⁴* 'to transport'
 遞送 *di⁴song⁴* 'to deliver'
 投送 *tou²song⁴* 'to submit and deliver'
 分送 *fen¹song⁴* 'to distribute'
 傳送 *chuan²song⁴* 'to convey,

deliver'
 呈送 *cheng²song⁴* 'to submit'
 遣送 *qian³song⁴* 'to send back, repatriate'
 放送 *fang⁴song⁴* 'to broadcast'
 奉送 *feng⁴song⁴* 'to give away'
 斷送 *duan⁴song⁴* 'to forfeit'

(11) 弄 *nong⁴* 'to play with' (There are no known synonymous coordinate compounds with 弄 *nong⁴* in initial position; in initial position it becomes a syntactic causative or resultative construction, e.g. 弄髒 *nong⁴zang¹* 'to dirty, make dirty'; 弄壞 *nong²huai⁴* 'to ruin'.)

玩弄 *wan²nong⁴* 'to play around with, dally with'
 捉弄 *zhuo¹nong⁴* 'to tease'
 嘲弄 *chao²nong⁴* 'to mock'
 賣弄 *mai⁴nong⁴* 'to show off'
 嬉弄 *xi¹nong⁴* 'to play around with'
 撥弄 *ban¹nong⁴* 'to fiddle around with'
 撥弄 *bo¹nong⁴* 'to fiddle with'
 戲弄 *xi⁴nong⁴* 'to play around with'

擺弄 *bai³nong⁴* 'to fiddle with'
 咬弄 *yao³nong⁴* 'to bite around at (of an animal)'
 作弄 *zuo⁴nong⁴* 'to play a trick on'
 耍弄 *shua³nong⁴* 'to make a fool of'
 撫弄 *fu³nong⁴* 'to fondle'
 把弄 *ba³nong⁴* 'to play around with'
 播弄 *bo¹nong⁴* 'to order someone around, stir up'
 摸弄 *mo¹nong⁴* 'to handle, fondle'

(12) 打 *da*³ ‘to hit, strike’ (打 *da*³ in initial position usually either takes an object noun in second position, or a resultative complement; or it may function as an intensificatory aspectual verb.)

拍打 *pai*¹*da*³ ‘to slap, pat’
 毆打 *ou*¹*da*³ ‘to beat up’
 攻打 *gong*¹*da*³ ‘to attack’
 拷打 *kao*³⁽²⁾*da*³ ‘to flog, beat’

撲打 *pu*¹*da*³ ‘to swat’
 敲打 *qiao*¹*da*³ ‘to beat, rap (e.g. a drum)’
 摔打 *shuai*¹*da*³ ‘to beat, knock’

3.2.3 Type (3): Coordinate compound verbs with resultative force

As we have seen in Type (2) above, categories converge when conditions for both types are met in the same compound. Superficially, the expression 消失 *xiao*¹*shi*¹ [to diminish + to lose, be lost] ‘to disappear’ could be interpreted as either a coordinate compound, since the two elements are both verbs and close synonyms, or it could be categorized as a resultative construction, with 失 *shi*¹ or ‘becoming lost/gone’ being the result of the ‘diminishing’. We will use the following simple test to determine whether an expression is a resultative phrase or compound. If the potential form particle 得 *de* can be inserted between the two components of the expression, and it yields the meaning ‘to be able to V’; or if the negative potential form 不 *bu*⁴ can be inserted in the same place to produce the meaning of ‘cannot V’, it is a resultative construction and not a compound verb. In a compound verb, on the other hand, no material is allowed to intervene between the two morphemes. Neither *消得失 *xiao*¹*deshi*¹ nor *消不失 *xiao*¹*bu*⁴*shi*¹ ‘cannot disappear’ occurs in Mandarin, so the expression is in this case best interpreted as a synonymous coordinate compound.

This phenomenon is to be distinguished from resultative compounds or lexical resultatives, such as 說明 *shuo*¹*ming*² ‘to explain, clarify’, in which the two elements of the compounds are not synonyms. These will be addressed in Chapter V.

Synonymous coordinate verb compounds with resultative force are especially common with morphemes meaning ‘leaving/removal/disappearance’, but there are other common meaning groups as well. Below follow some common semantic fields with representative example compounds.

A. 'Leaving, removal, disappearance':

- (110) 逃脫 *tao²tu¹* [to flee + to extricate s.o. from] 'to make a getaway'
 (111) 解脫 *jie³tu¹* [to undo + to extricate o.s. from] 'to free, extricate oneself from'
 (112) 搬離 *ban¹li²* [to move + to leave] 'to move away from'

B. 'Stopping/breaking'

- (113) 斷絕 *duan⁴jue²* [to break off + to sever] 'to sever'
 (114) 隔絕 *ge²jue²* [to separate + to sever] 'to isolate'
 (115) 禁止 *jin⁴zhi³* [to forbid + to stop] 'to prohibit'
 (116) 了斷 *liao³duan⁴* [to finish + to break off] 'to put a definitive end to'

C. 'Closing, coming together'

- (117) 閉合 *bi⁴he²* [to close + to bring together] 'to close up'
 (118) 融合 *zu³he²* [to meld + to put together] 'to meld together'
 (119) 合併 *he²bing⁴* [to come together + to merge] 'to combine, amalgamate'

D. 'Obtaining, gaining consciousness'

- (120) 捕獲 *bu³huo⁴* [to capture + to obtain] 'to capture'
 (121) 獲取 *huo⁴qu³* [to obtain + to take] 'to get'
 (122) 領取 *ling³⁽²⁾qu³* [to pick up + to get] 'to claim, pick up'
 (123) 察覺 *cha²jue²* [to check + to sense] 'to become aware of'
 (124) 甦醒 *su¹xing³* [to revive + to awaken] 'to revive, regain consciousness'

E. 'Going through/across'

- (125) 穿越 *chuan¹yue⁴* [to go through + to cross] 'to cross'
 (126) 穿刺 *chuan¹ci⁴* [to go through + to poke through] 'to poke through'
 or: 刺穿 *ci⁴chuan¹* [to poke through + to go through] 'to poke through'
 (127) 經過 *jing¹guo⁴* [to pass by + to pass] 'to pass (by)'

3.2.4 Type (4): High-frequency morpheme + lower frequency morpheme

We have noted a pattern of a more specific verb morpheme being followed by a more general verb morpheme in type (2). There is another set of coordinate verb compounds with just the opposite pattern: general, high-frequency verb + lower frequency verb. Some examples with 停 *ting*² ‘to stop’ (numbers in parentheses indicate number of occurrences in Sinica Corpus): 停歇 *ting*²*xie*¹ [to stop + to rest] ‘to cease’ (6); 停擺 *ting*²*bai*³ [to stop + to place] ‘to come to a halt’ (25); 停閉 *ting*²*bi*⁴ [to stop + to close] ‘to close down (a business)’ (0); 停泊 *ting*²*bo*² [to stop + to berth] ‘to anchor, berth’ (26); 停頓 *ting*²*dun*⁴ [to stop + to pause] ‘to halt, pause, be at a standstill’ (30); 停放 *ting*²*fang*⁴ [to stop + to put] ‘to park’ (90); 停靠 *ting*²*kao*⁴ [to stop + to lean towards] ‘to pull over [of a car], berth’ (13); 停留 *ting*²*liu*² [to stop + to remain] ‘to stay for a time, remain’ (138); 停閒 *ting*²*xian*² [to stop + to be idle] ‘to rest idle’ (0); 停止 *ting*²*zhi*³ [to stop + to stop] ‘to stop’ (283); 停滯 *ting*²*zhi*⁴ [to stop + to stagnate] ‘to stagnate, bog down, come to a standstill’ (33).

That the more general morpheme occurs in the initial position of these particular coordinate compounds can probably be explained by reference to other verbal constructions, first and foremost, aspectual verb compounds. In compounds with aspectual morphemes, the aspectual verb must occur in **initial** position. It seems very likely that aspectual verb compounds provided a precedent of aspectual morphemes in initial position, and this in turn established a tendency that spread to other morphological patterns, in this case synonymous coordinate compounds. A second reason is that in the case of coordinate compounds containing 停 *ting*² ‘to stop’, the final morpheme tends to be an **ending state**, as in a resultative construction: something **stops**, and then **remains** in a place or in a certain condition, for example, stagnation: 停滯 *ting*²*zhi*⁴ [to stop + to stagnate] ‘to stagnate, bog down, come to a standstill’. Morphosyntactically, however, the construction is a synonymous coordinate compound since the two elements are synonyms.

We find this tendency further confirmed in coordinate compounds containing 開 *kai*¹ ‘to open’. In initial position, it signals initiatory aspect, as in 開動 *kai*¹*dong*⁴ [to start + to move] ‘to start to move, to begin an action’; in second position, 開 *kai*¹ means ‘to come loose, spread out’, as in 散開來 *san*⁴*kai*¹*lai*² ‘to spread, scatter out’. Therefore, morphemes commonly used to express initiatory aspect are assigned a fixed place in synonymous coordinate compounds, namely, first position, their accustomed position in aspectual verbs expressing initiatory aspect. There is no semantic conflict between these

two verb types; an initiatory aspect morpheme like 開 *kai*¹ ‘to open, start’ has basically the same meaning in aspectual compound verbs with initiatory aspect as in synonymous coordinate compounds; but the meaning and implications of the same morpheme in a resultative construction with **realization aspect** are unavoidably very different, and create a conflict. So when the morpheme is used in a synonymous coordinate compound, ambiguity and confusion with resultative constructions are avoided by placing it in **initial** position, as in aspectual compound verbs.

These initiatory aspectual morphemes can, however, freely appear in final position in subordinate compounds, such as 暫停 *zhan*⁴*ting*² ‘to stop temporarily’, 獨創 *du*²*chuang*⁴ ‘to come up with a unique creation’, 公開 *gong*¹*kai*⁴ ‘to make public’, and 敞開 *chang*³*kai*¹ ‘to open up (widely)’. There is no conflict such as that found between synonymous coordinate compounds and resultative constructions, since the modifier-modified relationship is a clear and unambiguous one, and not easily confused with resultative constructions.

There are other compounds with the more generic morpheme in initial rather than final position. 游泳 *you*²*yong*³ ‘to swim’ is one such example. 游 *you*², which is interchangeable with 遊 *you*², refers to horizontal movement both in water and over dry land; 泳 *yong*³ refers exclusively to ‘swimming’, as evidenced e.g. in the compounds 泳裝 *yong*³*zhuang*¹ ‘swimsuit’ 泳技 *yong*³*ji*⁴ ‘swimming technique’ and the subordinate compound verb 暢泳 *chang*⁴*yong*³ ‘to swim to one’s heart’s content’. The compound 游泳 *you*²*yong*³ seems to have more in common with sound symbolism compounds – it is alliterative. It seems that in some cases sound features may win out over information structure and syntactic conventions in determining the relative order of elements in a compound.

3.3. RELATED ACTIONS

These fall between compounds composed of synonyms or near-synonyms, in which the two actions referred to are the same or nearly so; and serial verbs, which list two actions that follow in sequence. The connection between the two is usually conjunctive (‘and’) but it may also be disjunctive (‘or’). There is overlap between this category and the others, and it is sometimes difficult to assign individual compounds definitively to one category or another. Categories are useful, however, as archetypes, or definitions of “pure” types. But because language has the habit of building upon itself using any materials

it finds handy – and this is in fact an efficient method conducive to easy recall – we should also expect blurred edges, combined types, and unsure cases. Here are a few examples and their breakdowns:

(128)	教導 <i>jiao^{1/4}dao³</i>	[to teach + to guide]	‘to teach and guide’
(129)	管教 <i>guan³jiao⁴</i>	[to manage + to teach]	‘to look after and teach’
(130)	編譯 <i>bian¹yi⁴</i>	[to compile, edit translate]	‘to edit and + to translate’
(131)	飲食 <i>yin³shi²</i>	[to eat + to drink]	‘to eat and drink’ (often used as a noun)
(132)	談笑 <i>tan²xiao⁴</i>	[to chat + to laugh]	‘to chat and laugh’
(133)	刷洗 <i>shua¹xi³</i>	[to brush + to wash]	‘to brush and wash’
(134)	租借 <i>zu¹jie⁴</i>	[to rent + to loan]	‘to rent and/or loan’
(135)	修補 <i>xiu¹bu³</i>	[to repair + to patch]	‘to repair and patch’
(136)	勸慰 <i>quan⁴wei⁴</i>	[to advise + to console]	‘to advise and console’
(137)	領養 <i>ling³⁽²⁾yang³</i>	[to receive + to raise]	‘to adopt (and rear a child)’
(138)	送交 <i>song⁴jiao¹</i>	[to send + to submit]	‘to deliver and submit’
(139)	送請 <i>song⁴qing³</i>	[to send + to request]	‘to send s.t. over and request the recipient to do s.t.’

3.4 LEXICAL SERIAL VERBS

Lexical serial verbs are a concatenation of simplex verbs referring to actions or activities arranged according to their actual sequence in time. The verbs must have the same argument structure; they also must share the same subject and, if there is one, the same object. There is no conjunction or even caesura to further clarify or make more explicit the relationship between the two verbs. Lexical serial verbs are inseparable and thus lexical and to be distinguished from syntactic or sentence-level serial verb constructions, called 連動式 *lian²dong⁴shi⁴* in Chinese, such as: 再拿起來看看 *zai⁴na²qi³lai²kan⁴kan* ‘Pick it up again and have a look at it’, or 許多人捧著金碗討飯 *Xu³duo¹ren²peng³zhe jin¹wan³⁽²⁾tao³fan⁴* ‘Lots of people are carrying golden bowls and begging.’ (Wippermann 1993: 139).

Although the two verbs in a lexical serial verb refer to discrete actions that have no necessary connection – like ‘picking’ a plant and ‘eating’ it – they

must form a logical sequence in the context of the compound, and one must flow from the other. The difference between serial verbs and coordinate compounds composed of synonyms or near-synonyms, or related actions, is that the actions are not necessarily as closely related, and they **must** happen in temporal sequence.

There is some degree of productivity in serial verbs, if the user is adept at stringing them together in accord with established patterns, but mostly they are fixed and conventional, with many being found ready-made in the dictionary. Complex verbs can both **expand** what one might have said in another way, as is often the case with synonymous coordinate compound verbs in which a syllable is added to fill out a prosodic template, substituting for a monosyllabic verb; and they can also use asyndeton to **contract**, condense, shorten wordy phrases into disyllabic lexical compounds.

Serial verb compounds display varying levels of cohesiveness and integration. Some consciously feel like two very discrete actions placed side-by-side, e.g. 採食 *cai³shi²* [to gather, pick + to eat] ‘to pick for eating, to pick and eat’; others are less obviously distinct, e.g. 追緝 *zhui¹qi⁴* [to pursue, chase + to apprehend] ‘to pursue and apprehend (a criminal)’; still others may be perceived as a single action by the average speaker of Chinese, e.g. 起立 *qi³li⁴* [to rise + to be in a standing position] ‘to stand up’.

Many serial verbs have a V1 meaning ‘to choose, select’, since one often needs to first make a choice of materials or people before acting on a task. Another common V1 is 查 *cha²* ‘to examine’ an action one does before accepting something. 收 *shou¹* ‘to receive, accept’, an action easily combined with other actions, is common both in the V1 and V2 position.

Here are some representative examples of serial verbs, with their morpheme-by-morpheme breakdowns and glosses of the compound as a whole:

- | | | | |
|-------|--|---|---|
| (140) | 追緝 <i>zhui¹qi⁴</i> | [to pursue + to apprehend] | ‘to pursue and apprehend’ |
| (141) | 查獲 <i>cha²huo⁴</i> | [to investigate + to capture] | ‘to hunt down and seize’ (also resultative) |
| (142) | 查辦 <i>cha²ban⁴</i> | [to investigate + to punish] | ‘to investigate and impose punishment’) |
| (143) | 移植 <i>yi²zhi²</i> | [to move + to plant] | ‘to transplant’ |
| (144) | 挪借 <i>nuo²jie⁴</i> | [to remove to another place + to borrow/loan] | ‘to give a short-term loan’ |

- (145) 起立 *qi³li⁴* [to rise + to stand] ‘to get up into a standing position, stand up’
- (146) 採食 *cai³shi²* [to pick + to eat] ‘to pick (a plant) for eating, pick and eat’
- (147) 選購 *xuan³gou⁴* [to choose + to purchase] ‘to choose and purchase’
- (148) 選送 *xuan³song⁴* [to choose + to gift] ‘to choose and give as a gift’
- (149) 選編 *xuan³bian¹* [to select + to compile] ‘to select and edit, compile’
 or 選輯 *xuan³ji²* [to select + to edit] ‘to select and edit, compile’
- (150) 選派 *xuan³pai⁴* [to select + to assign] ‘to select and assign’
- (151) 查收 *cha²shou¹* [to check + to receive] ‘to examine and receive, accept’
- (152) 簽收 *qian¹shou¹* [to sign + to receive] ‘to sign for (a delivery)’
- (153) 點收 *dian⁴shou¹* [to count + to receive] ‘to count and accept (cash)’
- (154) 驗收 *yan⁴shou¹* [to approve + to receive] ‘to inspect and approve (a contracted job)’
- (155) 檢修 *jian³xiu¹* [to examine + to repair] ‘to examine and repair’
- (156) 修配 *xiu¹pei⁴* [to repair + to replace] ‘to repair and replace needed parts’
- (157) 走訪 *zou³⁽²⁾fang³* [to walk + to visit] ‘to go and see, interview’
- (158) 來訪 *lai²fang³* [to come + to visit] ‘to come and visit’
- (159) 訪談 *fang³tan²* [to visit + chat] ‘to visit and chat with’
- (160) 編導 *bian¹dao³* [to write a script + to direct] ‘to write and direct’
- (161) 交驗 *jiao¹yan⁴* [to hand over + to approve] ‘to submit for inspection and approval’
- (162) 裝運 *zhuang¹yun⁴* [to load + to ship] ‘to load and ship’
- (163) 張貼 *zhang¹tie¹* [to spread out + to stick] ‘to post (a notice)’

- (164) 收購 *shou¹gou¹* [to receive + to buy] ‘to buy up’
 or 收買 *shou¹mai³* ‘to buy up’
 (165) 悔改 *hui³⁽²⁾gai³* [to regret + to change] ‘to regret what one
 has done and
 change’

3.5 ANTONYMOUS COORDINATE COMPOUND VERBS

There is not a large number of examples of coordinate compound verbs formed from antonyms, and the ones there are tend to be used more often as nouns than as verbs (as in 做買賣 *zuo⁴mai³mai⁴* [to do + (to buy + to sell)] ‘do business’). This may perhaps be in part because of their *yin-yang* type of balance and stability, that is, both aspects of an action are described, making the compound notionally balanced and complete. However, some of the compounds in this category are also relatively high frequency in their role as verbs.

In this compound type, a logically opposed pair of verbs comes together to form a new verb describing the ‘on’ and ‘off’ parameters of an action, and the action created by an alternation of the two. These verbs often include the idea of ‘going and coming’, ‘presence and absence’, ‘starting and stopping’ of an action, or ‘back-and-forth’ or ‘up-and-down’ motion. The compounds do not so much describe two different actions, but rather different points or phases in the “life cycle” of the same action. The two usually occur in a logical sequential order, i.e. a “positive” first, then a “reversal” of the positive action, such as ‘appearing’ before ‘disappearing’, ‘rising’ before ‘falling’, ‘opening’ or ‘turning on’ before ‘closing’ or turning off’, ‘taking’ before ‘giving up’, ‘buying’ before ‘selling’. Yet there are exceptions: we have ‘exhaling’ and ‘spitting out’ before ‘inhaling’ and ‘taking in’. That ‘separation’ comes before ‘reuniting’ is natural, since when people or things are together, it is taken for granted; ‘coming together’ only is worth mentioning in the context of ‘separation’.

The tightness of the relationship between the two morphemes varies. Some translate into simplex verbs in other languages like English, e.g. 呼吸 *hu¹xi¹*: *to breathe*, which is composed morphologically of ‘blowing out/exhaling’ and ‘sucking in/inhaling’. Others are not necessarily thought of as part of the same activity in English, like ‘going and coming’, but are conceived of as an ongoing and unitary activity in Chinese due to the way they are framed. Speaker perception regarding the discreteness of the elements probably varies quite a bit from compound to compound and also from individual to

individual. These compounds are often reduplicated, as in 來來去去 *lai²lai²qu⁴qu⁴* [(come + come) + (go + go)] ‘to go back and forth repeatedly’.

The syntactic/morphosyntactic equality of the elements, i.e. lack of headedness, of these compounds, is partially reflected in the fact that they often occur in reversed order; either the same characters can be reversed (see (167) and (168), or semantically close morphemes can be used in the opposite order (see (169) through (173)).

It is sometimes difficult to determine whether the relationship between two verbs is that of synonyms, antonyms, related, or sequential actions. Some pairs of opposites do not qualify for this category because they have different subjects, and function only as nouns, e.g. 供求 *gong¹qiu²* [to provide + to demand] ‘supply and demand’. Examples:

- | | | |
|--|------------------------------|---|
| (166) 呼吸 <i>hu¹xi¹</i> | [to expire + to inspire] | ‘to breathe’ |
| (167) 往來 <i>wang³lai²</i> | [to go + to come] | ‘to come and go, have contact with’ |
| (168) 來往 <i>lai²wang³</i> | [to come + to go] | ‘to go and come, go with’ |
| (169) 往返 <i>wang³⁽²⁾fan³</i> | [to go + to return] | ‘to go and return’ |
| (170) 往還 <i>wang³huan²</i> | [to go + to return] | ‘to go and return’ |
| (171) 來回 <i>lai²hui²</i> | [to come + to return] | ‘to go and return, make a round trip’ |
| (172) 進出 <i>jin⁴chu¹</i> | [to enter + to exit] | ‘to go and come’ |
| (173) 出入 <i>chu¹ru⁴</i> | [to exit + to enter] | ‘to exit and enter, go out and come in’
(sometimes a noun meaning ‘discrepancy’) |
| (174) 進退 <i>jin⁴tui⁴</i> | [to advance + to retreat] | ‘to advance and retreat’ |
| (175) 離合 <i>li²he²</i> | [to separate + to reunite] | ‘to be separated and reunited’ |
| (176) 出沒 <i>chu¹mo⁴</i> | [to come out + to sink down] | ‘to appear here and there, appear and disappear, haunt’ |
| (177) 上下 <i>shang⁴xia⁴</i> | [to ascend + to descend] | ‘to ascend and descend, to go up and down’ |
| (178) 漲跌 <i>zhang³die²</i> | [to rise + to fall] | ‘to rise and fall’ |
| (179) 增減 <i>zeng¹jian³</i> | [to increase + to decrease] | ‘to increase or decrease’ |
| (180) 加減 <i>jia¹jian³</i> | [to add + to subtract] | ‘to add or subtract’ |

- (181) 升降 *sheng¹jiang⁴* [to raise and lower, rise and fall] ‘to raise and lower, rise and fall’
- (182) 起降 *qi³jiang⁴* [to rise + to descend] ‘to take off and land’
- (183) 起落 *qi³luo⁴* [to rise + to fall] ‘to rise and fall’
- (184) 起伏 *qi³fu²* [to rise + to fall] ‘to rise and fall, undulate’
- (185) 開關 *kai¹guan¹* [to open/turn on + to close/turn off] ‘to alternately open and close, turn on and turn off something’ (can also be a noun meaning ‘switch’)
- (186) 買賣 *mai³mai⁴* [to buy + to sell] ‘to buy and sell’ (often a noun meaning ‘business’)
- (187) 取捨 *qu³⁽²⁾she³* [to take and keep + to give up, reject] ‘to choose what to keep and what to give up, accept or reject’
- (188) 授受 *shou⁴shou⁴* [to give + to receive] ‘to grant and accept, give and receive’
- (189) 收發 *shou¹fa¹* [to receive + to issue] ‘to receive and issue (documents)’
- (190) 問答 *wen⁴da²* [to ask + to answer] ‘to ask and answer’
- (191) 賞罰 *shang³fa²* [to reward + to punish] ‘to reward and punish’
- (192) 獎懲 *jiang³cheng²* [to reward + to punish] ‘to reward and punish’
- (193) 裝卸 *zhuang¹xie⁴* [to load + to unload] ‘to load and unload [freight]’
- (194) 起卸 *qi³xie⁴* [to pick up + to unload] ‘to pick up and unload’
- (195) a. 吞吐 *tun¹tu³* [to swallow + to spit out] ‘to take in and put out’ (e.g. cargo, said of a harbor)
- b. 吞吞吐吐 *tun¹tun¹tu³⁽²⁾tu³* ‘to hem and haw’
- (196) 吐納 *tu³na⁴* [to spit out + to take in] ‘to take in and spit out, inhale and exhale, breathe’

3.6 SOUND SYMBOLISM COMPOUNDS

There is a category of word formations in Chinese that is sometimes called 聯綿字 *lian²mian²zi⁴* [to join + silk floss, continuous + character] ‘linked words’. *Lian²* and *mian²* rhyme, so word itself is an example of the formation type it refers to. There are two relatively well-known dictionaries of 聯綿字 *lian²mian²zi⁴*: 聯綿字譜 *Lian²mian²zi⁴pu³* (*A Lexicon of Chinese Lian²mian² Binomes*) by Wang Guowei (Wang² Guo²wei²) 王國維 (1877-1927), and 聯綿字典 *Lian²mian²zi⁴dian³* (*A Dictionary of Chinese Lian²mian² Binomes*), compiled by Fu Dingyi (Fu² Ding⁴yi¹) 符定一, published in 1954. It is difficult, based on the entries included in these works, to formulate strict criteria for what kind of collocations can be considered *lian²mian²zi⁴*. There are no firm rules regarding separability, frequency of occurrence, content, or phonology. 聯綿字 *lian²mian²zi⁴* can be roughly described as highly lexicalized, usually disyllabic formations, the elements of which have a close semantic connection, and may or may not in addition have a phonological connection in the form of alliteration, assonance, rhyme or reduplication.

It could be argued that, as already discussed in Chapter I, certain disyllabic verbs, especially ones invoking sound symbolism such as 徘徊 *pai²huai²* ‘to pace to and fro’, consist of only one morpheme, since neither component can occur alone and neither has an independent meaning. We maintain that in the case of verb binomes like these each component does indeed contribute meaning to the whole, and is thus a morpheme; however, each can only occur in the presence of the other. We call these **correlative morphemes**, on the analogy of correlative conjunctions, such as the English *neither...nor....* Compounds composed of correlative morphemes often invoke sound symbolism, in the form of e.g. alliteration or rhyme. The English morpheme *fro* hardly occurs except in the context of *to and fro*; yet in that context it does have a distinct meaning, namely ‘back’ to the place one started out from when walking *to*. Grammatically *fro* cannot normally appear in isolation, but it does have its own semantic content and is a morpheme.

The elements in a 聯綿字 *lian²mian²zi⁴* item can be related in the following ways; (1) is obligatory, (2) and (3) are also possible:

- (1) **semantics**, e.g. 困窮 *kun⁴qiong²* [in difficulty + poor] ‘in dire straits’, 汙穢 *wu¹hui⁴* [stain + dirt] ‘filthy’;
- (2) **phonology**, e.g. rhyme, as in 奧妙 *ao⁴miao⁴* [deep + mysterious] ‘profound and subtle’, or alliteration, as in 忠直 *zhong¹zhi²* [loyal + straight] ‘loyal and upright’;

- (3) **character form**, e.g. a shared radical, as in 囹圄 *ling²yu³* ‘prison’ (an archaic and rarely used item) and 蝌蚪 *ke¹dou³* ‘tadpole, polliwog’ (which is still current and high frequency); no breakdowns of individual morphemes is possible in either example.

Many entries in the 聯綿字 *lian²mian²zi⁴* lexica seem like very ordinary collocations, e.g. 奢大 *she¹da⁴* [extravagant + big] ‘extravagant’, 反而 *fan³er²* [reverse + and/but] ‘on the contrary’, and 嫌疑 *xian²yi²* [suspicion + to suspect] ‘suspicion’. Some of the binomes, especially nouns, are disyllabic single morphemes. There simply is no use for or discrete meaning associated with 囹 *yu³* and 蚪 *dou³* except respectively in 囹圄 *ling²yu³* ‘prison’ and 蝌蚪 *ke¹dou³* ‘tadpole’, respectively.

Relatively high proportions of 聯綿字 *lian²mian²zi⁴* occur in the following categories (no morphemic breakdowns are possible): (1) place names, e.g. 峨嵋 *e²mei²* ‘Emei’ (mountain in Sichuan), 榮經 *ying²jing¹* Yingjing (county in Sichuan), 桐塚 *tong²zhong³* Tongzhong, in Hubei; (2) names of animal and plant species, and specialized objects: e.g. 蜻蜓 *qing¹ting²* ‘dragonfly’, 犴狴 *qiu²yu²* ‘armadillo’, 薔薇 *qiang²wei¹* ‘rose’, 傀儡 *kui²lei³* ‘marionette’, 琺瑯 *fa⁴lang²* ‘enamel’; (3) onomatopoeia, e.g. 窸窣 *xi¹su¹* ‘to whisper, rustle’, 布古 *bu⁴gu³* ‘cuckoo’, 咕冬 *gu¹dong¹* ‘kerplunk’; (4) descriptive modifiers, e.g. 嫵媚 *chan²juan¹* ‘beautiful (of a woman)’, 燦爛 *can⁴lan⁴* ‘brilliant’, 骯髒 *ang¹zang¹* ‘dirty’, 靦腆 *mian³⁽²⁾tian³* ‘shy, diffident’; (5) words expressing halting or back-and-forth movement or hesitation, e.g. 徘徊 *pai²huai²* ‘to pace back and forth’, 躊躇 *chou²chu²* ‘to hesitate’.

While a study on 聯綿字 *lian²mian²zi⁴* would be worthwhile in its own right, our interest in this type of highly cohesive compound, which is often further bonded by sound, distribution of occurrence, and written form, is restricted to action verbs. Most of these tend to fall into the fifth group cited above, descriptions of halting, hesitating, or repeated action.

Under this group, we will focus primarily on more meaningful synonymous coordinate compounds, like 吵鬧 *chao³nao⁴* ‘to make a lot of noise’, and secondarily on compounds in which sound symbolism is primary. Wherever meaning is to be found, it takes precedence over sound in characterizing the compound; where the meaning is obscure or lacking in substance, sound becomes the dominant and defining characteristic.

The compound as a whole may suggest its referent, e.g. 吵鬧 *chao³nao³*, cited above, uses the diphthong [au], initiated by the open vowel [a], suggesting loud speech. But even more important than the sound of the

compound as a whole is the **relationship between the two elements**. The first element may itself be onomatopoeic, or something resembling it; and the second component may echo some element of the first either by means of **alliteration** 雙聲 *shuang¹sheng¹* [double + sound] – the modern term is 頭韻 *tou²yun⁴* [head + rhyme]; **rhyme** 疊韻 *die²yun⁴* [overlapping + rhyme]; or at the extreme, **reduplication**, 重疊詞 *chong²die²ci²* [repeated + overlapping + word], which is usually subsumed under 雙聲 *shuang¹sheng¹* in traditional taxonomies.

English has many such formations, some of which have trace their origins to a syntactic phrase. *Willy-nilly*, for example, comes from the old English phrase *wille ic̄, nylle ic̄* (Barney 1977:3): ‘Do I **want** to? Do I **not** want to?’ Doing something *willy-nilly* means going along with a default option due to indecision. *Shilly-shally*, ‘to hesitate, dawdle around’ is from ‘Shall I? Shall I?’ *Wishy-washy* is a reduplicative form based on *washy*, ‘watery, weak’, and means ‘to be indecisive, a pushover’. We will find that Chinese sound symbolism compounds tend to fall within a similar semantic field. It is easy to see why sound symbolism compounds often express **hesitation**, **halting motion**, **back and forth motion**, a **spreading out**, or what Yip calls “lingering indecision” (2000:184). The compounds iconically represent the ideas they refer to by reproducing phonetic information: this suggests a hesitation about moving on forward to new material, resulting instead in a rehashing of old material.

Most of the compounds considered here date back to times when they had considerably different phonetic shapes than the modern Mandarin ones. We will be considering mainly synchronic forms rather than attempting a historical study. Some, though not all, have maintained the same rhyme or alliterative relationships as formerly. Yet there are some cases where changes have occurred which affect the choice of the written form, when there is more than one to choose from. One form of the compound *pang²huang²* ‘to walk back and forth aimlessly’ is 彷徨 *pang²huang²*. This form occurs, however, not once in the Sinica Corpus; another form, 徬徨 *pang²huang²*, on the other hand, appears 23 times. This is likely because the phonetic in 徬 *pang²* suggests *fang* to a modern Mandarin speaker (the initial was a bilabial stop in an earlier stage of Chinese), whereas 徬 suggests *pang²*, due to the 旁 *pang²* phonetic. The existence of variant forms is further evidence that it is the **sound** that is primary, and not the written form.

Rhyming compounds are among the least analyzable of the type of compound under examination here, and the most likely candidates for classification as disyllabic single morphemes. To be a rhyme it is required that

all sound segments starting from and including the main vowel through the end of the syllable be identical, disregarding tone, e.g. 囉嗦 *luo¹suo¹* ‘to nag, talk too much’. Unlike rhyming compounds, alliterative, assonantal and other types of sound symbolism compounds are more often composed of two full morphemes, each with an individual existence independent of the compound. This suggests that rhyme is more powerful than alliteration as a purely audio effect, in that it can be used to create compounds without adding on any significant semantic material. Also, a larger number of syllables are generally available to each other to form alliterative – as opposed to rhyming – compounds. In sum, a rhyme is quite likely to be a nonsense or filler rhyme, while each element of an alliterative pair is more likely to have full, independent meaning.

Some rhyming compounds appear almost exclusively in set phrases or idioms. An example is 綢繆 *chou²mou²* ‘to repair’. This appears 25 times in the Sinica corpus, in each case as part of the idiom 未雨綢繆 *wei⁴yu³chou²mou²* ‘to start fixing (the roof) before it rains, prepare for eventualities’.

The popularity of sound symbolism formations in English has diminished over time, and they are now a relatively marginal word formation pattern; the same seems to be true of Chinese. Many of the phonetic symbolism compounds in Wang’s and Fu’s lexica and even modern dictionaries like the 新華字典 *Xin¹hua²Zi⁴dian³* are rare and antiquated, and seldom used, even in formal writing. However a notable number of such compounds do form part of the living language and are quite high frequency. Some examples are listed below.

Rhyming compounds in which the meaning of one or both elements is relatively obscure:

- | | |
|--|--|
| (196) 徜徉 <i>chang²yang²</i> | ‘to stroll back and forth’ variant: 倘佯 |
| (197) 徬徨 <i>pang²huang²</i> | ‘to pace back and forth’ variant: 彷徨 |
| (198) 徘徊 <i>pai²huai²</i> | ‘to pace up and down, waver’ |
| (199) 蹉跎 <i>cuo¹tuo²</i> | ‘to fool around, waste time’ |
| (200) 蹣跚 <i>man²(pan²)shan¹</i> | ‘to hobble along’ |
| (201) 囉嗦 <i>luo¹suo¹</i> | ‘to talk too much, make too much of a |
| variant: 囉唆 | fuss over something’ |
| can be expanded to: | |
| 羅哩羅嗦 <i>luo¹liluo¹suo¹</i> | |
| (202) 嘮叨 <i>lao²dao¹</i> | ‘to nag’ |

- (203) 哆嗦 *duo¹suo¹* 'shake, tremble'
 (204) 叮嚀 *ding¹ning²* 'to urge repeatedly, exhort'
 variant: 丁寧
 (205) 匍匐 *pu²fu²* 'to crawl, creep forward'
 (206) 睥睨 *pi⁴ni⁴* 'to look askance, to the side'
 (207) 蕩漾 *dang⁴yang⁴* 'to ripple, undulate'
 (208) 屹立 *yi⁴li⁴* 'to stand staunchly'
 (209) 埋怨 *man²yuan⁴* 'to complain'
 (埋 *man²* is usually pronounced *mai²* and means 'to bury' except in this compound; this seems to be a variant pronunciation designed especially to rhyme in this compound; the meaning is also bleached)
 (210) 綢繆 *chou²mou²* 'to fix, repair'
 (all in 未雨綢繆 *wei⁴yu³* ('to fix [the roof] before it rains')
chou²mou²)
 (211) 濠淘 *hao²tao¹* 'to howl, bawl'
 (in 濠淘大哭 *hao²tao¹da⁴ku¹* 'to bawl one's eyes out')

Rhyming compounds in which both elements are independent morphemes with a full and transparent meaning:

- (212) 幫忙 *bang¹mang²* [to help + busy] 'to help'
 (213) 摸索 *mo¹suo³* [to touch + to search] 'to grope one's way'
 (214) 沒落 *mo⁴luo⁴* [to sink + to fall] 'to decline'
 (215) 捉摸 *zhuo¹mo¹* [to capture + to touch] 'to fathom'
 (216) 逗留 *dou⁴liu²* [to play+ to keep, stay] 'to stay, loiter'
 (217) 束縛 *shu⁴fu⁴* [to bind + to tie] 'to fetter, limit'
 (218) 寒暄 *han²xuan¹* [winter + summer] 'to chitchat'
 (219) 綿延 *mian²yan²* [silk floss + to extend] 'to extend on'
 (220) 瀕臨 *bin¹lin²* [to be close to + to approach, arrive] 'to be on the brink of'
 (221) 吵鬧 *chao³nao⁴* [to make noise + to be boisterous] 'to make lots of noise' (
 (222) 笑鬧 *xiao⁴nao⁴* [to laugh + to be boisterous] 'to laugh and be rowdy')
 (223) 飄搖 *piao¹yao²* [to drift + to rock] 'to drift'
 (224) 縱容 *zong⁴rong²* [to indulge + to tolerate] 'to indulgently permit'

Alliterative compounds:

Arranged more or less in descending order, going from compounds with a more opaque and semantically empty final element to ones with a transparent, full morpheme as a final element:

- (225) 躊躇 *chou²chu²* (unanalyzable) ‘to hesitate’
 (226) 彳亍 *chi⁴chu⁴* (unanalyzable) ‘to walk slowly’
 (227) 澎湃 *peng¹pai⁴* (unanalyzable) ‘to surge’
 (228) 踉跄 *lang⁴qiang⁴* (unanalyzable) ‘to stagger’
 (229) 吩咐 *fen¹fu⁴* (unanalyzable) ‘to tell, instruct’
 (230) 猶豫 *you²yu⁴* [to wait + pleased] ‘to hesitate’
 (231) 猶疑 *you²yi²* [to wait + to suspect] ‘to hesitate’
 (232) 瀰漫 *mi²man⁴* [to supplement + to spread] ‘to envelope, enshroud’
 (233) 淘汰 *tao²tai⁴* [to clean out + to eliminate] ‘to eliminate’
 (234) 游泳 *you²yong³* [to swim + to swim] ‘to swim’
 (235) 流浪 *liu²lang⁴* [to flow + wave] ‘to wander about’
 (236) 飄泊 *piao¹bo²* [to drift + to dock] ‘to drift about’
 variant: 漂泊 *piao¹bo²*
 (237) 匹配 *pi³pei⁴* [to be equal to + to match] ‘to match, mate’
 (238) 充斥 *chong¹chi⁴* [to fill + to expand] ‘to be full of, congested with’
 (239) 摧殘 *cui¹can²* [to destroy + to damage] ‘to devastate’
 (this construction could be analyzed as resultative)
 (240) 掙扎 *zheng¹zha²* [to fight + to struggle] ‘to struggle’
 (241) 琢磨 *zhuo²mo²* [to carve + to polish] ‘to think over’
 (242) 拿捏 *na²nie¹* [to take + to pinch] ‘to adjust something just right’
 (243) 茁壯 *zhuo²zhuang⁴* [to grow strong + to be sturdy] ‘to grow strong’
 (244) 磨滅 *mo²mie⁴* [to grind + to exterminate] ‘to obliterate’
 (this construction could be analyzed as resultative)

- (245) 吞吐 *tun¹tu³* [to swallow + to spit out] ‘to take in and put out’ (e.g. cargo, said of a harbor)
 as reduplicative: 吞吞吐吐 *tun¹tun¹tu³tu³* ‘to stutter, say haltingly’
 (246) 斟酌 *zhen¹zhuo²* [to pour + to consider] ‘to consider carefully’

Although in some cases, the sound relationship between the elements of a compound may be due to chance, we find that in many cases the sound relationship iconically suggests or reinforces some aspect of the meaning of the compound, such as repeated, tentative, or extended action.

SUMMARY

A disyllabic rather than monosyllabic expression is often preferred or required in various contexts, such as when an object or other sentence elements are bimorphemic, or when they occur in a more formal register of speech or writing. There are a number of different strategies for composing a coordinate compound verb, including (1) pairing of two synonyms or near synonyms, (2) two related actions, with a conjunctive or disjunctive connection; (3) lexical serial verbs, which express a temporal sequence of actions; (4) a pair of antonyms, which express two sides or aspects of the same action; and (5) two syllables connected by some kind of sound relationship such as alliteration, assonance, rhyme, or reduplication, which iconically expresses part of the meaning of the whole, such as extended or halting action. Because the elements of a coordinate verb compound are on equal syntactic footing, the compounds are syntactically headless.

Synonymous coordinate compounds include a number of subtypes. The first subtype is a relatively “pure” matching of two morphemes that are close in meaning. Despite the headlessness of these compounds, many individual morphemes tend to appear in a set position, either initially or finally, though some morphemes are more flexible and occur in both positions. In the second subtype, which is influenced by the prefixed subordinate compound pattern, a more specific verb precedes a more general verb, and a type of semantic modification and semantic right-headedness results. The third subtype consists of coordinate compound verbs with resultative force; that is, the final morpheme, while synonymous with the first, suggests an outcome or resting state resulting from the action of the first verb. Finally, some compounds reverse the usual specific + general verb order of coordinate compounds.

These usually have a first morpheme with inceptive or terminative meaning, of the type that would be found in an aspectual compound verb. Thus the synonymous coordinate compound verb type, while seemingly the most neutral and straightforward of the various types of complex verbs, in fact is a showcase of syntactic and semantic interaction with the other main types of complex verbs in Chinese.

CHAPTER IV: EMBEDDED COMPOUND VERBS

We have examined prefixed and other subordinate compound verbs with elements in a relationship of modification or junction to each other, i.e. modifier + modified head. We have also looked at coordinate compound verbs, in which the two formative elements are in a relationship of conjunction or equality in that they are closely related in meaning and belong to the same grammatical category. In this chapter we will examine inseparable verbal compounds in which the elements are in various types of syntactic or nexus relationships with each other.

4.1 TYPES OF COMPOUND VERBS WITH EMBEDDING

The relationship between the two elements of an embedded compound may be one of a matrix verb (V1) plus a verb complement (V2). This is the case with lexical **aspectual** compounds, which are used to express the beginning or initiation of an action, its termination, its continuation, or a change in the action mid-course. V2 functions as a complement of V1, leaving V1 unable to take an additional external object. In lexical aspectual compounds, the two verbs share the same subject/agent, and the compound as a whole can then take an external object if V2 is transitive. The valence of a lexical aspectual compound as a whole is the **same** as for the V2 verb complement alone. Some representative lexical aspectual compounds are 興建 *xing¹jian⁴* [to begin + to construct] ‘to begin to construct’, 改嫁 *gai³jia⁴* [to change + to marry] ‘(for a woman) to remarry’, and 止痛 *zhi³tong⁴* [to stop + to hurt] ‘to stop pain’.

A second type of embedded verb compound is lexical **passives**, in which V1 functions as a passivization marker for V2, the verb complement. The direction of action between the subject and object of the verb complement is **reversed**, relative to when the complement verb is used alone, for example 頒 *ban¹* is ‘to award’; 獲頒 *huo⁴ban¹* [to receive + to award] is ‘to be awarded’. In this compound type, the original object (in this example, the recipient of the award) is raised to subject and valence is **reduced** by one argument, either from three arguments to two for trivalent verbs, as in 頒 *ban¹* ‘to award’ (original arguments: the giver, the award, and the recipient; in the passive form, there are only the award and the recipient), or from two arguments to one for bivalent verbs, such as 釋 *shi⁴* ‘to release’ (original

arguments: the one doing the releasing, and the one or thing released; in the passive form, the one or thing released is the sole argument).

In a third kind of embedded compound, the initial verb marks the compound as a whole as a **causative**. With lexical causatives, valence is **increased** by one; we have an additional **agent** working on the grammatical subject of a given verb: A **causes** (V1) B to do an action (V2), for example 請教 *qing³jiao⁴* [to request + to instruct] ‘to ask s.o. for advice’; 勸募 *quan⁴mu⁴* [to advise + to donate] ‘to urge to donate’; and 逼供 *bi¹gong¹* [to force + to confess] ‘to force s.o. to confess’. V2 does **not** normally function as an objectlike complement of V1, as is the case with lexical aspectual or lexical passive compounds. We have instead abbreviations of longer phrases with various elements omitted, such as subjects, objects, and additional implied verbs. This places V1 and V2 in varying types of syntactic relationships with each other. Typically, the patient/object of V1 also serves as the agent/subject of V2, but neither is overtly expressed within the compound, though one or both may appear elsewhere in the utterance in which the compound occurs. Implied information and the specific interpretation of each individual compound vary; these are determined largely by the particular characteristics of the verb components, exigencies of context, and by convention.

Yet another type of embedded compound is in effect a **passive-causative** construction, which is also often an abbreviation of a longer phrase. These express the idea of **having something done by someone else**. One major subcategory of this verb type is what we will call **emissive** compounds, in which someone submits or delivers something to someone else for some action to be performed on it. Examples are 付印 *fu⁴yin⁴* [to hand over + to print] ‘to send to be printed’ and 送辦 *song⁴ban⁴* [to send + to process] ‘to submit to be processed administratively, to submit for administrative processing’. V1 in essence marks the whole as a passive-causative construction, in the form of an inseparable compound. Another subcategory is the “availability” compounds, in which something is placed at the disposal of others to possibly perform an action on it. An example is 備索 *bei⁴suo³* [to be prepared + to pick up] ‘to be available to be picked up, to be available on request’.

Although the concepts encoded in embedded compounds could in most cases also be conveyed syntactically, expressing them in compound form fits a higher information load into fewer syllables, thus offering a concise stylistic alternative to periphrasis. In other cases, as in the emissive compounds, they are simply the standard unmarked way to express a concept. We will discuss and exemplify each type of embedded compound verb in turn.

4.2 LEXICAL ASPECT

Aspect is expressed on different levels in a language: syntactic, lexical, and semantic. There are many works that treat syntactic aspect in Chinese, mostly as marked by particles such as 了 *le*, which indicates completion of an action (though it confusingly often translates into a past tense in English), e.g. 他們奮鬥了那麼多年... *ta¹men fen⁴dou⁴ le ne⁴me duo¹ nian²* ‘They struggled for so many years...’ (i.e. ‘completed many years of struggle’); or the beginning of a new state or new situation, e.g. 再也挨不下去了 *zai⁴ ye³ ai¹bu⁴⁽²⁾xia⁴qu⁴ le* ‘...can no longer bear it...’ (i.e. has arrived at a new situation in which something can no longer be borne). Aspect is also marked in resultative and directional constructions: 他們痛快的聊了起來 *ta¹men tong⁴kuai⁴ de liao²leqi³lai²*. ‘They **began** to chatter happily.’; 看完電影，一票人又去吃宵夜 *kan⁴wan² dian⁴ying³, yi¹piao⁴ren² you⁴ qu⁴ chi¹ xiao¹ye⁴* ‘**After finishing watching** the movie, the whole group went out for a late night snack.’

Wang (1987b:282) says it is easier to define “aspect” in a negative way: anything that concerns time, but is not primarily concerned with relations of past, present, and future, he says, can be said to come under the category of “aspect” in Chinese. Wang distinguishes seven kinds of aspect in Chinese: (1) common (unmarked), (2) progressive (verb followed by 著 *zhe*), (3) perfective (marked by 了 *le*), (4) recent (verb preceded by 來 *lai²* ‘to come’), (5) inchoative or ingressive (verb followed by 起來 *qi³lai²*), (6) successive (verb followed by 下去 *xia⁴qu⁴*), and (7) transitory (reduplication of verb). In all of these types, Wang addresses only **syntactic** aspect.

In an interesting study on **semantic** aspect in Chinese, Guo (1993) analyzes the inherent event structure of aspectual markers and individual verbs, then places each one on a continuum according to how many aspectual conditions it meets, e.g. whether it has a starting point, an ending point, a continuous stretch in the middle, or whether it is punctual in nature. Examples: 認識 *ren⁴shi⁴* ‘to know, be acquainted with’ has a beginning point, but no ending point; 產生 *chan³sheng¹* ‘to produce, result in’ has no set beginning point, but a definite ending point; and 依靠 *yi¹kao⁴* ‘to rely on’ has a definite beginning and end. Wong et al (1999) also propose a system of verb classification based on temporal concepts. They divide verbs according to whether they are **static**, expressing a stable property or state, e.g. 知道 *zhi¹dao⁴* ‘to know’; **durative**, expressing an instantaneous (e.g. 爆炸 *bao⁴zha⁴* ‘to explode’) or durative (e.g. 參觀 *can¹guan¹* ‘to visit’) situation or process; or **telic**, describing changes with an inherent climax, or an event (Wong et al note that many verbs can be either telic or atelic, depending on the context and marking with particles like

了 *le*, e.g. 蓋 *gai*⁴ ‘to build’ is telic in 他們蓋了一幢樓 *Ta*¹*men gai*⁴*le yi*¹⁽²⁾*dong*⁴*lou*² ‘They built a building’). Based on this analysis, they have devised an algorithm for automatic information extraction, classifying verbs as **instantaneous**, **activity**, **static**, and **ambiguity** (for verbs that combine features of more than one type, which they further classify based on additional contextual information). Wang (1987b:283) calls this “logical” as opposed to “syntactic” aspect.

Chinese, along with many other languages, has another aspectual system, however: a lexical one, incorporated into certain verb compounds. Lexical aspect parallels syntactic aspect, and it complements aspect as expressed collocationally in resultative and directional constructions. Lexical aspect is often also referred to by the German term *Aktionsart*, ‘type/manner of action’. We will, however, stick with the term “lexical aspect”.

4.2.1 Defining and exemplifying lexical aspect

Verbs tend to be extremely compact tokens representing what can sometimes be highly complex activities, for example the verb *drive* in *He will drive the car*. encompasses all the actions required to operate a car, including turning the key in the ignition, stepping on the accelerator, holding or turning the steering wheel so that the car is directed to its destination, applying the brakes, shifting gears, and finally stopping and parking the car. If we focus on any one of these parts of the process: starting, stopping, continuing, and changing course, we are dealing with **aspect**. The beginning of an action is the **inchoative aspect**; its conclusion we will call **terminative aspect**; its continuation, **continuative aspect**; and change to another action, **commutative aspect**. We will add two further types of aspect encountered in the Mandarin data, **additive aspect** and **supplemental aspect**.

Probably the most direct and unmarked way to express aspect is syntactically. If we wish to refer to the **beginning** or **initiation** of an action, we can use a matrix verb meaning ‘to begin’, like 開始 *kai*¹*shi*³, and add another verb to it as a complement, e.g. 開始收拾 *kai*¹*shi*³ *shou*¹*shi*² ‘to begin to pick up, to begin picking up’. We can do the same if we wish to refer to the **termination** of an action, using a verb like 停止 *ting*²*zhi*³ ‘to stop’, e.g. 停止收拾 *ting*²*zhi*³ *shou*¹*shi*² ‘to stop picking up’. We can express the **continuation** of an action with a phrase like 繼續收拾 *ji*⁴*xu*⁴ *shou*¹*shi*² ‘to continue picking up’. Corpus data reveal that aspectual verbs more often take a verbal complement than a nominal object, although both are possible. Bare aspectual verbs are also used, though they imply some kind of verbal complement even

when it is unexpressed; for example one only says 我們現在開始 *Wo³men xian⁴zai⁴ kai¹shi³* ‘Let’s begin’ if the hearer and listener both know just what action is going to be initiated.

Because aspectual verbs are used to describe the imposition of one of a limited set of actions, such as starting and stopping, on another main action, the verb complement of an aspectual matrix verb can be viewed as its syntactic **object**, thus becoming partially nominal in nature. An aspectual matrix verb that has a verb complement cannot take an additional external object. For example, 開始 *kai¹shi³* ‘to begin’ by itself can take a nominal object, e.g. ...開始這份工作 ...*kai¹shi³ zhe⁴ fen⁴ gong¹zuo⁴* ‘...began this job’ (a past event is referred to in the original context in all the examples cited here), or a verb complement, as in 開始實施 *kai¹shi³ shi²shi¹* ‘began to implement’; but it cannot take both at the same time. If there is a verbal complement, it fills the role of “object” for the aspectual verb, and if there is a nominal object of the compound as a whole, it is the object of the verb complement, and not directly of the aspectual verb, as in 開始實施基本技能訓練 *kai¹shi³ shi²shi¹ ji¹ben³ ji⁴neng² xun⁴lian⁴* ‘began to implement basic technical training’. The “object” of 開始 *kai¹shi³* ‘began’ is the verb complement 實施 *shi²shi¹* ‘to implement’ and not ‘basic technical training’.

In an inflected language, the matrix verb generally is finite and the verb complement non-finite (cf. English *He began to pick up*). In English, the objectlike nature of the verb complement (i.e. the fact that it is a recipient or patient of an action) is expressed by use of the infinitive or *-ing* form of the verb, also non-finite, depending on the requirements of the aspectual verb used, e.g. *starts talking* or *starts to talk*; *continues talking* or *continues to talk*; *stops talking* (but not *stops to talk*; this phrase has another, non-aspectual meaning). When V2 ends in *-ing*, it is not completely clear whether it is a gerund or present participle; or maybe it is an amalgam of the two. This example illustrates how “nounness” or “verbness” are not polarized concepts, but points on a continuum. In this case, the “nounness” or analysis of V2 as a gerund seems to stem from its **syntactic** role; its “verbness” or analysis as a present participle from its **logical** or **semantic** role.

Although there is nothing to overtly mark Chinese verbs as finite or non-finite, it does on some level make sense to talk about the matrix verb as “finite” and its complement verb as “non-finite” even in Chinese. First, when used as a verb complement, a verb is objectified, and refers to an action as a concept rather than marking it as being performed by a certain individual or individuals. In addition, there is a strict word order requirement: the matrix verb must come **before** the complement verb.

Mirroring such analytic constructions as 開始收拾 *kai¹shi³ shou¹shi²* ‘began to pick up’ are numerous **lexical compounds** in Mandarin with incorporated aspectual verbs or other aspectual elements, e.g. 起飛 *qi³fei¹* [to rise up + to fly] ‘to take off’ (= ‘to begin to fly’) and 停收 *ting²shou¹* [to stop + to collect] ‘to discontinue collecting (e.g. recyclables, a fee)’.

Though we have just observed that an aspectual matrix verb must occur **before** its verb complement, aspect can in fact also be expressed in Chinese with aspect-marking non-matrix verbs or other formatives that come **after** the main verb, called “satellites”. The directional construction 飛起 *fei¹qi³* [to fly + to rise up] ‘to fly off, away’ exists in Chinese alongside of 起飛 *qi³fei¹* ‘to take off’. Even native speakers of Chinese are often hard pressed to explain just what the difference is between these two constructions.

Inchoative aspect is expressed in both constructions, but they contrast two different types of aspect marking in the Chinese verbal system. The first is an example of **initiatory aspect** and the second of **realization aspect**. Initiatory aspect, in which the aspectual verb occurs in **initial** position, expresses a **conscious, intentional action exercised upon the verbal complement**. This is the same type of aspect as that which can be expressed analytically as described above. Because they generally involve an intentional action, initiatory aspectual compounds are often also **causative** in nature; one causes a thing to begin, continue, or end, rather than its happening spontaneously. Verbs marked with realization aspect, on the other hand, are **resultative** and **directional constructions**, with the aspectual material in **final** position; this material is furthermore **separable** from the verb base. These describe a **concrete realization, natural progression, or outcome** of the action described by the main verb, once said action has been set in motion, regardless of how it originally began. This is the key distinguishing feature between these two ways of expressing aspect in Chinese.

Because in many cases the factual outcome or result of an action accords closely with the intended outcome of the initiatory action, the two verb construction types are sometimes similar in semantic effect. But syntactically, aspectually and logically they are unambiguously distinct. With initiatory aspect, the agent is generally in control of the action. The action described in realization aspect is an outcome often beyond the control of the agent. Both types are distinct from subordinate compound verbs which have an adverbial prefix in initial position, such as 高飛 *gao¹fei¹* [high + to fly] ‘to fly high’ and 紛飛 *fen¹fei¹* [profusely, wildly + to fly] ‘to fly all over the place’.

The concept of “headedness” is irrelevant in both initiatory and realization aspect, since we restrict the application of “headedness” as a feature to cases

of bona fide modification, or junction type relationships, leaving it out of consideration in the case of syntactic-type complementation – even when it is compound-internal – or nexus type relationships. Lexical initiatory aspect compound verbs can be viewed as highly cohesive, i.e. inseparable, abbreviations of full Aspectual Verb + Verb Complement phrases; e.g. 開始辦理 *kai¹shi³ ban⁴li³* ‘to begin to administer a procedure’ can also be expressed in the compound 興辦 *xing¹ban⁴*. The bimorphemic compounds are lexicalized, yet their formation pattern is to some extent productive.

To further illustrate and contrast the differences between initiatory (e.g. 起飛 *qi³fei¹* ‘to take off’) and realization (e.g. 飛起 *fei¹qi³* ‘to fly off, away’) aspect, we will look at examples formed with the morpheme 開 *kai¹*, which means ‘to open’ and by extension ‘to initiate, kick off, begin’, and which is highly productive in aspectual verb compounds.

Three examples of 開 *kai¹* used in **initial** position in inseparable initiatory aspect compounds are: 開打 *kai¹da³* [to open + to strike] ‘to begin to fight, play a ball game’; 開辦 *kai¹ban⁴* [to open + to administer] ‘to launch a new administrative procedure’; and 開動 *kai¹dong⁴* [to open + to move] ‘to get going, set in motion, to start eating a meal’. On the other hand, when 開 *kai¹* ‘to open’ **follows** a main verb, it functions as a directional complement indicating the **progression** of movement ‘away from a source’. The origin of this use is certainly traceable to the idea of ‘opening up space’ by removing oneself or a thing from a place. Examples are 走開 *zou³kai¹* [to walk, run + to open], ‘to go away’, 跳開 *tiao⁴kai¹* ‘to jump out of the way, avoid’, and 放開 *fang⁴kai¹* ‘to let go, release’. All are separable, and thus are constructions rather than compounds.

In some formations, the realization aspect 開 *kai¹* has fused closely with the initial element to produce a compound. In 展開 *zhan³kai¹* [to spread + to open] ‘to unfold, deploy’, the two elements are inseparable, so it is a compound, which might also be classified as a synonymous coordinate compound. 離開 *li²kai¹* [to leave + to open] ‘to leave, depart, go away’ can be either a separable directional construction (e.g. 離不開 *li²bu⁴kai¹* ‘cannot leave’) or an inseparable compound (e.g. 已經離開了 *yi³jing¹ li²kai¹ le* ‘has/have already left’).

Elements in both aspectual compound verbs and in realization aspect constructions interact with the external syntax of the sentence, and may in many cases block the addition of an additional aspectual verb, e.g. ?開始興辦 *kai¹shi³ xing¹ban⁴* ‘to begin initiating an administrative procedure’ is redundant and not very felicitous, though it does occur, and was confirmed in over 2,500 Google hits; ?興辦起來 *xing¹ban⁴ qi³lai²* ‘for the initiation of an

administrative procedure to start' is even odder, though a Google search turned up over 1,300 hits for the phrase.

Inchoative is used as a generic term for expressions of any kind of "beginning" action, either initiatory or realizational; **inceptive** will be used to refer exclusively to **intentional** inauguration of an activity expressed in **initiatory** type structures, which occur before a verb.

Of the different meaning types of initiatory aspect, inceptive (as opposed e.g. to terminative and continuative) aspect seems to be the most prominent and frequently used; reasons for this will be suggested later in the chapter. We will now look at several individual morphemes used in initiatory aspectual compounds, giving examples of compounds formed with each one, and adding comments where appropriate.

Note that the final element is assumed to be verbal in the examples chosen, though in some cases it could be interpreted to be nominal.

4.2.2. Inceptive action: The aspect markers: 起 *qi*³ 'to rise', 啓 *qi*³ 'to open', 興 *xing*¹ 'to activate', 創 *chuang*⁴ 'to create'

We begin by considering as a group four morphemes which function as aspectual matrix verbs in certain verb compounds. They occur in initial position, preceding a verbal complement. The verbs are: 起 *qi*³ 'to rise up, begin' (often a free morpheme, e.g. 先起個油鍋 *qi*³ *ge* *you*² *guo*¹ 'first start heating oil in a wok'), 啓 *qi*³ 'to open, start' (bound), 興 *xing*¹ 'to activate, excite' (usually bound), and 創 *chuang*⁴ 'to start, initiate' (free). All are relatively restricted as to which verbs they may collocate with; 起 *qi*³ is the most productive, i.e. open to novel collocations, of the four.

Some examples with 起 *qi*³ 'to rise up, get up' in initial position as an aspect marker are: 起跑 *qi*³(²) *pao*³ [to rise + to run] 'to begin running'; 起飛 *qi*³ *fei*¹ [to rise + to fly] 'to take off (of a plane)'; 起動 *qi*³ *dong*⁴ [to rise + to move] 'to start (a machine)', similar to 啓動 *qi*³ *dong*⁴ below; 起跳 *qi*³ *tiao*⁴ [to rise + to jump] 'to take off (in sports)'; 起哄 *qi*³ *hong*⁴ [to rise + to make an uproar] 'to create a stir, jeer'; 起行 *qi*³ *xing*² [to rise + to go] 'to set off for a journey'; 起訴 *qi*³ *su*⁴ [to rise + to accuse, sue] 'to bring a suit, prosecute'; 起用 *qi*³ *yong*⁴ [to rise + to use] 'to appoint to an office'; 起算 *qi*³ *suan*⁴ [to rise + to calculate] 'to calculate beginning from the present'; and 起舞 *qi*³(²) *wu*³ [to rise + to dance] 'to begin to dance'.

The morpheme 啓 *qi*³ is homophonous with 起 *qi*³ in Mandarin, and is sometimes used in similar contexts as an inceptive aspect marker. Examples with 啓 *qi*³ 'to open, start, initiate, launch': 啓動 *qi*³ *dong*⁴ [to open + to move]

‘to start (a car, machine), launch (a software application)’; 啓航 *qi³hang²* [to open + to navigate] ‘to launch (a voyage)’; 啓用 *qi³yong⁴* [to open + to use] ‘to begin to use (e.g. a building)’; 啓發 *qi³fa¹* [to open + to emit] ‘to inspire, arouse, enlighten’; 啓示 *qi³shi⁴* [to open + to show] ‘to offer an inspiration’; and the literary 啓迪 *qi³di²* [to open + to enlighten] ‘to enlighten, guide’.

Examples with 興 *xing¹*, ‘to start, initiate, launch’, include: 興建 *xing¹jian⁴* [to launch + to construct] ‘to raise up [a building]’; 興辦 *xing¹ban⁴* [to launch + to administer] ‘to initiate an administrative procedure’; and 興修 *xing¹xiu¹* [to launch + to build] ‘to start construction on’.

Examples with 創 *chuang⁴* ‘to start, initiate’: 創辦 *chuang⁴ban⁴* [to create + to administer] ‘to establish, set up’; 創建 *chuang⁴jian⁴* [to create + to build] ‘to found, establish’; 創刊 *chuang⁴kan¹* [to create + to publish periodically] ‘to launch a periodical’; 創立 *chuang⁴li⁴* [to create + to establish] ‘to found’; 創設 *chuang⁴she⁴* [to create + to install] ‘to establish, set up’; 創造 *chuang⁴zao⁴* [to create + to make] ‘to create’; and 創作 *chuang⁴zuo⁴* [to create + to make] ‘to create [a literary work]’. The inceptive force of 創 *chuang⁴* seems relatively bleached in the last four compounds, since the meaning of the two elements is in each case closely related; some of these examples could possibly also be analyzed as synonymous coordinate compounds.

There are numerous other verbs used in initial position in lexical aspectual compounds. In the next section we will consider the use of two high-frequency, semantically bleached verbs in this connection.

4.2.3 From concrete to aspectual verb: 開 *kai¹* ‘to open’ and 發 *fa¹* ‘to emit’

Each of the two verbs that will be discussed in this section has a very specific and concrete base meaning: that of 開 *kai¹*, mentioned in the preceding, is ‘to open’, and that of 發 *fa¹* is ‘to emit’. Each tends to retain this concrete meaning when combined with a noun to form a VO phrase, e.g. 開門 *kai¹men²* ‘to open a door’ and 發言 *fa¹yan²* ‘to make a statement’.

Both verbs can also function as matrix verbs with verb complements in VV compounds, a structure that follows the pattern of aspectual verb compounds. With their respective base meanings relating to ‘opening’ and ‘emitting’, each is well compatible with the notion of ‘beginning’ or the inchoative aspect. So when combined with a verb complement, the original literal meaning of these two verbs tends to become bleached, and they can serve as **inceptive aspect** markers. With the Aspectual Matrix Verb + Verb Complement pattern in place,

subsequent formations have tended to fall into a similar semantic pattern, through the aid of precedent and analogy.

The process of going from a concrete lexical verb to an aspectual one was nevertheless only a partial one, since the V1s as used in some compounds of this type still preserve their original meanings to varying extents. In the compound 開採 *kai¹cai³* ‘to begin mining/to open up land for mining’, for example, 開 *kai¹* is an aspectual verb, but it carries with it associations of ‘opening’, triggered by the semantics of the compound as a whole: ‘beginning to mine’ requires an ‘opening’ of the earth. This is the case in numerous compounds. Often, however, 開 *kai¹* manifests only its more abstract meaning and is purely inceptive in function, as in 開辦 *kai¹ban⁴* ‘to kick off, inaugurate, initiate’. Where the situation fits, the original meaning of the word and its associations will be called up; where they do not fit, verbs like 開 *kai¹* will be more straightforwardly aspectual in nature.

Whenever the balance tips such that the V1 does not assume a dominantly aspectual function at all, the whole must be differently analyzed and assigned to another compound or construction type. Aspectual actions such as beginning and ending can be imposed on almost any activity, but once V1 leaves the realm of aspect, one often ends up with **two separate main actions**, making the formation a **coordinate compound** or possibly a **resultative construction** rather than an embedded compound. An example is 開裂 *kai¹lie⁴* [to open + to split] ‘to split, tear’, which describes the ‘opening up’ of something that is splitting apart. 開 *kai¹* in some other compounds implies ‘leaving’, e.g. 開溜 *kai¹liu¹* [to open, leave + to slip away] ‘to leave, “take off”’ (slang) and 開脫 *kai¹tuō¹* [to open, leave + to escape from] ‘to escape’. All of these could perhaps best be analyzed as coordinate compound verbs, with resultative force. And yet, shades of the aspectual meaning of V1 also seem to be called up with these verbs, since they describe the beginning of the action of ‘leaving’.

There is also ambiguity as to compound or construction type with a number of miscellaneous embedded compound types that describe various other V1 activities, such as **promoting** or **choosing to do** an action. The less “neutral” the action described by V1, that is, the more a V1 action takes on its own characteristics (e.g. ‘choosing’ and ‘considering’) rather than simply exercising an effect on V2 (e.g. starting and stopping it), the more it will tend toward being a separate verb in its own right. For example, is 選購 *xuan³gou⁴* ‘to choose and to buy’, ‘to choose for purchase’ or ‘to choose (i.e. decide) to purchase’? These cases are not as clearcut as when the matrix verb is unequivocally aspectual in function. Verbs like 選 *xuan³* ‘to choose’ do in any

case refer to a decision to begin to do some action, so they to some extent carry an inchoative meaning.

Below follow some examples with 開 *kai*¹ in initial position, arranged in groups with shared semantics: 開辦 *kai*¹*ban*⁴ [to open + to administer] ‘to kick off, inaugurate, initiate’; 開拍 *kai*¹*pai*¹ [to open + to film] ‘to begin filming, shooting (a movie)’; 開演 *kai*¹*yan*³ [to open + to perform] ‘to open (said of a performance)’; 開映 *kai*¹*ying*⁴ [to open + to show a film] ‘to premiere’ (said of a movie); 開動 *kai*¹*dong*⁴ [to open + to move] ‘to begin (to eat), “dig in”’; 開創 *kai*¹*chuang*⁴ [to open + to create] ‘to inaugurate’; 開講 *kai*¹*jiang*³ [to open + to talk, tell] ‘to tell stories’; 開航 *kai*¹*hang*² [to open + to navigate] or 開行 *kai*¹*xing*² [to open + to go] ‘to embark on an ocean journey’; 開赴 *kai*¹*fu*⁴ [to open + to head towards a destination] ‘to begin a journey to a destination’; 開拔 *kai*¹*ba*² [to open + to pull up] ‘to set out, move (troops)’; 開設 *kai*¹*she*⁴ [to open + to institute] ‘to open (a facility), begin offering’; 開學 *kai*¹*xue*² [to open + to study] ‘to begin a new semester’; 開張 *kai*¹*zhang*¹ [to open + to open] ‘to open for business’; 開展 *kai*¹*zhan*³ [to open + to unfold] ‘to develop’; 開發 *kai*¹*fa*¹ [to open + to emit] ‘to open up for development’; 開拓 *kai*¹*tu*⁴ [to open + to develop] ‘to develop’ (can also be analyzed as a coordinate verb compound); 開放 *kai*¹*fang*⁴ [to open + to release] ‘to open up, liberalize, lift restrictions’; 開採 *kai*¹*cai*³ [to open + to collect] ‘to begin to mine’; 開挖 *kai*¹*wa*¹ [to open + to dig] ‘to begin excavation’; 開掘 *kai*¹*jue*² [to open + to dig] ‘to excavate’; 開鑿 *kai*¹*zao*² [to open + to drill] ‘to begin to drill’; 開銷 *kai*¹*xiao*¹ [to open + to expend] and 開支 *kai*¹*zhi*¹ [to open + to expend] ‘to expend (funds)’ (also used as nouns). The degree to which V1 retains its original meaning as opposed to an aspectual interpretation varies with each compound. And many of these examples are sometimes or even most often nominal in actual use, though all are also used as verbs.

A number of representative compounds in which 發 *fa*¹ ‘to emanate, emit, issue, give out, become’ functions as an inceptive aspectual verb are: 發問 *fa*¹*wen*⁴ [to issue + to ask] ‘to ask questions’; 發笑 *fa*¹*xiao*⁴ [to issue + to laugh] ‘to break out laughing’; 發售 *fa*¹*shou*⁴ [to issue + to sell] ‘to go on sale, put up for sale’; 發育 *fa*¹*yu*⁴ [to issue + to mature] ‘to enter puberty’; 發覺 *fa*¹*jue*² [to issue + to perceive] ‘to discover, become aware of’; 發掘 *fa*¹*jue*² [to issue + to dig] ‘to excavate, dig up’; 發作 *fa*¹*zuo*⁴ [to issue + to take effect] ‘to have an attack, seizure’; 發揮 *fa*¹*hui*¹ [to issue + to shake] ‘to bring into play’; 發配 *fa*¹*pei*⁴ [to issue + to exile] ‘to exile for punishment’; and 發動 *fa*¹*dong*⁴ [to issue + to move] ‘to mobilize’ (this could also be analyzed as resultative).

Similar to the situation with 開 *kai*¹, 發 *fa*¹ used as an initiatory aspectual element retains more of its literal concrete meaning in some compounds, such as 發配 *fa*¹*pei*⁴ [to issue + to exile] ‘to exile for punishment’. And while 發 *fa*¹ conveys a sense of being a relatively independent aspectual element in the context of some compounds, such as 發問 *fa*¹*wen*⁴ ‘to bring up questions’, in others it is less easily perceived as such, e.g. 發展 *fa*¹*zhan*³ [to issue + to unfold] ‘to develop’, although it may have inceptive force. When the latter is the case, the compound is more likely to be preceded by a full analytical aspect verb like 開始 *kai*¹*shi*³ ‘to begin’ (e.g. 開始發展 *kai*¹*shi*³ *fa*¹*zhan*³ ‘to begin to develop’) than would be the case with some of the other aspectual compound formatives like 興 *xing*¹ ‘to begin’. (See also below regarding a different type of compound with 發 *fa*¹ as an initial element.)

A third verb in this category also tends toward use as an inceptive V1: 出 *chu*¹ ‘to go out’. While it is quite clearly inceptive in compounds like 出任 *chu*¹*ren*⁴ [to go out + to be responsible for] ‘to assume office’, it keeps much of its literal meaning of ‘going out’ in most other VV compounds in which it is a V1, e.g. 出生 *chu*¹*sheng*¹ ‘to be born’; 出嫁 *chu*¹*ji*⁴ ‘to marry (a man)’; 出發 *chu*¹*fa*¹ ‘to embark on a journey’; and 出租 *chu*¹*zu*¹ ‘to be, put up for rent’; so it is not further treated here.

4.2.4 Inceptive aspect compounds with miscellaneous verbs: 就 *jiu*⁴ ‘to realize’, 承 *cheng*² ‘to assume’, 獲 *huo*⁴ and 得 *de*² ‘to obtain, get’, 行 *xing*² ‘carry out’, 作 *zuo*⁴ ‘to do’

就 *jiu*⁴ means, among many other things, ‘to undertake, engage in, enter upon, go to’, making it clearly inceptive in nature, and it occurs in a number of inceptive aspect compounds. The inceptive meaning is not always immediately apparent from the English translations, but the compounds do in fact emphasize the undertaking or beginning of an action, e.g.: 就任 *jiu*⁴*ren*⁴ [to assume + to serve in a post] ‘to assume office’ (cf. the synonym 出任 *chu*¹*ren*⁴); 就讀 *jiu*⁴*du*² [to assume + to read, study] ‘to enroll in a school’ (similar to 就學 *jiu*⁴*xue*² [to undertake + to study]); 就診 *jiu*⁴*zhen*³ [to undertake + to treat (medically)] ‘to seek medical help’ (a near synonym for 就醫 *jiu*⁴*yi*¹ [to undertake + to treat (medically)]); 就寢 *jiu*⁴*qin*³ [to assume + to sleep] ‘to retire, go to bed’; 就伴 *jiu*⁴*ban*⁴ [to assume + to accompany] ‘to keep s.o. company’; in some cases it is unaccusative in effect, resulting in a passive meaning: 就擒 *jiu*⁴*qin*² [to assume + to capture] is ‘to be captured’.

The verb 承 *cheng*², which means ‘to undertake to do, accept, assume, bear’ also appears in a number of aspectual compounds: 承辦 *cheng*²*ban*⁴ [to undertake + to administer] ‘to (undertake to) administer’; 承建 *cheng*²*jian*⁴

[to undertake + to construct] ‘to contract for the building of, undertake the construction of’; 承包 *cheng²bao¹* [to undertake + to contract] ‘to contract to build’; 承製 *cheng²zhi⁴* [to undertake + to manufacture] ‘to undertake, accept orders to manufacture for others’ (similar to 承做 *cheng²zuo⁴* [to undertake + to make] ‘to undertake to make for s.o.’); 承轉 *cheng²zhuan³* [to undertake + to forward] ‘to assume the responsibility of forwarding s.t.’; 承管 *cheng²guan³* [to undertake + to manage] ‘to take full charge’; and 承銷 *cheng²xiao¹* [to undertake + to market, sell] ‘to act as sales agent’.

The verbs 獲 *huo⁴* and 得 *de²*, both of which mean ‘to obtain, get’, mark a punctual beginning and thus serve as a kind of inchoative in the perception verb compounds 獲知 *huo⁴zhi¹*/得知 *de²zhi¹* and 獲悉 *huo⁴xi¹*/得悉 *de²xi¹* ‘to learn of, obtain/receive knowledge of’.

A number of compounds are formed with the light verbs 行 *xing²* and 作 *zuo⁴*. A light verb is a verb with a very general meaning, such as *to do, to make, to take*. By themselves the verbs 行 *xing²* and 作 *zuo⁴* simply mean ‘to carry out’ and ‘to do’. There are two possible analyses of compounds consisting of a light verb followed by a complement that is a default verb: (1) VO, in which case the final element is nominal; or (2) aspectual matrix verb plus a verb complement, in which case the final element is verbal. For the examples cited here, we propose the second analysis, since the final element seems to be more verbal than nominal. The next question is how to analyze the initial element. We suggest that although 行 *xing²* and 作 *zuo⁴* are light verbs meaning ‘to carry out/to do’, due to their Verb + Verb Complement format, they assume the function of an aspectual verb, marking the verb complement as either a ‘punctual’ or ‘durative/iterative’ action. Whether the action is punctual in nature, e.g. ‘stabbing’, or an iterative long term action, e.g. ‘practicing medicine’, depends on the verb complement. So the “polarity” of a verb like 行 *xing²*, i.e. punctual or iterative, cannot be determined except when the semantic structure of the compound is considered as a whole. Examples of 行 *xing²* used to indicate a **punctual** action are: 行竊 *xing²qie⁴* [to carry out + to steal] ‘to steal’; 行搶 *xing²qiang³* [to carry out + to rob] ‘to rob’; 行刺 *xing²ci⁴* [to carry out + to stab] ‘to stab s.o.’. Examples of 行 *xing²* marking an action as **iterative**, and sometimes translatable as ‘to practice’, are: 行醫 *xing²yi¹* [to carry out + to treat medically] ‘to practice medicine’; 行乞 *xing²qi³* [to carry out + to beg] ‘to beg’; and 行獵 *xing²lie⁴* [to carry out + to hunt] ‘to hunt’.

Examples in which 作 *zuo⁴* ‘to do’ marks an action as punctual/inceptive include 作嘔 *zuo⁴ou³* ‘to feel nauseous, retch’, and perhaps 作答 *zuo⁴da²* [to make + to answer] ‘to offer an answer to a question’; an example of 作 *zuo⁴*

indicating a continuative action is 作陪 *zuo⁴pei²* ‘to help entertain an honored guest (e.g. at a meal)’. 作 *zuo⁴* sometimes marks the punctual ‘beginning’ of a ‘discontinuation’, e.g. 作罷 *zuo⁴ba⁴* [to make + to cease] ‘to call an end/halt to, break off, discontinue doing something’, and 作廢 *zuo⁴fei⁴* [to make + to abandon] ‘to become invalid’.

4.2.5 Embedded compounds formed with the light verb 打 *da³* ‘to strike’

The light verb that draws the most attention in Chinese is perhaps 打 *da³*, which literally means ‘to hit’, though its meaning often goes far beyond ‘striking with the hand’. There is a certain degree of awareness among Chinese about the versatility of this morpheme, which appears in all sorts of collocations and idioms.

Like 作 *zuo⁴* (in e.g. 作早操 *zuo⁴zao³cao¹* ‘to do morning calisthenics’), 打 *da³* is used in numerous idiomatic expressions and phrases of more than two morphemes, especially in Verb + Nominal Object constructions, such as 打哈欠 *da³ha¹qian⁴* (or 呵欠 *he¹qian⁴*) ‘to yawn’, 打抱不平 *da³bao⁴bu⁴ping²* ‘to defend someone against an injustice’, 打官司 *da³guan¹si¹* ‘to be involved in a legal suit’, and 打個比方 *da³ge³bi³fang¹* ‘to cite an example, analogy’. There is also a large number of disyllabic 打 *da³* + Noun constructions, such as 打球 *da³qiu²* [to strike + ball] ‘to play a ball game’, 打雷 *da³lei²* [to strike + thunder] ‘to thunder’, and 打工 *da³gong¹* [to strike + work] ‘to work at a part-time job’. In most of these constructions, 打 *da³* is used as a general purpose or light verb standing in for any number of actions associated with some activity, the nature and scope of which is determined by the complement of the verb. Although these are idioms that are set in form, they are generally analytic and separable, and thus they are collocations or phrases, not compounds.

Chu (1999:164), who filled 62 pages (161-223) of his 514 page treatise on Chinese word formation with interesting examples from early popular literature of expressions with 打 *da³* as a first element, cites the criticism of scholar Ouyang Xiu (Ouyang² Xiu¹) 歐陽修 in his *Gui¹ Tian² Lu⁴ 歸田錄*, volume II, regarding overuse of the morpheme 打 *da³* instead of more specific verbs. “The word 打 *da³* stands in for any and every action at all” (「觸事皆謂之打」Chu⁴ shi⁴ jie¹ wei⁴ zhi¹ da³), Ouyang wrote. Chu mentions another Song scholar, Xiang Anshi (Xiang⁴ An¹shi⁴) 項安世, who voiced a similar complaint. The sheer number of Chinese expressions using 打 *da³* seems to inspire collection. Hobbyist Wu Jiaqing (Wu³ Jia⁴qing¹) 伍稼青 produced and published in 1979 his 打雅 *Da³⁽²⁾ya³* (*Lexicon of the word 打*

*da*³), a handwritten collection of over 700 collocations with 打 *da*³ as an initial morpheme, together with explanatory notes.

Wang (1987a:272) calls 打 *da*³ the equivalent of a prefix (the term he uses is 前附號 *qian²fu⁴hao⁴* ‘front-attached marker’, a subtype in his 記號 *ji⁴hao⁴* ‘marks’ category), but **only** when it precedes a **verb** in a verb compound. His basis for this classification is the semantic “emptiness” (of “lightness”) of 打 *da*³ in such compounds. In other cases, such as when 打 *da*³ precedes a noun, e.g. 打球 *da³qiu²* ‘to play ball’, he says it is a full-fledged “word”. We do not consider 打 *da*³ a prefix, because it is clearly verbal in nature, as it is in VN phrases like 打球 *da³qiu²* [to strike + ball] ‘to play ball’ and resultative phrases like 打敗 *da³bai⁴* [to strike + (to the point of) defeat] ‘to defeat’, and not a subordinate adverbial modifier of the verb that follows it; but Wang’s point regarding the special status and function of the morpheme 打 *da*³, especially when it precedes another verb, is well taken.

Chu (1999:161-2) categorizes 打 *da*³ as a “verbal marker” when used in a meaning that extends beyond ‘to strike’, and says it is simply “symbolic of any action”. Noting the high productivity of 打 *da*³, Chu also calls it a “prefix”, citing Wang to support his assertion; but he fails to attach Wang’s crucial condition that 打 *da*³ functions as a “prefix” only before another verb. Chu does not really distinguish between 打 *da*³ + Noun and 打 *da*³ + Verb formations, except to note that the latter are relatively fewer in number than the former. In most of Chu’s examples, 打 *da*³ is followed by a **noun**; and he does not seem to be aware that he thus is implying that 打 *da*³ is a **nominal** prefix, though the examples he gives are in almost all cases **Verb-Object phrases**. This analysis can only be deemed not well thought out and erroneous. Apparently all he means by “prefix” is a morpheme that appears as a first element in many words or phrases, regardless of its relationship to the elements around it.

Gao (2001:194), who devotes an entire chapter of her book on Chinese physical action verbs to expressions including 打 *da*³, says (2001:162-3): “When formed into a VV compounding verb, it is very likely that *da*³ expresses the action[,] and the other verb, which can be another action verb, a motion verb, or a verb of any type, modifies the action of *da*³. In most of the extended uses of 打 *da*³, particularly in its combined forms, its basic meaning seems to be backgrounded but evidently it functions as a building block in the construction of larger “semantic units”.”

Regarding Gao’s comment that the V2 “modifies” 打 *da*³ when it is a V1: Chinese is a consistently head-final language; modifying material must appear **before** what it modifies, and not after. So it is not correct to say that the verb

in final position “modifies” a V1. In coordinate verb compounds in which 打 *da*³ is “modified” as a semantic head, it is a V2 and not a V1, e.g. 敲打 *qiao*¹*da*³ [to knock + to strike] ‘to knock’ and 槌打 *chui*²*da*³ [to hammer + to strike] ‘to pound’; a more specific verb **precedes** the less specific one, and in this way “modifies” it, even though the whole is a coordinate and not subordinate verb compound. When 打 *da*³ occupies the initial position, it must have a different analysis.

Gao insightfully observes that 打 *da*³ confers a more active role and greater **intentionality** of the agent in executing the action expressed by the main verb. This does indeed seem to be the main function of 打 *da*³ in 打 *da*³ + V2 compounds. The question is how to correctly analyze and classify 打 *da*³ in this context.

We suggest that morphosyntactically, 打 *da*³ in this compound type is an aspect-like V1, whose main **semantic** function nevertheless is to add, as Gao notes, **greater intentionality** to the verb it precedes. It is as though 打 *da*³ “gains admission” to the V1 slot based on the aspectual V1 + V2 verb complement pattern. We will recall that verbs following this pattern belong to **initiatory** aspect, which involves **intentional** action, as opposed to resultative and directional constructions, which tend to describe an action following or completing an action already set in motion. Occupying this particular position, 打 *da*³ capitalizes on the slot’s basic characteristic of intentional action, while exhibiting a relatively weak aspectual character, and takes on greater intentionality as its **primary** function. Let us look at a few examples to further elucidate how this works in practice.

In the expression 打鬧 *da*³*nao*⁴ ‘to stir up a ruckus’, for example, the agent is consciously and actively being loud and unruly, rather than causing a disturbance by default, unintentionally, or without being very aware of his or her actions. In 打撈 *da*³*lao*¹, ‘to fish out’, the agent is making considerable effort at the task of trying to remove something from the water or other medium; it is not used when one scoops up something unintentionally or by chance. Intentionality is already a characteristic of the initiatory aspectual verbs mentioned in the first part of this section, but 打 *da*³ implies a much stronger intentionality than regular aspectual verbs. But while the primary role of 打 *da*³ is to intensify the intentionality of V2, it often seems to have an incidental or secondary function as an inceptive aspectual verb as well.

Here are some examples of 打 *da*³ used as a light verb of intensified intentionality, and sometimes concurrently of inceptive aspect, with a verb complement: 打扮 *da*³*ban*⁴ [to strike + to put on] ‘to dress up’; 打磨 *da*³*mo*² [to strike + to polish] ‘to polish’; 打賭 *da*³⁽²⁾*du*³ [to strike + to bet] ‘to bet’;

打點 $da^{3(2)}dian^3$ [to strike + to touch, embellish] ‘to make preparations’; 打理 $da^{3(2)}li^3$ [to strike + to manage] ‘to fix up, take care of, make preparations’; 打鬧 da^3nao^4 [to strike + to make noise] ‘to stir up a ruckus’; 打撈 da^3lao^1 [to strike + to pull out of water] ‘to fish out’; 打轉 da^3zhuan^4 [to strike + to turn] ‘to go around in circles’ (often figurative); 打滾 $da^{3(2)}gun^3$ [to strike + to roll] ‘to tumble, do a somersault’; 打滑 da^3hua^2 [to strike + to slip] ‘to skid’; 打擊 da^3ji^2 [to strike + to hit] ‘to deliver a blow’ (often nominal); 打劫 da^3jie^2 [to strike + to rob] ‘to mug, rob’; 打搶 da^3qiang^3 [to strike + to rob] ‘to rob’; 打攪 $da^{3(2)}jiao^3$ [to strike + to stir] ‘to disturb, bother’; 打擾 $da^{3(2)}rao^3$ [to strike + to stir up] ‘to bother’; 打閃 $da^{3(2)}shan^3$ [to strike + to dodge] ‘to dodge’; 打造 da^3zao^4 [to strike + to make, manufacture] ‘to make, manufacture’; 打坐 da^3zuo^4 [to strike + to sit] ‘to sit [as in meditation]’; 打算 da^3suan^4 [to strike + to calculate] ‘to plan’; 打掃 $da^{3(2)}sao^3$ [to strike + to sweep] ‘to sweep up, clean’; 打印 da^3yin^4 [to strike + to print] ‘to print up’. As with 作 zuo^4 and 行 $xing^2$, the specific aspectual character of 打 da^3 , when it is in fact aspectual, often depends on the nature of the verb complement.

As in the cases of 開 kai^1 and 發 fa^1 , 打 da^3 often does preserve some of the force of its basic meaning of ‘to strike’, especially where it is used in combination with a morpheme which has a concrete meaning related to ‘striking’ or ‘hitting’. A case in point is 打造 da^3zao^4 ‘to make, manufacture’, e.g. 打造兵器 $da^3zao^4 bing^1qi^4$ ‘to make weapons’. In this case, 打 da^3 gives a sense of ‘striking’ something in the making of a manufactured object. So 打 da^3 , like many of the other inceptive light verbs, often carries a good deal of its own semantic baggage. 打造 da^3zao^4 is, however, also often used with abstract objects, e.g. 打造形象 $da^3zao^4 xing^2xiang^4$ ‘to create an image’.

打 da^3 can in some cases be used to form a free disyllabic verb from a bound morpheme, the same as some of the other inceptive verbs such as 興 $xing^1$. 擾 rao^3 ‘to disturb’, for example, cannot be used alone; adding 打 da^3 to form 打擾 da^3rao^3 makes it a free form, a verb meaning ‘to bother, disturb’.

The role of 打 da^3 extends even further in at least one case, to becoming a **causative** marker. In the compound 打聽 da^3ting^1 ‘to inquire around about something’, for example, the morpheme 打 da^3 basically changes the meaning from a passive activity of ‘listening’ to an act of ‘causing’ the listening to come about, i.e. bringing about an opportunity for listening through inquiry. This will be discussed in more detail in the section on causatives below.

4.2.6 Terminative aspect: 停 *ting*² ‘to stop’, 止 *zhi*³ ‘to stop’, 休 *xiu*¹ ‘to stop, suspend, rest’ 斷 *duan*⁴ ‘to break off, sever’, 拒 *ju*⁴ ‘to resist, refuse’, 防 *fang*² ‘to prevent’; 失 *shi*¹ ‘to lose, fail to’

Some examples of the terminative aspect, or expression of an effort targeted at **stopping** a given action, have already been cited in the preceding. The primary verb used to express purposefully stopped action is 停 *ting*² ‘to stop’. It is a transparent aspectual verb, and the compounds in which it occurs are often easily expandable to a longer, more explicit analytical form.

Some examples are: 停辦 *ting*²*ban*⁴ [to stop + to administer] ‘to discontinue administering (a procedure)’, shortened from 停止辦理 *ting*²*zhi*³*ban*⁴*li*³; 停飛 *ting*²*fei*¹ [to stop + to fly] ‘to no longer fly, cancel a flight’; 停收 *ting*²*shou*¹ [to stop + to collect] ‘to discontinue collecting (e.g. a fee, recyclables)’; 停開 *ting*²*kai*¹ [to stop + to open, hold] ‘to stop holding, cancel (a class), discontinue driving’; 停駛 *ting*²*shi*³ [to stop + to drive] ‘to discontinue driving (a vehicle, e.g. providing school bus service)’; 停招 *ting*²*zhao*¹ [to stop + to recruit] ‘to discontinue recruiting (new students for an academic program)’; 停刊 *ting*²*kan*¹ [to stop + to publish] ‘to stop publishing (a journal, etc.)’; and 停租 *ting*²*zu*¹ [to stop + to rent out] ‘to discontinue renting out’.

We noted in the preceding that the same morpheme can sometimes be used for both the inceptive verb formative and resultative satellite, e.g. 開 *kai*¹ ‘to begin’ also serves as a resultative satellite meaning ‘away from a place’. 停 *ting*², however, is not used as a resultative satellite; other formative elements are used instead, especially 住 *zhu*⁴; ‘to stop completely’ is 停住 *ting*²*zhu*⁴.

停 *ting*² is not the only verb that can be used to indicate purposeful termination of an activity. There is also, for example, 止 *zhi*³ ‘to stop, discontinue’, used in 止付 *zhi*³*fu*⁴ [to stop + to pay] ‘to stop payment (on a check)’. Several verb compounds in the semantic field of medicine use the terminative aspectual formative 止 *zhi*³: 止痛 *zhi*³*tong*⁴ [to stop + to hurt] ‘to stop pain, be analgesic’; 止瀉 *zhi*³*xie*⁴ [to stop + to suffer from diarrhea] ‘to stop diarrhea, be anti-diarrheal’; 止吐 *zhi*³*tu*⁴ [to stop + to vomit] ‘to stop vomiting, to be anti-emetic’; 止咳 *zhi*³*ke*² [to stop + to cough] ‘to suppress coughing, be a cough suppressant, be anti-tussive’; and 止癢 *zhi*³*yang*³ [to stop + to itch] ‘to stop itching, be anti-pruritic’. There is also the unaccusative 止跌 *zhi*³*die*² [to stop + to fall] ‘to stop falling’ (e.g. a stock price), in which the subject, a stock price, does not actively initiate the action.

The verb 退 *tui*⁴ is used with a few verb complements in the meaning of ‘to withdraw from’, or effectively, ‘to stop’. One example is 退選 *tui*⁴*xuan*³ [to

withdraw + to select] ‘to withdraw [from one’s selection of] an academic course’; here it is not used in the sense of ‘withdrawing from an election’, in which case it would be a VO phrase. Another is 退染 *tui⁴ran³* [to withdraw + to dye] ‘to stop the process of dyeing’. If 學 *xue²* ‘to study’ is interpreted as a verb, then 退學 *tui⁴xue²* [to withdraw + to study] ‘to withdraw from school’, is another example.

Another verb used in a small number of terminative aspectual compounds is 休 *xiu¹* ‘to stop, suspend, rest’: 休刊 *xiu¹kan¹* [to rest + to publish] ‘to discontinue publishing’ (a near synonym for 停刊 *ting²kan¹*, cited above); 休耕 *xiu¹geng¹* [to rest + to plow] ‘to leave fallow’; and 休學 *xiu¹xue²* [to rest + to study] ‘to withdraw from one’s studies (學 *xue²* seems to be a verb in this compound, as it does in 開學 *kai¹xue²* ‘to begin classes’).

There are also a few examples with 斷 *duan⁴* ‘to break off, sever’: 斷航 *duan⁴hang²* [to sever + to navigate] ‘to discontinue sailing (a vessel)’; 斷交 *duan⁴jiao¹* [to sever + to intersect, interact] ‘to sever relations’, though 交 *jiao¹* in this compound tends to be quite strongly nominal; 斷食 *duan⁴shi²* [to terminate + to eat] ‘to stop eating, fast’; 斷炊 *duan⁴chui¹* [to sever + to cook] ‘to run out of food and fuel’, a relatively literary expression, and unaccusative.

拒 *ju⁴* ‘to refuse’ and 防 *fang²* ‘to prevent’ are not simple negatives; both refer to a ‘stopping’ of an expected or anticipated event before it has a chance to actually happen. For 拒 *ju⁴* ‘to resist, refuse’ there are the compounds: 拒付 *ju⁴fu⁴* [to refuse + to pay] ‘to refuse payment’, 拒繳 *ju⁴jiao³* [to refuse + to pay] ‘to refuse to pay (a fee)’, 拒領 *ju⁴ling³* [to refuse + to pick up] ‘to refuse to pick up (e.g. severance pay)’, 拒收 *ju⁴shou¹* [to refuse + to receive] ‘to refuse to accept (e.g. a patient)’, 拒買 *ju⁴mai³* [to refuse + to buy] ‘to boycott’, 拒用 *ju⁴yong⁴* [to refuse + to use] ‘to refuse to use’, 拒答 *ju⁴da²* [to refuse + to answer] ‘to refuse to answer’ and 拒抽 *ju⁴chou¹* [to refuse + to smoke] ‘to refuse to smoke (e.g. secondhand smoke)’.

There is a whole class of terminative aspectual compounds formed with 防 *fang²* ‘to prevent’ which describe the prevention of various sorts of undesirable events. They include: 防盜 *fang²dao⁴* and 防竊 *fang²qie⁴* [to prevent + to steal] ‘to take measures against theft’; 防漏 *fang²lou⁴* [to prevent + to leak] ‘to prevent leaking’; 防堵 *fang²du³* [to prevent + to clog] ‘to prevent clogging’; 防振 *fang²zhen⁴* [to prevent + to vibrate] ‘to prevent damage due to shock, vibration’; 防曬 or 防晒 *fang²shai⁴* [to prevent + (for the sun) to shine on] ‘to prevent sunburn, damage due to sun’; 防腐 *fang²fu³* [to prevent + to spoil] ‘to prevent spoilage’; and 防蝕 *fang²shi²* [to prevent + to corrode] ‘to prevent corrosion, be anti-corrosive’.

There are in addition a few scattered idiosyncratic terminative aspectual compounds with varying VIs, which sometimes mean ‘to reduce, restrict’ rather than an outright ‘to stop’, e.g. 節育 *jié yu*⁴ [to reduce + to bear (children)] ‘to practice birth control’; 節流 *jié liú*² [to reduce + to flow] ‘to reduce expenditures’; 節食 *jié shí*² [to reduce + to eat] ‘to diet (to lose weight)’; 制動 *zhì dòng*⁴ [to restrict, control + to move] ‘to apply brakes’; 鬆綁 *sōng bǎng*³ [to loosen + to tie, bind] ‘to untie, unfasten, release’; and 緩衝 *huǎn chōng*¹ ‘to buffer, lessen an onslaught’.

The verbal formative 失 *shī*¹ literally means ‘to lose’, but in the compounds under study it is usually used in the sense of ‘to fail to’ do a certain action, or to express the occurrence of an action by default or due to carelessness. Because of this, compounds with 失 *shī*¹ tend to be unaccusative in nature, that is, **the ostensible subject of these intransitive verbs does not actively participate in the stated action.**

Functionally these compounds are much like passive constructions, in that they omit mention of the agent of an action; but in form they are a kind of intransitive verb. To draw an analogy from English: one can say, *She photographs well.*, meaning that ‘She looks attractive in photographs’, or ‘When someone photographs her (or ‘When she is photographed’), she comes out looking good.’ ‘She’ is not actively doing the photographing, but is rather the one being photographed, and ‘she’ should in theory be the object of *photographs*; yet in these sentences ‘she’ is the subject, and ‘photographs’ is intransitive.

Similarly, in Chinese, one can use the compound verb 失竊 *shī qié*⁴ [to lose + to steal] ‘to be stolen’ to make sentences like 鐵櫃內的一百本護照全部失竊 *Tiě guǐ nèi de yī bǎi běn hù zhào quán bù shī qié*⁴ ‘All 100 passports in the safe lost-stole.’ i.e. ‘All 100 passports in the safe were stolen/lost due to theft.’, which is passive in the English translation. Who stole the passports is not known, so there is no mention of the agent. ‘Passports’ is the grammatical subject (‘passports lose-steal’), yet as in a passive construction, they are the patient of the stealing, not the initiator of it; this verb is therefore classified as unaccusative.

Further examples include: 失傳 *shī chuán*² [to fail to + to pass on] ‘to fail to be passed down to new generations’; 失信 *shī xìn*⁴ [to lose + to believe, trust] ‘to lose credibility, trust, break a promise’; 失修 *shī xiū*¹ [to lose + to repair] ‘to fall into disrepair’; 失控 *shī kōng*⁴ [to lose + to control] ‘to go out of control’; 失戀 *shī liàn*⁴ [to lose + to be in love] ‘to be jilted’, literally, ‘to lose being in a love relationship’; 失察 *shī chá*² [to fail to + to scrutinize] ‘to fail to oversee, let an infringement occur, slip by’ (the expressions 失檢

shi¹jian³ [to fail to + to examine] and *失慎 shi¹shen⁴* [to fail to + to take care] are also used in similar contexts with almost the same meaning); *失算 shi¹suan⁴* [to lose + to calculate] ‘to miscalculate’; *失守 shi¹shou³* [to lose + to defend] ‘to fall’ (said of a city); *失禁 shi¹jin¹* [to lose + to restrain] ‘to be incontinent’; *失措 shi¹cuo⁴* [to lose + to manage] ‘to lose one’s presence of mind’; *失迎 shi¹ying²* [to fail to + to meet] ‘to fail to meet s.o.’; and the formal polite expression, *失陪 shi¹pei²* [to fail to + to accompany] ‘Excuse me, I must be leaving now’, literally, ‘I will now fail to accompany you’. The compounds *失竊 shi¹qie⁴* and *失盜 shi¹dao⁴* [to allow a loss to occur to oneself + to steal, rob] ‘to have something stolen, robbed’ are also clearly unaccusative. The items stolen are the subject in each case, and they have unintentionally allowed themselves to be stolen. Similar to these two is the compound *失笑 shi¹xiao⁴* [to inadvertently allow + to laugh] ‘to let a laugh slip out, laugh in spite of oneself’. This again is unaccusative; the subject did not actively or intentionally perform the action referred to.

It is clear, as already alluded to, that we have far fewer ways to express the terminative aspect in an aspectual verbal compound than we have ways to express initiation and beginning, and there seem to be fewer actual examples of compounds that use each respective terminative aspect formative. And of the ones we do have, some tend to be unaccusative, or have subjects not actively causing the action of the complement verb. We need to ask why.

We find that there is a natural complementation between **lexical aspectual** compounds and **resultative** and **directional constructions** as regards expression of the inchoative and terminative aspect. In general, Chinese is structured, both syntactically and lexically, according to an iconic temporal linearity: things that occur first in time come first, those that occur later occur later in the utterance, except where there is movement of elements for the purpose of foregrounding and focus. Tai calls this the “Principle of Temporal Sequence” (PTS), which he states in this way: in Chinese, “the relative word order between two syntactic units is determined by the temporal order of the states which they represent in the conceptual world” (Tai 1985:50). This is the first reason that we would expect to, and actually do, find relatively more morphemes expressing initiation in first position, and more expressing termination in final position.

A more important reason is that in the real world, we purposefully and intentionally begin all manner of things, but most often these same things come to an end of their own accord, after having run a natural course of activity. Of course this is not always the case; there are also many things that we actively stop, and so we have both syntactic constructions and lexical

means, such as the intentional aspectual verbs discussed in the preceding, to express this. But the relative frequencies of each respective aspect in the language very likely reflect frequencies of the corresponding activities in the real world. Thus we find many ways of expressing a natural “finishing” or coming to an end in **resultative** constructions, and fewer among the aspectual compounds.

4.2.7 Continuative or resumptive action: 續 *xu*⁴ and 繼 *ji*⁴ ‘to continue, renew’

Syntactic and/or analytical means can be used to indicate an action in progress or a continuative action. The example 正在急速進展著 *zheng*⁴*zai*⁴*ji*²*su*⁴*jin*⁴*zhan*³*zhe* ‘is rapidly advancing’ uses both analytic and syntactic means – the analytic adverbial 正 *zheng*⁴ ‘just at this moment’, the verb 在 *zai*⁴ ‘to be in the process of’, and the syntactic marker 著 *zhe*, which indicates among many other things, action in progress. The most straightforward analytical way to express a continued action is to place the aspectual compound verb 繼續 *ji*⁴*xu*⁴ ‘to continue’ before a verb complement, e.g. 可繼續使用至用完為止 *ke*³*ji*⁴*xu*⁴*shi*³*yong*⁴*zhi*⁴*yong*⁴*wan*²*wei*²*zhi*³ ‘you can continue to use it until it is used up.’ Ongoing action can also be expressed in aspectual compounds, though only a few very specific types of continuatives are expressed lexically.

There is a distinction between the **continuative** and the **progressive** aspect. In general, lexical compounds with continuative aspect are not simply abbreviations of an expanded ‘continue to do something’ construction. They typically denote, rather, a **renewing**, or a concrete action taken to extend or continue an action which has come to a natural end, due to a prior agreement, a running out of resources, or the completion of a natural cycle; examples include the period for which a book may be borrowed, or a rental contract. For this reason, this type of aspect could in some cases also be called **resumptive** aspect.

The two main formatives are the two morphemes in the most common expression for ‘to continue’, the semibound morphemes 續 *xu*⁴ and 繼 *ji*⁴ (examples of 續 *xu*⁴ as a free morpheme: 我想續一杯咖啡 *wo*³*xiang*³*xu*⁴*yi*¹⁽⁴⁾*bei*¹*ka*¹*fei*¹ ‘I’d like to get a refill on my coffee’; 明天要去續我的租約 *Ming*²*tian*¹*yao*⁴*qu*⁴*xu*⁴*wo*³*de**zu*¹*yue*¹ ‘I’ll go renew my rental contract tomorrow’ (e.g. for cell phone service); 繼 *ji*⁴ as a free morpheme is typically used in adverbial phrases with 後 *hou*⁴ or 之後 *zhi*¹*hou*⁴ ‘after’, to mean ‘following, in the wake of’, e.g. 繼回收寶特瓶後, 環保署新年展開新行動 *ji*⁴*hui*²*shou*¹*bao*³*te*⁴*ping*²*hou*⁴, *huan*²*bao*³⁽²⁾*shu*³*xin*¹*nian*²*zhan*³*kai*¹*xin*¹

xing²dong⁴ ... ‘Following the PET (polyethylene terephthalate) bottle recycling effort, the EPA is launching a new initiative in the new year...’).

Some examples of continuative aspect compounds with 續 *xu⁴* are: 續借 *xu⁴jie⁴* [to continue + to borrow] ‘to renew (library books), continue to borrow’; 續聘 *xu⁴pin⁴* [to continue + to hire] ‘to extend a contract of employment’; 續訂 *xu⁴ding⁴* [to continue + to subscribe] ‘to renew a subscription’; 續租 *xu⁴zu¹* [to continue + to rent] ‘to renew a rental contract, continue renting’; 續駛 *xu⁴shi³* [to continue + to drive] ‘to continue driving’; 續採 *xu⁴cai³* [to continue + to collect] ‘to continue to collect’; 續列 *xu⁴lie⁴* [to continue + to list, display] ‘to show in a continuous display’ (e.g. drawings for animation); 續言 *xu⁴yan²* [to continue + to say] ‘to continue by saying s.t.’; 續任 *xu⁴ren⁴* [to continue + to serve in an office] ‘to continue to serve in a post’ (used in a situation e.g. in which a person is considering leaving mid-term; this contrasts with the more common 繼任 *ji⁴ren⁴*, which implies that one is continuing to serve after a reappointment); 續演 *xu⁴yan³* [to continue + to perform] ‘to continue to play a role’ (e.g. in a movie sequel); 續跌 *xu⁴die²* [to continue + to drop] ‘to continue to fall’ (e.g. stock prices); 續繳 *xu⁴jiao³* [to continue + to submit payment] ‘to continue to pay’ (e.g. an annual fee); 續展 *xu⁴zhan³* [to continue + to be on display] ‘to continue to be exhibited’.

The only common expression that uses the morpheme 繼 *ji⁴* ‘to continue’ in an aspectual compound is the already-mentioned 繼任 *ji⁴ren⁴* [to continue + to serve in an office] ‘to continue serving in an office or position’.

There seems to be a division of labor and specialization of function between lexical and syntactic means for expressing continuation. The general notion of ‘continuation’ is expressed most commonly in Mandarin by syntactic means, though lexical continuatives also occupy an important niche in the language.

4.2.8 Additive and supplemental aspect: 加 *jia¹* and 增 *zeng¹* ‘to add on to, do additionally, do anew’; 補 *bu³* ‘to compensate for, supplement’

To the more usual aspectual categories of beginning, ending, and continuing, we add the category of **additive** and **supplemental action**, which are basically subcategories of the inceptive aspect, since both mark new beginnings.

Examples of **additive action** with 加 *jia¹* ‘to add on, to do an action in addition to what was originally intended’ include: 加開 *jia¹kai¹* [to add + to drive] ‘to add an extra run of a transport vehicle’; also, ‘to add an extra course

or section to a class schedule'; 加裝 *jia¹zhuang¹* [to add + to install] 'to install additionally'; 加設 *jia¹she⁴* [to add + to install] 'to install, establish something additional'; 加租 *jia¹zu¹* [to add + to rent] 'to additionally rent'; 加印 *jia¹yin⁴* [to add + to print] 'to additionally print, print additional copies'; 加發 *jia¹fa¹* [to add + to issue] 'to additionally issue' (e.g. pay); 加派 *jia¹pai⁴* [to add + to dispatch] 'to additionally assign' (e.g. policemen); 加洗 *jia¹xi³* [to add + to wash] 'to wash an additional time'; also 'to make extra prints of a photograph'; and 加收 *jia¹shou¹* [to add + to collect, charge] 'to additionally charge'.

The meaning of 增 *zeng¹* 'to add on to' is very close to that of 加 *jia¹*, and it is used with many of the same verb complements, or semantically similar ones: 增設 *zeng¹she⁴* [to add + to set up], 增置 *zeng¹zhi⁴* [to add + install], and 增辦 *zeng¹ban⁴* [to add + to administer] 'to add on, additionally build, establish, set up'; 增開 *zeng¹pi⁴* [to add + to open up] 'to additionally open up'; 增產 *zeng¹chan³* [to add + to produce] 'to additionally produce'; 增購 *zeng¹gou⁴* [to add + to purchase] 'to purchase in addition'; 增訂 *zeng¹ding⁴* [to add + to stipulate] 'to additionally stipulate'; 增編 *zeng¹bian¹* [to increase + to draw up, compile] and 增列 *zeng¹lie⁴* [to add onto + to list] 'to add onto a list/budget'; 增撥 *zeng¹bo¹* 'to additionally allocate'; 增收 *zeng¹shou¹* [to add onto + to collect] 'to additionally collect (e.g. a tax)'; 增聘 *zeng¹pin⁴* [to add onto + to hire] 'to additionally hire'; 增派 *zeng¹pai⁴* [to add onto + to dispatch] 'to additionally dispatch, send (e.g. troops)'; 增調 *zeng¹diao⁴* [to add onto + to transfer] 'to additionally transfer (e.g. troops)'; 增植 *zeng¹zhi²* [to add onto + to plant] 'to additionally plant'; 增殖 *zeng¹zhi²* [to add onto + to reproduce] 'to further reproduce (e.g. cells)'; 增援 *zeng¹yuan²* [to add onto + to aid] 'to provide additional assistance'.

補 *bu³* means 'to mend, patch, make up; to compensate for; to supplement', and describes a supplementing or following up of an original action, in order to complete something considered unfinished, incomplete, or somehow lacking, or something that is being done after a deadline. It is in effect a repetition or, again, a new beginning. 補 *bu³* is mainly a free morpheme, a monosyllabic aspectual-type verb that can both precede another verb or verb phrase analytically, and that can also bond with another verb morpheme to form a compound.

Examples of inseparable compound verbs formed with 補 *bu³* include: 補交 *bu³jiao¹* [to make up + to hand in] 'to hand something in late'; 補辦 *bu³ban⁴* [to make up + to carry out an administrative procedure] 'to take care of an administrative procedure after an event'; 補報 *bu³bao⁴* [to make up + to report] 'to file a report after an event'; 補發 *bu³fa¹* [to make up + to issue] 'to

issue after the fact, to issue a replacement (e.g. an ID)'; 補考 *bu³⁽²⁾kao³* [to make up + to take an exam] 'to take a make-up exam'; 補習 *bu³xi²* [to make up + to study] 'to get additional tutoring in a subject, attend a cram school'. This is on occasion separable; now and then one hears expressions like: 補個習 *bu³ge xi²* [to supplement + a + studying], though this tends to be tongue in cheek.

For comparison, below follow some examples of 補 *bu³* used as an independent monosyllabic verb used before verb compounds and VO phrases: 補申報 *bu³shen¹bao⁴* 'to file a tax return after the deadline has passed' (compare with the compound 補報 *bu³bao⁴* above); 補申請 *bu³shen¹qing³* 'to apply after a deadline has passed'; 補辦理 *bu³ban⁴li³* [to make up + to administer + to manage] 'to conduct an administrative procedure after the deadline has passed' (compare with the compound 補辦 *bu³ban⁴*); 補繳費 *bu³jiao³fei⁴* 'to pay a fee after the deadline has passed' (compare with the compound 補繳 *bu³⁽²⁾jiao³*); 補簽名 *bu³qian¹ming²* 'to add one's signature after the originally agreed-upon time' (compare with the compound 補簽 *bu³qian¹*); and 補上課 *bu³shang⁴ke⁴* 'to make up a class' (often shortened to the VO phrase 補課 *bu³ke⁴*).

4.2.9 Commutative action: 改 *gai³* 'to change', 換 *huan⁴* 'to change, to trade one thing in for another', 轉 *zhuan³* 'to transfer to'

Changing from one activity to another is also an expression of aspect; it is the termination of one activity and beginning of a new one. The most common commutative action formatives are 改 *gai³* 'to change', 換 *huan⁴* 'to change, to trade one thing in for another', and 轉 *zhuan³* 'to transfer to'.

Some examples for 改 *gai³* 'to change' are: 改選 *gai³⁽²⁾xuan³* [to change + to elect] 'to elect in a new election'; 改嫁 *gai³jia⁴* [to change + to marry] '(for a woman) to remarry'; 改建 *gai³jian⁴* [to change + to construct] 'to construct a new structure to replace an old one'; 改寫 *gai³⁽²⁾xie³* [to change + to write] 'to rewrite, adapt, recast'; 改裝 *gai³zhuang¹* [to change + to outfit] 'to refit, to redecorate'; 改稱 *gai³cheng¹* [to change + to call someone (by a particular name)] 'to rename'; 改造 *gai³zao⁴* [to change + to make] 'to remake'; 改葬 *gai³zang⁴* [to change + to bury] 'to rebury, move to a new grave'; 改用 *gai³yong⁴* [to change + to use] 'to use something else, switch to something else'.

These examples are formed with 換 *huan⁴* 'to change': 換用 *huan⁴yong⁴* 'to switch over to using something else'; 換發 *huan⁴fa¹* 'to renew, reissue' (e.g. a license, ID card); 換取 *huan⁴qu³* 'to replace'; 換穿 *huan⁴chuan¹* 'to

change into (different clothes); 換算 *huan⁴suan⁴* ‘to convert (a quantity into a different measuring system)’; 換搭 *huan⁴da¹* ‘to ride in a different vehicle’; 換掛 *huan⁴gua⁴* ‘to hang something different (e.g. a flag)’; and 換裝 *huan⁴zhuang¹* ‘to transship’ (see also 轉運 *zhuan³yun⁴* below).

Examples with 轉 *zhuan³* ‘to turn, shift, transfer’ include: 轉賣 *zhuan³mai⁴* [to transfer + to sell] ‘to resell’; 轉送 *zhuan³song⁴* [to transfer + to give as a gift] ‘to pass a gift on to someone else’; 轉讓 *zhuan³rang⁴* [to transfer + to yield] ‘to transfer something to someone else, to sign something over to someone else’; 轉保 *zhuan³(2)bao³* [to transfer + to insure] ‘to transfer an insurance policy to another’s name’; 轉交 *zhuan³jiao¹* [to transmit + to submit] ‘to pass on, transmit’; 轉運 *zhuan³yun⁴* [to transfer + to ship] ‘to transship’; 轉告 *zhuan³gao⁴* [to transfer + to tell] ‘to pass on information to s.o. else’; 轉述 *zhuan³shu⁴* [to transfer + to narrate] ‘to retell (something told by another)’; 轉引 *zhuan³(2)yin³* ‘to quote from a secondary source’; 轉播 *zhuan³bo¹* [to transfer + to broadcast] ‘to relay (a broadcast)’; 轉錄 *zhuan³lu⁴* [to transfer + to record] ‘to make a copy (of a recording)’; 轉產 *zhuan³(2)chan³* [to transfer + to produce] ‘to switch to the manufacture of another line’; 轉入 *zhuan³ru⁴* [to transfer + to enter] ‘to shift to, to become involved in s.t. new’; 轉生 *zhuan³sheng¹* [to transfer + to be born] ‘to be reincarnated’; 轉戰 *zhuan³zhan⁴* [to transfer + to do battle] ‘to shift a fight to a new battlefield’ (often metaphorical); 轉念 *zhuan³nian⁴* [to transfer + to study] ‘to switch to a different field of study’ (the other meaning for this compound, ‘to think the better of an idea’, is perhaps best analyzed as a VO compound); 轉學 *zhuan³xue²* [to transfer + to study] ‘to transfer (to a different school)’, if 學 *xue²* is interpreted as a verb; and 轉嫁 *zhuan³jia⁴* [to transfer + to marry (a man)] ‘to remarry’ (said of a woman); metaphorically it is used to mean ‘to shift (credit/responsibility/blame, etc.), pass on to’, as in 建商多層加價、轉嫁消費者 *Jian⁴shang¹ duo¹ceng² jia¹jia⁴, zhuan³jia⁴ xiao¹fei⁴zhe³* ‘Construction companies pass the many extra charges on to the consumer’.

As with 再 *zai⁴* ‘again, re-’, there are a number of trisyllabic compounds, particularly technical terms related to commerce and finance, that are formed with 轉 *zhuan³* as an aspectual formative in initial position. Some examples: 轉投資 *zhuan³tou²zi¹* [to transfer + to invest] ‘to reinvest’; 轉融通 *zhuan³rong²tong¹* [to transfer + to extend credit] ‘to reextend credit’; 轉增資 *zhuan³zeng¹zi¹* ‘to further increase capital’; 轉託管 *zhuan³tuo¹guan³* [to transfer + to entrust + to manage] ‘to transfer management rights to’; 轉投入 *zhuan³tou²ru⁴* ‘to change to a new occupation’.

We need a criterion to distinguish aspectual matrix verbs, such as 轉 *zhuān*³ ‘to change’, as in 轉念 *zhuān³nian⁴* ‘to change to another area of study’, from adverbial prefixes, such as 通 *tōng*¹ ‘to connect, through(ly); throughout, entirely, overall’, as in 通讀 *tōng¹du²* ‘to acquire a thorough knowledge of’. In general, if the initial element can function alone as an independent verb with the same meaning of the embedded compound as a whole, it is best analyzed as an aspectual matrix verb. It is relatively easy to make a judgment in examples like 靜聽 *jìng⁴ting¹* [quietly + to listen] ‘to listen to quietly’, in which the initial element is most frequently used as an adjective/adverb or stative verb, and in which it could not stand in for the compound as a whole meaningwise. When the most frequent unmarked usage of an initial element is as an action verb, however, it is more difficult to decide.

Two borderline cases are 追 *zhuī*¹ ‘to chase, pursue, follow up, to enact retroactively; from behind’, and 回 *huí*² ‘to return, go back, back’; examples are 追加 *zhuī¹jia¹* [to pursue + to add] ‘to increase (e.g. a budget) retroactively’, 追思 *zhuī¹si¹* [to pursue + to think about] ‘to recall, reminisce’; and 回收 *huí²shou¹* [back + to collect] ‘to recycle, bring in for recycling’, 回顧 *huí²gu⁴* [back + to look] ‘to look back, review’. In this study, we have come down on the side of “prefix” for these two items, since they seem to mainly refer to the direction of action rather than independent actions in themselves. 轉 *zhuān*³, on the other hand, is clearly a verb meaning ‘to change to, transfer to’, and is thus analyzed as an aspectual matrix verb when used in embedded verb compounds. These examples are cited to point out that while the analysis of each element is in most cases fairly straightforward, there are also less clearcut cases.

In the next section, we will consider a different kind of embedded verb compound, lexical passive compounds.

4.3 LEXICAL PASSIVE COMPOUNDS

The syntactic passive in Mandarin is a complex subject that lies outside the realm of this study; but in Mandarin the passive is in some cases expressed lexically, and that does concern us here. The syntactic passive marker 被 *bei*⁴ ‘by’, and the more colloquial passive markers 讓 *ràng*⁴ ‘let’, 叫 *jiào*⁴ ‘to call’, and 給 *gěi*³ ‘to give’ are not used in lexical passive compounds; instead we find matrix verbs meaning ‘to obtain, get, receive’, which bear none of the adversative connotations that the syntactic passive marker 被 *bei*⁴ does, or

once did – 被 *bei*⁴ is now used virtually without semantic restriction in Taiwan Mandarin.

The most common passive-marking matrix verbs are 獲 *huo*⁴ ‘to obtain’ (originally ‘to capture (prey)’) and 得 *de*² ‘to get, obtain’. These do not mark a verb for the passive in every compound in which they occur in initial position, for example 得悉 *de*²*xi*¹ ‘to learn of’, cited above, is an inchoative aspectual compound verb and not a lexical passive. Sometimes the same formative element is called upon to fulfill a different function when there is a need to fill, the semantic and syntactic fit is good, and no serious ambiguity results. In this case, the semantics of the verb complement, a verb of perception, resolve the syntax of the formation: for example, ‘to obtain + to choose, elect’ easily produces ‘to be elected’, 獲選 *huo*⁴*xuan*³; but ‘to obtain + to know’ generates 得悉 *de*²*xi*¹ ‘to gain knowledge of, to come to know, to learn’ rather than ‘to be learned’; note that the agent/subject of each verb differs in the first example, but is the same for both verbs in the second example. Expediency is a powerful morphological force, and it often wins out over a natural striving towards neatness and consistency.

As mentioned earlier, the valence of a lexical passive compound is reduced by one argument relative to the non-passive form, just as is true of syntactic passives. The valence of trivalent ‘give’ type verbs, such as 頒 *ban*¹ ‘to award’, is reduced from three arguments (the agent, patient, and recipient) and to two (recipient and patient); for bivalent verbs, such as 救 *jiu*⁴ ‘to save, rescue’, valence is reduced from two arguments (agent and patient) to one (patient).

There are only a limited number of common examples; here are some simple action verbs and their corresponding lexical passive with 獲 *huo*⁴:

- (1) 贈 *zeng*⁴ ‘to give, to give as a gift’
獲贈 *huo*⁴*zeng*⁴ [to obtain + to give as a gift] ‘to be given s.t. as a gift, to receive as a gift’;
- (2) 頒 *ban*¹ ‘to award, to present an award’
獲頒 *huo*⁴*ban*¹ [to obtain + to present an award] ‘to be given an award, to receive an award’
- (3) 選 *xuan*³ ‘to choose, select, elect’
獲選 *huo*⁴*xuan*³ ‘to be elected’

- (4) 准 *zhun*³ ‘to permit, allow’
獲准 *huo*⁴*zhun*³ ‘to be permitted, allowed, given permission’
- (5) 釋 *shi*⁴ ‘to release’
獲釋 *huo*⁴*shi*⁴ ‘to be released’
- (6) 晉 *jin*⁴ ‘to promote’
獲晉 *huo*⁴*jin*⁴ ‘to be promoted’
- (7) 報 *bao*⁴ ‘to report, inform’
獲報 *huo*⁴*bao*⁴ ‘to be informed’
- (8) 救 *jiu*⁴ ‘to rescue, save’
獲救 *huo*⁴*jiu*⁴ [to obtain + to rescue] ‘to be rescued’

The matrix verb 得 *de*² ‘to obtain, get’, can replace the 獲 *huo*⁴ in 獲救 *huo*⁴*jiu*⁴ [to obtain + to rescue] ‘to be rescued’ to form 得救 *de*²*jiu*⁴ ‘to be rescued’. 獲救 *huo*⁴*jiu*⁴ and 得救 *de*²*jiu*⁴ are also the only items in this group that can on occasion be separable, e.g. 獲了救 *huo*⁴*jiu*⁴ and 得了救 *de*²*le**jiu*⁴ ‘has/have been rescued’, suggesting they might be better analyzed in some cases as VO phrases.

It may be relevant to note two occasions heard in a radio broadcast of mistaken double passivizing, one syntactic and one lexical, with the passive compound 獲頒 *huo*⁴*ban*¹: 他被獲頒獎金...*Ta*¹ *bei*⁴ *huo*⁴*ban*¹ *jiang*³*jin*¹... ‘He was was-awarded prize money...’. This may suggest that the lexical passive is becoming less transparent to some users.

An example of a negative passive compound is 拒捕 *ju*⁴*bu*³ [to refuse + to arrest] ‘to resist being arrested’.

The morpheme 當 *dang*¹ ‘to be, act as’ functions as a passive marker in one common compound: 當選 *dang*¹*xuan*³ ‘to be elected (to office)’. This is probably an extension from such expressions as 當政 *dang*¹*zheng*⁴ ‘to be in (political) power’. An Internet search turned up a very few hits from mainland Chinese sites that used 當了選 *dang*¹*le**xuan*³, making it possibly separable under some circumstances.

There are two additional passive-marking elements that are used in a few limited formations: 遇 *yu*⁴ and 遭 *zao*¹. Both mean ‘to encounter, experience’ and tend to be adversative. They both also tend to occur in syntactic constructions rather than in inseparable compounds; examples, however, are given here for reference and comparison. Examples with 遇 *yu*⁴: 遇害 *yu*⁴*hai*⁴

[to encounter + to harm] ‘to be murdered’; 遇刺 *yu⁴ci⁴* ‘to be stabbed’; examples with 遭 *zao¹*: 遭竊 *zao¹qie⁴* ‘to have something stolen from one’; and 遭劫 *zao¹jie²* ‘to be robbed, mugged’.

Most of the compounds in this category are used more often in written or relatively formal styles of Chinese.

4.4 LEXICAL CAUSATIVE AND PASSIVE-CAUSATIVE COMPOUNDS

4.4.1 Lexical causatives

As with aspect, Chinese has both syntactic and lexical causatives. One simple and stereotyped way to form a **syntactic** analytical causative in Chinese is with the marker 使 *shi³* or 使得 *shi³de²*, both of which mean ‘to cause, make’ something to be done, e.g. ...這些變化使得腫瘤細胞變得更不可控制 *Zhe⁴xie¹bian⁴hua⁴shi³de²zhong³liu²xi⁴bao¹bian⁴de²geng⁴bu⁴ke³kong⁴zhi⁴* ‘These changes made the tumor cells (become) even more uncontrollable’. 使 *shi³* and 使得 *shi³de²* tend to belong to a relatively more formal or written style, though they are also used in everyday speech. The verbs 叫 *jiao⁴* ‘to call’ and 讓 *rang⁴* ‘to let, allow’ are often used for the same purpose in colloquial Mandarin, e.g. ...這真叫人噁心 *Zhe⁴zhen¹jiao⁴ren²e³xin¹* ‘This really makes one feel disgusted’; 室內的祥和氣氛，會讓選手精神專注，全力以赴 *Shi⁴nei⁴de xiang²he²qi⁴fen¹, hui⁴rang⁴xuan³⁽²⁾shou³jing¹shen²zhuan¹zhu⁴, quan²li⁴yi³fu⁴* ‘A tranquil atmosphere inside will make the players able to concentrate and give it their best’. Note the use of 叫 *jiao⁴* ‘to call’ and 讓 *rang⁴* ‘to let, allow’ as both causative-marking and passive-marking verbs. The verb 害 *hai⁴* ‘to hurt, harm’ can be used in adversative situations, e.g. 你害我遲到了 *ni³hai⁴wo³chi²dao⁴le* ‘You made/caused me to be late.’ or something like ‘You negatively affected me so as to make me late, you hurt me by making me late.’

There are furthermore pairs of single-morpheme action verbs with corresponding causatives, e.g. 吃 *chi¹* ‘to eat’ and 餵 *wei⁴* ‘to feed’, 學 *xue²* ‘to learn’ and 教 *jiao¹* ‘to teach’; 死 *si³* ‘to die’ and 殺 *sha¹* ‘to kill’.

There are also lexical causative compounds. Where the subject and/or object is different for each of the formative elements of a Matrix Verb + Verb Complement compound, and it is not a passive construction, we are often dealing with lexical causatives, in which the agent of V1 (unexpressed within the compound) causes the agent of V2 to do something, thus making the agent of V2 simultaneously a patient of V1. Some compounds of this type may

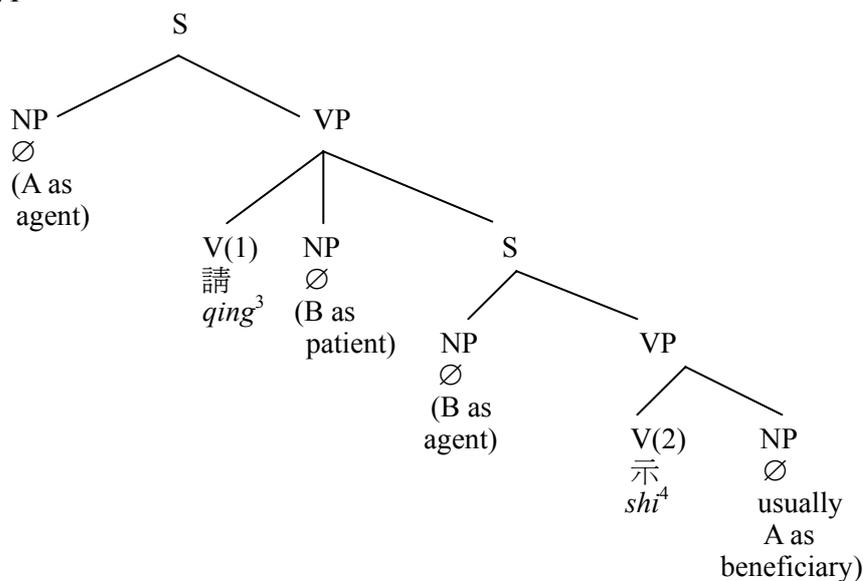
imply a grammatical passive in addition to the causative, i.e. a passive-causative: 'A causes something **to be done** (by B)'.

In lexical causative compounds we typically find a marked type of causation, rather than the neutral, straightforward causation implied by a 使得 *shi³de²*-type construction. The causation may be either a polite invitation, request, or offer, using 請 *qing³* or 邀 *yao¹* as a matrix verb; or it may involve 'helping' or 'promoting' something to happen as with the matrix verbs 促 *cu⁴* 'to promote' and 助 *zhu⁴* 'to help'; it may on the other hand express a forcing of someone to do something against their will, using a matrix verb like 逼 *bi¹* 'to force, compel'.

Causative lexical compounds are basically compressed versions of longer, more explicit phrases, and their structure varies greatly from compound to compound, depending on the expanded phrase it is derived from. We will offer tree analyses that make explicit implied information and relationships in a few of the compounds to aid us in understanding them better. Tree-drawing conventions mainly follow Burton-Roberts (1986).

Let us look at a few compounds with the matrix verb 請 *qing³*:
請示 *qing³shi⁴* [to request + to show] 'to request instructions'.

TREE 1



The full meaning of the compound is ‘to cause someone to instruct one on a matter’, though it is framed in the politeness implied by the morpheme 請 *qing*³ ‘to request’. In this example phrase using 請示 *qing*³*shi*⁴: ...他也一樣向元老請示...*ta*¹*ye*³*yi*^{1(2)}}*yang*⁴*xiang*⁴*yuan*²*lao*^{3(2)}}*qing*³*shi*⁴ ‘...he also asked the elder statesmen for instructions’, ‘he’ is the subject, overtly expressed, of the V1 請 *qing*³ ‘to request’, ‘the elder statesmen’ is the object, also overtly expressed, of 請 *qing*³ ‘to request’, as well as the subject, not repeated overtly as such, of the V2 示 *shi*⁴ ‘to instruct’; ‘he (i.e. ‘him’)’ is additionally the assumed but unexpressed object of 示 *shi*⁴ ‘to instruct’.

The compound 請教 *qing*³*jiao*⁴ [to request + to instruct] means ‘to request s.o. to give their advice on a matter’. An example sentence with 請教 *qing*³*jiao*⁴ is 我...想最後請教你一個其實滿無聊的問題 *wo*³...*xiang*³*zui*⁴*hou*⁴*qing*³*jiao*⁴*ni*³*yi*^{1(2)}}*ge**qi**shi*²*man*³*wu**liao*²*de**wen*⁴*ti*² ‘I...finally would like to solicit your views on what is actually a rather silly question.’ Here the subject/agent of V1 ‘to request’ is ‘I’, the object/patient of V1 is 你 *ni*³ ‘you’: ‘I request you’. 你 *ni*³ ‘you’ is also the agent of V2 ‘to give advice’, and 我 *wo*³ ‘I/me’ is the beneficiary: ‘you teach me’. 請 *qing*³ ‘to request’ alone can take a direct object like 你 *ni*³ ‘you’, but with the compound 請教 *qing*³*jiao*⁴, 你 *ni*³ ‘you’ is marked, either overtly or not, as oblique, because of the differing subjects and objects of V1 and V2. Overt oblique markers that can be used are 向 *xiang*⁴ ‘towards’ (i.e. 向你請教 *xiang*⁴*ni*^{3(2)}}*qing*³*jiao*⁴) or 於 *yu*² ‘at, from’ (請教於你 *qing*³*jiao*⁴*yu*²*ni*³) in some sentences; note different placement of the phrases with oblique marking. There is a further oblique object here, namely 問題 *wen*⁴*ti*² ‘question, problem’, which is sometimes marked for obliqueness with 有關 *you*³*guan*¹, 關於 *guan*¹*yu*², or 有關於 *you*³*guan*¹*yu*² ‘about’ or with 就 *jiu*⁴ ‘regarding’. 就教 *jiu*⁴*jiao*⁴ [to approach + to instruct] ‘to ask for advice’ has the same meaning and structure.

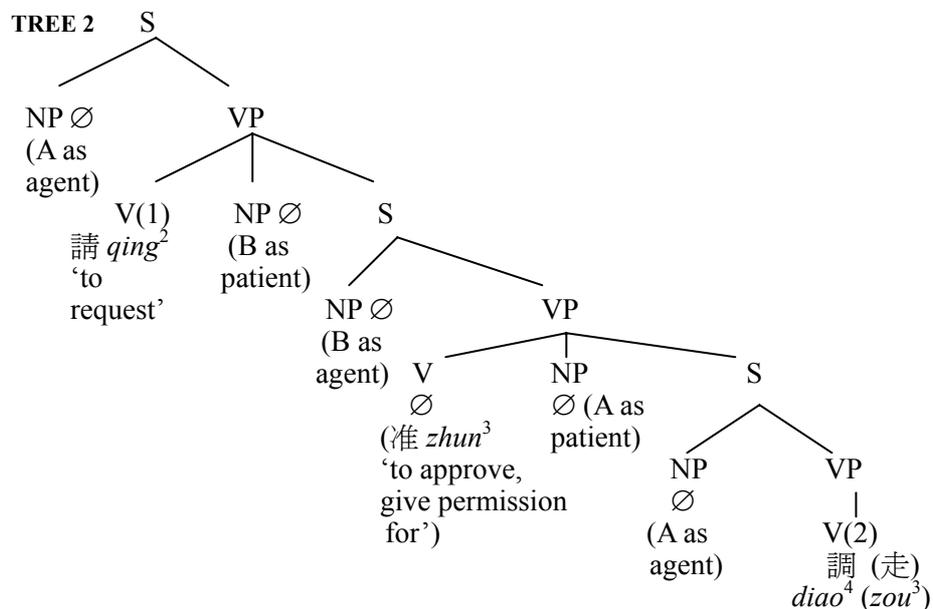
Three other compounds with 請 *qing*³ are a bit more complicated and difficult to analyze, because they leave even more information unexpressed; yet the meaning of the whole is clear. They could be said to combine a causative and passive, which could be roughly glossed as:

‘A requests (V1) B to have/allow/cause A to be V2-ed.’

None of the three permits an expressed object. The compounds are: 請調 *qing*³*diao*⁴ ‘to request to be transferred’, 請辭 *qing*³*ci*² [to request + to resign] ‘to request permission to resign’, and 請見 *qing*³*jian*⁴ [to request + to see] ‘to request an audience’. Semantically, each of these compounds includes the notion of ‘obtaining permission’ though it is not overtly expressed in either of the individual components of the compound. That the compounds include the idea of permission is often reflected in the contexts in which the expressions

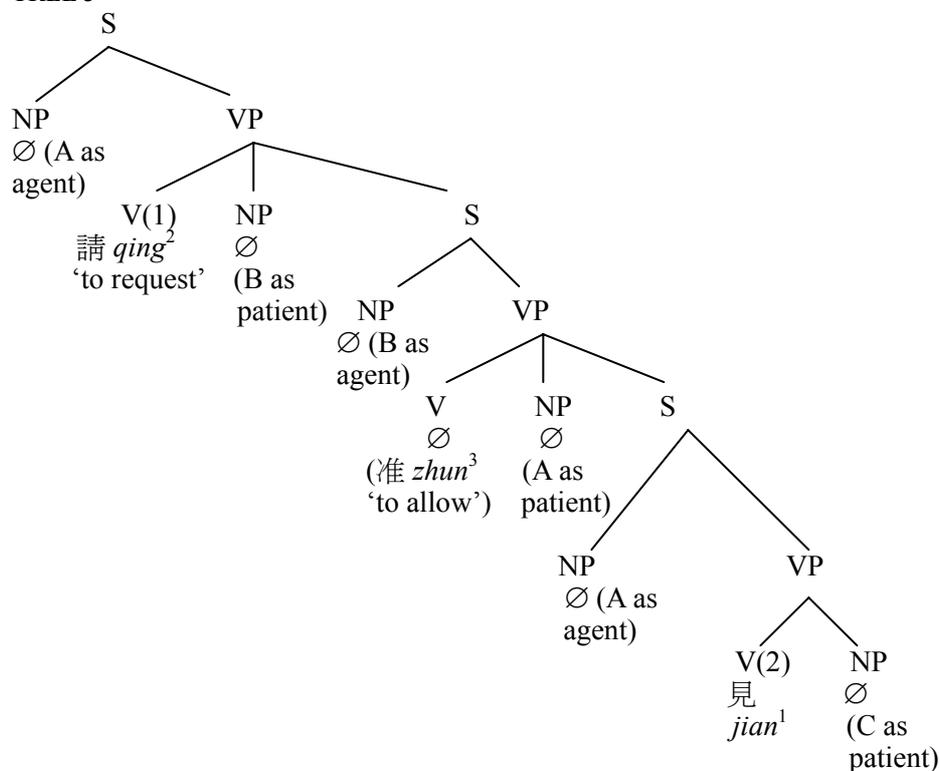
occur; note how 准 *zhun*³ ‘to allow, approve’ occurs immediately following 請辭 *qing*³*ci*² ‘to request permission to resign’ in the headline 溫家寶受壓請辭未准 *Wen*¹*Jia*¹*bao*³*shou*⁴*ya*¹*qing*³*ci*²*wei*⁴*zhun*³ ‘Wen Jiabao tenders resignation under pressure, not approved’. An example for 請調 *qing*³*diao*⁴ ‘to request approval to be transferred’: 林坤富表示, 十位老師請調, 他只准一位. *Lin*²*Kun*¹*fu*⁴*biao*³*shi*⁴, *shi*²*wei*⁴*lao*³*shi*¹*qing*³*diao*⁴, *ta*¹*zhi*³⁽²⁾*zhun*³*yi*¹⁽²⁾*wei*⁴. ‘Lin Kunfu indicated that ten teachers had requested to be transferred, but he only approved one (transfer).’ An example in modern formal literary Chinese – the style most befitting the context – for 請見 *qing*³*jian*⁴ ‘to request an audience with’: 請見奉核定後, 賓客人數或行程如有變更, 應先來函說明. *Qing*³*jian*⁴*feng*⁴*he*²*ding*⁴*hou*⁴, *bin*¹*ke*⁴*ren*²*shu*⁴*huo*⁴*xing*²*cheng*²*ru*²*you*³*bian*⁴*geng*¹, *ying*¹*xian*¹*lai*²*han*²*shuo*¹*ming*². ‘Once the request to see the president has been respectfully considered and approved, any changes in the number of guests or in the itinerary should be explained in a letter beforehand’. A less formal example: 他想請見孔子 *Ta*¹*xiang*³⁽²⁾*qing*³*jian*⁴*Kong*³⁽²⁾*zi*³ ‘He wanted to request an audience with Confucius’.

請調 *qing*³*diao*⁴ [to request + to transfer] ‘to request to be transferred’ implies the following information and grammatical relations:



請見 *qing³jian⁴* ‘to request an audience’ implies the following information and grammatical relations:

TREE 3



The exact interpretation of each compound can vary according to circumstances and semantics. Many compounds like these have developed conventionalized meanings based on the needs of a specific situation, with their own particular configuration of surface form and implied information and grammatical relations.

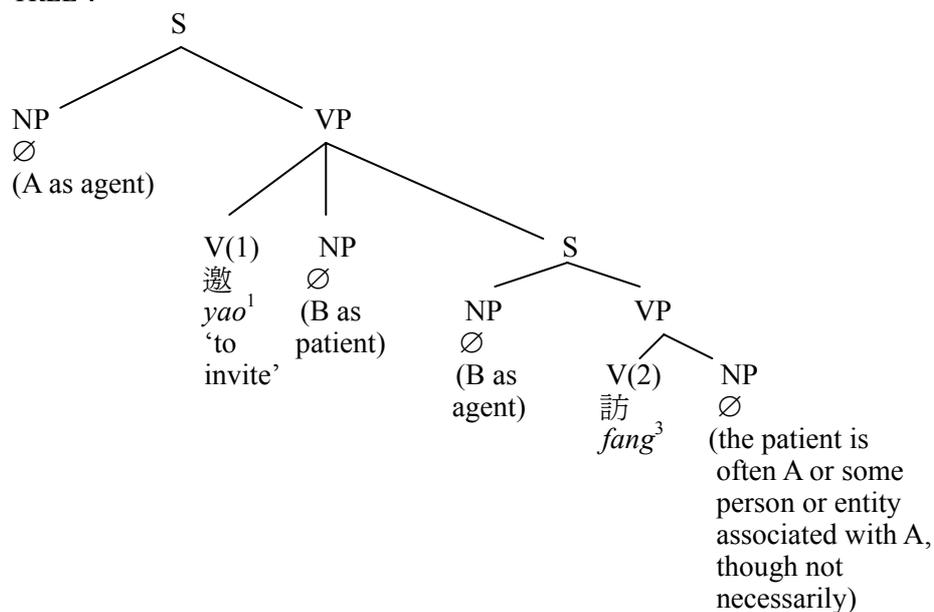
Similar compounds are formed with 求 *qiu²* ‘to ask, request, plead’, some of which overlap with the 請 *qing³* examples: 求見 *qiu²jian⁴* [to ask + to see] ‘to request an audience’; 求救 *qiu²jiu⁴* [to ask + to rescue] ‘to call for help, ask s.o. to rescue one’; 求援 *qiu²yuan²* and 求助 *qiu²zhu⁴* [to ask + to help]

‘to ask for assistance’; 求饒 *qiu²rao²* [to ask + to forgive] ‘to ask for mercy, forgiveness’; 求證 *qiu²zheng⁴* [to ask + to prove] ‘to seek proof’; 求售 *qiu²shou⁴* [to ask + to sell] ‘to seek to sell s.t.’; 求借 *qiu²jie⁴* [to ask + to lend] ‘to ask for a loan’; 求愛 *qiu²ai⁴* [to ask + to love] ‘to court, woo’ (‘to seek that s.o. love one’); 求教 *qiu²jiao⁴* [to ask + to instruct] ‘to ask for advice’; 求測 *qiu²ce⁴* [to ask + to interpret] ‘to ask that a Chinese character be interpreted (by a fortune teller)’; 求診 *qiu²zhen³* and 求醫 *qiu²yi¹* [to ask + to give medical care] ‘to seek medical help’ (‘to get another to heal one’); 求宿 *qiu²su⁴* [to ask + to lodge] ‘to seek lodging’, i.e. to ask that someone provide one with lodging’; 求償 *qiu²chang²* [to ask + to compensate] ‘to seek compensation, to be compensated’; 求變 *qiu²bian⁴* [to ask + to change] ‘to seek change, variety’ (this could also be VN). 求降 *qiu²xiang²* [to ask + to surrender] means ‘to beg to be allowed to surrender, hold out the white flag’, i.e. one ‘begs’ another person ‘to allow **oneself** to surrender’. Note that in a similar compound cited below, 迫降 *po⁴xiang²* ‘to force to surrender’, the one surrendering is **the other person**. This kind of alternation underlines the idiosyncrasy of each individual form; each form must be analyzed individually. Even one that is superficially similar to an existing form may be a lexical abbreviation for very different grammatical relations.

Some examples with 勸 *quan⁴* ‘to advise s.o. to do s.t., persuade’ are: 勸募 *quan⁴mu⁴* [to persuade + to donate] ‘to solicit donations’; 勸降 *quan⁴xiang²* [to persuade + to surrender] ‘to induce to capitulate’; 勸止 *quan⁴zhi³* [to persuade + to stop] and 勸阻 *quan⁴zu³* [to persuade + to block] ‘to dissuade s.o., urge s.o. to stop doing s.t.’.

One example begins with 邀 *yao¹* ‘to invite’: 邀訪 *yao¹fang³* [to invite + to visit] ‘to invite s.o. to visit’. An example sentence: 外交部積極邀訪外賓參加 520 *Wai⁴jiao¹bu⁴ ji¹ji² yao¹fang³ wai⁴bin¹ can¹jia¹ wu³er⁴ling²* ‘The Ministry of Foreign Affairs is actively inviting foreign visitors to attend the May 20th (inauguration)’. A tree of the implied information and grammatical relations for 邀訪 *yao¹fang³* is:

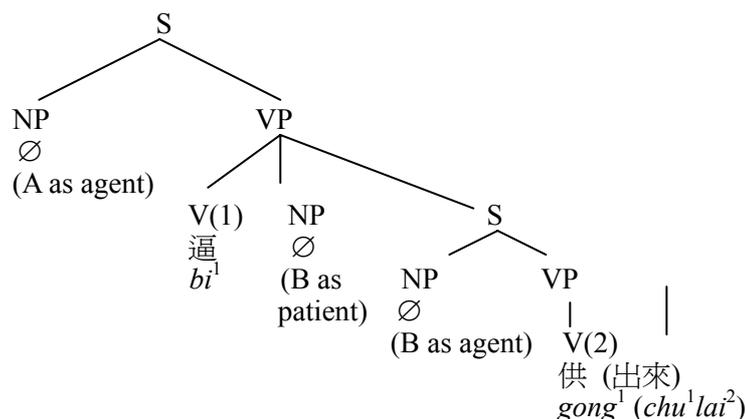
TREE 4



打聽 *da³ting¹* [to strike + to hear] is a rather idiosyncratic example of a causative, since most of the 打 *da³* verb compounds are intensificatory or aspectual rather than causative. It means in essence 'to cause oneself to hear', and thus produces the meaning 'to inquire around about something', though it seems to be more idiomatic than syntactically analyzable. 打聽 *da³ting¹* is neutral as regards politeness or coercion; the next set of compounds, however, are lexical causatives involving the use of force.

The following compounds all use 逼 *bi¹* as a matrix verb except for one which uses 迫 *po⁴*; both morphemes mean 'to force'. We again find inconsistency across the analyses of the compounds. We will start with 逼供 *bi¹gong¹* [to force + to confess] 'to force s.o. to confess', which implies the following information and grammatical relations:

TREE 5



This verb may take an overt object but usually does not. An example sentence with an expressed object: 美女兵說其任務是逼供伊俘虜 *Mei³⁽²⁾nü³bing¹shuo¹qi²ren⁴wu⁴shi⁴bi¹gong¹yi¹fu²lu³* ‘A female American soldier says it was her duty to force confessions from Iraqi prisoners of war’. Compounds with a similar syntax: 逼嫁 *bi¹jia⁴* [to force + to marry] ‘to force a woman to marry’; 逼遷 *bi¹qian¹* [to force + to move] ‘to force s.o. to move (a home, business)’; 逼退 *bi¹tui⁴* [to force + to retire] ‘to force s.o. to retire’.

The compounds 逼問 *bi¹wen⁴* ‘to ask in a forceful way’ and 逼使 *bi¹shi³* ‘to force s.o. to do s.t.’ are conjunctive subordinate compounds, covered in Chapter II. Others with 逼 *bi¹* in initial position, like 逼走 *bi¹zou³* ‘to force s.o. to leave; to press s.o. to the point that he leaves’ are resultative constructions.

The one example with 迫 *po⁴*, ‘to force’ is 迫降 *po⁴xiang²* [to force + to surrender] ‘to force to surrender’.

A related causative marker in lexical causatives is 罰 *fa²* ‘to punish’. It appears in 罰站 *fa²zhan⁴* [to punish + to stand] ‘to punish s.o. by making him/her stand (for a long time), make s.o. stand in a corner’; if they are being asked ‘to sit in a corner’ or a hallway or other place, it would be 罰坐 *fa²zuo⁴* [to punish + to sit]; 罰跪 *fa²gui⁴* [to punish + to kneel] is ‘to punish s.o. by having him/her kneel (a long time)”; 罰寫 *fa²xie³* [to punish + to write] is ‘to punish s.o. by having him/her write s.t. (long)’; 罰喝 *fa²he¹* [to punish + to drink] is ‘to punish s.o. by having him/her drink s.t. (e.g. a glass of wine)’. There are other compounds according to the punishment given: stooping down, eating, singing, even laughing and kissing – more possibilities could

probably be found in army stories. This is a highly productive form. The compounds are typically used within passive or causative syntactic structures which may be unmarked or may use the passive marker 被 *bei*⁴: 我被姑姑罰站 *wǒ³ bei⁴ gu¹ gu¹ fá² zhan⁴* ‘I was made to stand in the corner by Auntie’, or a causative marker like 給 *gei*³: ...偶爾太皮了給牠罰站.....*ou³⁽²⁾ er³ tai⁴ pi² le gei³ ta¹ fá² zhan⁴*... ‘...sometimes when he (a dog) was too naughty I’d make him stand in a corner...’

A causative verb morpheme that involves less force than 逼 *bi*¹, 迫 *po*⁴ or 罰 *fa*² is 催 *cui*¹ ‘to urge, press for’. It is used in compounds such as 催繳 *cui¹ jiao³* ‘to press for payment’, 催交 *cui¹ jiao¹* ‘to press to turn in’, 催眠 *cui¹ mian²* ‘to hypnotize’, and 催生 *cui¹ sheng¹* ‘to induce, hasten labor’.

定 *ding*⁴ in the compound 定做 *ding⁴ zuo⁴* [to determine, set, establish, in a preplanned manner/to order + to make] ‘to have made to order, have custom made’ is another common lexical causative, not marked for either politeness or coercion.

Two compounds combine a causative and resultative structure: 通知 *tong¹ zhi¹* [to communicate + to know] and 告知 *gao⁴ zhi¹* [to tell + to know] ‘to inform’, i.e. to ‘communicate’ s.t. to s.o. with the result that they ‘know’ it. They can be identified as primarily causative by the differing subjects of V1 and V2: A tells B something, B learns or knows of what is told.

Another type of embedded compound that is causative in nature expresses the notions of **promoting** or further **helping along** an action. Like other causative compounds, the agent of each verb differs. Some examples are 助長 *zhu⁴ zhang³* [to help + to grow] ‘to encourage, abet, foster’; 激發 *ji¹ fa¹* [to stimulate + to emit] ‘to stimulate (the occurrence of)’; and 促銷 *cu⁴ xiao¹* [to promote + to sell, market] ‘to promote sales’, though the agents in this last example could be the same.

There is also a negative causative V1 element: 禁 *jin*⁴ ‘to forbid’. In compounds with 禁 *jin*⁴, some (often unspecified) person or authority forbids someone else, or everyone, to engage in some particular behavior. Examples with 禁 *jin*⁴ ‘to forbid’ as V1 include: 禁用 *jin⁴ yong⁴* [to forbid + to use] ‘to forbid the use of, to be forbidden to use’; 禁獵 *jin⁴ lie⁴* [to forbid + to hunt] ‘to forbid hunting’; 禁殺 *jin⁴ sha¹* [to forbid + to kill] ‘to forbid killing’; 禁行 *jin⁴ xing²* [to forbid + to go] ‘to forbid passage, access’; 禁入 *jin⁴ ru⁴* [to forbid + to enter] ‘to forbid entry; no entry; no admittance’; 禁運 *jin⁴ yun⁴* [to forbid + to ship] ‘to levy an embargo, prohibit shipping’; 禁建 *jin⁴ jian⁴* [to forbid + to construct] ‘to forbid construction’; 禁唱 *jin⁴ chang⁴* [to forbid + to sing] ‘to prohibit the singing (of a certain song)’; and 禁貼 *jin⁴ tie¹* [to forbid + to stick up, post] ‘to forbid the posting of s.t.’.

4.4.2 Passive-causatives: Emissive compound verbs

There is a subcategory of embedded non-aspectual compound verbs that we will call **emissive** verb compounds. Like the causatives described in the preceding section, these are highly compressed abbreviations of longer phrases. The initial element has the meaning of ‘to send, deliver, submit’ if taken in isolation; in the context of the compound, it means ‘to deliver to be Ved’ or ‘to deliver/submit/hand over for Ving’. From this point of view, these compounds are **passive-causatives**, and are roughly comparable to the morphological process in Japanese in which a form of the ending *-saserareru* is added to a verb to make it mean ‘to cause to have done’.

Emissive verb compounds are usually firmly inseparable, though those with 送 *song*⁴ ‘to send’ as an initial element are somewhat looser. Occasionally these may be treated as analytical constructions and material may come between the elements, for example a directional verb such as 去 *qu*⁴ ‘to go away from’, e.g. 送去修 *song*⁴ *qu*⁴ *xiu*¹ ‘to take something over to be repaired’. Their occasional expansion into analytical phrases demonstrates that these compounds are in fact two separate actions that occur in temporal sequence, though the first corresponds to a finite, the second to a non-finite verb form. In practice, the main functions of the first element of the compound are to establish the subject or initiator of the action (as the inflectional marking of a finite verb would in an inflected language), and also to mark the second element as an action to be performed by another party at the request of the subject of the first verb in the compound.

Two examples are the near synonyms 付印 *fu*⁴ *yin*⁴ [to hand over + to print] ‘to send to be printed’ and 交印 *jiao*¹ *yin*⁴ [to hand over + to print] ‘to submit to be printed’.

Some examples with 發 *fa*¹ ‘to send s.t. to have s.t. done to it’ are: 發行 *fa*¹ *xing*² ‘to issue, release for sale’, 發包 *fa*¹ *bao*¹ ‘to contract out’, or ‘to release to be contracted by another party’, and 發排 *fa*¹ *pai*² ‘to send to be typeset’.

As mentioned in the preceding, examples with 送 *song*⁴ ‘to send, deliver, hand over, submit for doing s.t.’, may occasionally be separable and thus not compounds; some examples are: 送修 *song*⁴ *xiu*¹ [to send + to repair] ‘to send s.t. out to be repaired’; 送審 *song*⁴ *shen*³ [to send + to review] ‘to submit for review, to submit to be reviewed’; 送醫 *song*⁴ *yi*¹ [to send + to treat medically] ‘to send to be treated medically, to send to a doctor’; 送辦 *song*⁴ *ban*⁴ [to send + to process] ‘to submit to be processed administratively, to submit for

administrative processing’; 送驗 *song⁴yan⁴* ‘to send to have analyzed, submit for analysis’.

4.4.3 ‘Available for’

Finally, we will consider an idiosyncratic set of embedded verb compounds compressed from longer phrases which are a subcategory of passive causatives. They are formed with the initial-position verb morpheme 備 *bei⁴* ‘to prepare’, used passively in these cases in the meaning of ‘to have been prepared for, to be or have ready for, to be or have available for’; the second morpheme complement refers to an action that the patient (or passive subject) of the first verb may undertake in order to benefit from the results of the ‘preparation’ referred to by V1. A common example is 備索 *bei⁴suo³* [to prepare + to take] ‘to be ready for picking up’, which occurs in expressions like 簡章備索 *jian³zhang¹ bei⁴suo³* literally, ‘Pamphlets are ready to be picked up,’ or in effect, ‘Pamphlets available on request.’ This expansion is a topic-comment structure, in which 準備 *zhun³bei⁴* ‘prepare’ could be analyzed as an unaccusative verb, with ‘pamphlets’ as its object-turned-subject; or it could be analyzed as a passive, with the passive marker 被 *bei⁴* omitted.

Other embedded compounds with 備 *bei⁴* in initial position that belong to this type include: 備查 *bei⁴cha²* [to prepare + to check] and 備詢 *bei⁴xun²* [to prepare + to inquire] ‘to be available for checking, inquiry’; 備用 *bei⁴yong⁴* [to prepare + to use] ‘to be ready for use (e.g. in an emergency, or for later use), to serve as a spare’; and 備抵 *bei⁴di³* [to prepare + to compensate] ‘to be ready to make up for/compensate for a loss’. Each has its own analysis according to the demands of context.

SUMMARY

Aspect can be expressed in Chinese both syntactically and lexically. Lexical aspect is realized by means of embedded inseparable compounds, with an aspectual verb morpheme as the first element, followed by a verb complement as the second. Types of aspect that can be expressed are initiatory in nature, that is, they entail a purposeful execution of an action, as opposed to resultative and directional constructions, which are realizational in nature and involve a natural outcome rather than intentioned action. Lexically expressed initiatory aspect includes inceptive, terminative, continuative, additive/

supplemental, and commutative aspect. Lexical aspectual compounds have a higher information density than analytic phrases, and tend to be used in relatively more formal written and spoken styles. Light verbs like 開 *kai*¹ ‘to open, start’ and 發 *fa*¹ ‘to emit’, in addition to more overtly aspectual verb components like 興 *xing*¹ ‘to initiate’ and 起 *qi*³ ‘to rise, begin’, often have aspectual meaning in this compound type. The light verb 打 *da*³ ‘to strike, do’ which shares a formal template with lexical aspectual verb compounds, is mainly intensificatory in effect. The verb morpheme 失 *shi*¹ ‘to lose’ is often used as a V1 in embedded verb compounds to form unaccusative aspectual constructions. Embedded compound verbs can express grammatical functions besides aspect, including passive, which uses morphemes like 獲 *huo*⁴ ‘to obtain’ for V1; causative, with V1s such as 請 *qing*³ ‘to request’ and 逼 *bi*¹ ‘to force’; and passive-causatives. Emissive verbs, with V1s like 發 *fa*¹ ‘to emit, send’ or 送 *song*⁴ ‘to send, deliver’ in initial position of a VV compound, are one way of expressing the notion of passive-causativity in Chinese, i.e. ‘to send s.t. to have s.t. done to it’.

CHAPTER V: OTHER COMPOUND VERB TYPES

The previous three chapters of this work describe and illustrate the most successful templates numberwise for pure verb compounds, namely, subordinate compound verbs, coordinate compound verbs, and compound verbs with embedding. But there are many other types of compounds with smaller numbers of examples.

S. F. Huang (1998:264) records no verb compounds of the Noun + Adjective/Adverb, Adjective/Adverb + Noun, or Adjective/Adverb + Adjective/Adverb types, nor any verbs formed with particles; we have, however, found examples of all but the first type (in this study we are not treating stative verbs, and thus omit from consideration Noun + Adjective/Stative Verb constructions, which form Subject + Predicate phrases, like 頭痛 *tou²tong⁴* ‘to have a headache’, that are not pure verbs).

Some of these miscellaneous compound verb types came into being through the process of an established form taking on a new function and meaning, for example, **denominal verbs** like 網羅 *wang³luo²* [net + bird net] ‘to enlist the services of’, **deadjectival verbs** like 辛苦 *xin¹ku³* [pungent, laborious + bitter] ‘to trouble someone with a task’, and **transitive VO compounds** that do not take an oblique object-marking particle, or that are otherwise bleached, and can take an additional external object, like 登陸 *deng¹lu⁴* [to ascend + land (n.)] ‘to land’, as in 登陸月球 *deng¹lu⁴yue⁴qiu²* ‘to land on the moon’, and 消毒 *xiao¹du²* [to dispel + poison] ‘to sterilize’, as in 消毒針頭 *xiao¹du²zhen¹tou²* ‘to sterilize (hypodermic) needles’. In some cases, **particles** have become opaque and bonded to the verb preceding them to form inseparable compounds, e.g. 在乎 *zai⁴hu¹* [to depend on + (particle)] ‘to care about, mind’ and 合乎 *he²hu¹* [to accord with + (particle)] ‘to be in accord with, match’.

Some compound types are modeled after other types of constructions, for example, resultative compounds like 說明 *shuo¹ming²* [to say + clear] ‘to explain’. There is a category of compound verbs of “making” and “becoming”, formed from a Verb + Adjective/Adverb, e.g. 加強 *jia¹qiang²* ‘to strengthen’ and 發黃 *fa¹huang²* [to emanate + yellow] ‘to yellow’; these are a subtype of resultative compounds which shows some similarities to *-en* type verbs in English, like *shorten* and *blacken*. Others types came into the language through borrowing from another language, English in particular; the most notable case of this is another “making and becoming” verb type, the *-ize*-type verbs ending with the morpheme 化 *hua⁴*, e.g. 全球化 *quan²qiu²hua⁴* [entire

+ globe + ize] ‘to globalize’. We will examine each verb compound type in turn in this catch-all chapter.

5.1 NOUN + NOUN COMPOUND VERBS

There are relatively few examples of Noun + Noun compound verbs in Chinese. Making a verb out of a bare noun is a common way of introducing a graphic metaphor of manner or an instrumental object into an English verb; for example, ‘to cloud’ is to obscure, e.g. an issue, as a cloud blocks the sun (metaphorical); ‘to elbow’ is to push one’s way through a crowd with one’s elbows (instrumental); and ‘to fork over’ is to hand over as though on a fork (both metaphorical and instrumental). Chinese, however, tends to use verbs with a verb morpheme as the head, sometimes preceded by a denominal adverb of manner, of the *to cherry-pick* (‘to choose carefully, as though picking the best cherries’) verb type, a type which English has relatively fewer examples of. English has, for example, the denominal verb *to screen* where Chinese has the Denominal Adverb + Verb compound 篩選 *shai¹xuan³* [sieve + to choose] ‘to screen, pre-select’ (this could also be analyzed as a coordinate compound verb [to sieve + to choose], with the more specific verb preceding the more general one).

Some of the few Noun + Noun compound verbs that are to be found in Chinese are, however, fairly high frequency. 網羅 *wang³luo²* [net + bird net] ‘to enlist the services of’ could be considered a simple denominal verb; cf. English *to net an account*. The verb 物色 *wu⁴se⁴* [thing + color], which means ‘to look for, choose, shop around for’, comes from the expression 察物色 *cha²wu⁴se⁴* ‘to inspect the color of a thing, to inspect the fur of an animal, such as a horse’, which dates to Zhou times. The verb was at some point dropped, leaving the bare object to function as a denominal verb with the same meaning as the full phrase.

A more recent addition to this category comes from the language of advertising; Johnson & Johnson’s ‘Baby your hair’ slogan was translated into Mandarin as 寶貝你的頭髮 *bao³bei⁴ ni³de tou²fa³* [treasure (n.) + your + hair]. 寶貝 *bao³bei⁴* is a noun meaning ‘treasure’; it is also used by parents as a term of endearment in addressing their children (cf. English ‘Honey’). The newly verbal 寶貝 *bao³bei⁴*, strongly influenced both semantically and phonetically by the English denominal verb ‘to baby’, seems to have seeped into everyday use; seven examples of it used as a verb out of 93 total tokens were counted in the Sinica Corpus, mostly in the same context of ‘babying’

oneself, one's skin, health, marriage, and so forth; one example is ...寶貝自己很重要...*bao³bei⁴zi⁴ji³hen³zhong⁴yao⁴* '...it's very important to take good care of ('baby') yourself'. We may conclude that denominal verbs do exist in Chinese, but they are not a preferred pattern of compound verb formation.

5.2 VERB/ADVERB/ADJECTIVE/NOUN + PARTICLE COMPOUND VERBS

S. F. Huang (1998:274) has claimed that “prepositions (or particles) never participate in word formation in Chinese.” There are however groups of pure verbs which are formed with a particle in final position, though none were found with a particle in initial position. Though intransitive, these verbs with few exceptions cannot stand alone and must take an oblique object. They could be viewed analytically and not considered integral verbs at all, except that they are clearly not composed anew each time from modular elements, but rather are highly established, inseparable, stock combinations, and now mainly belong to a small closed set, though historically the type was semi-productive.

The key point to consider in identifying as a compound a verb with a particle as a final element, is whether the expression is indeed inseparable. If it turns out to be an analytic expression with the particle functioning as a free and independent morpheme, then even if it commonly occurs in a fixed collocation, it is still not a compound, and will not be considered here. Examples of verbs commonly collocated with free particles are: 屬於 *shu³yu²* ‘to belong to’, 等於 *deng³yu²* ‘to be equal to’, 限於 *xian⁴yu²* ‘is limited to’; and 歸於 *gui¹yu²* ‘is attributable to’. All of these can occur without the oblique object-marking Classical Chinese particle 於 *yu²*.

The situation seems, however, to be different with 乎 *hu¹*, which tends to bond more tightly with the element preceding it to form various compound verbs. One reason for this tighter cohesiveness might be because the original meaning of 乎 *hu¹* in most of the example compounds has largely been forgotten. 乎 *hu¹* is in fact simply an alternate of 於 *yu²* in most cases; but being unrecognized as such, i.e. opaque, it is analyzed as an undetachable part of the initial element, with little meaning of its own, and without the ability to stand independently. 於 *yu²* is much more transparent, and much more likely to become detached from the formation in which it is used than ones with 乎 *hu¹*. These verbs are not, however, monomorphemic, because even if the meaning of 乎 *hu¹* is not well known, there is a clear sense of its identity as a particle.

In Classical Chinese 乎 *hu*¹ was used as an interrogative particle expressing doubt or marking a rhetorical question, as in the famous opening sentence of the Confucian *Analects*: 「學而時習之，不亦說乎。」 *Xue*² *er*² *shi*² *xi*² *zhi*¹, *bu*⁴⁽²⁾ *yi*⁴ *yue*⁴ *hu*¹? ‘Is it not a great joy to learn something and practice it often?’

乎 *hu*¹ is also used as a locative particle with a wide range of syntactic meanings: ‘in, on, at, from’, as in this example from the Legalist philosophical work 韓非子 *Han Fei Zi* (*Han*² *Fei*¹ *Zi*³), Book 8, Section 29, entitled 大體 *Da*⁴ *ti*³: 榮辱之責在乎己，而不在于人。 *Rong*² *ru*⁴ *zhi*¹ *ze*² *zai*⁴ *hu*¹ *ji*³, *bu*⁴⁽²⁾ *zai*⁴ *hu*¹ *ren*². ‘The responsibility for taking something as praise or as an insult lies in oneself, not in others.’ In this case, the particle 於 *yu*² ‘at, on, in’, could be substituted for 乎 *hu*¹ to yield the same meaning. It is this originally analytic phrase of 在 *zai*⁴ ‘to be located, lie, rest, consist’ plus 乎 *hu*¹ ‘in, at’ that eventually became reanalyzed as an independent lexical compound: 在乎 *zai*⁴ *hu*¹ [to be present + (particle)] ‘to care about s.t.’ (as in the objectless 我不在乎 *wo*³ *bu*⁴⁽²⁾ *zai*⁴ *hu*¹ ‘I don’t care’; and in this sentence taking an oblique object: 我不在乎他的想法 *wo*³ *bu*⁴⁽²⁾ *zai*⁴ *hu*¹ *ta*¹ *de* *xiang*³⁽²⁾ *fa*³ ‘I don’t care what he thinks’). The original meaning of the 在乎 *zai*⁴ *hu*¹ phrase was later taken over in modern Chinese by the phrase 在於 *zai*⁴ *yu*² ‘to lie in, consist in’, e.g. 其目的在於救人 *qi*² *mu*⁴ *di*⁴ *zai*⁴ *yu*² *jiu*⁴ *ren*² ‘its (medicine’s) purpose lies in saving people’. The transparent Classical Chinese particle 於 *yu*² generally functions as a free morpheme in modern Chinese, while expressions with the relatively opaque 乎 *hu*¹ are more often frozen.

There are a number of other examples of reanalyzed compound verbs with 乎 *hu*¹ as a second element. In these compounds, 乎 *hu*¹ has two functions: it serves as a verb marker which combines with almost any kind of content word – noun, verb, adjective, adverb – to form a verb, though only a few specific morphemes are actually used in this formation; and it also serves as a connector to link a bound morpheme with an oblique object or complement. Let us look at a few examples.

One example is 合乎 *he*² *hu*¹ [to combine + (particle)] ‘to accord, be in accord, match, fit in with’. An example: 只要找到合乎個人興趣的工作就應該知足了 *Zhi*³ *yao*⁴ *zhao*³ *dao*⁴ *he*² *hu*¹ *ge*⁴ *ren*² *xing*⁴ *qu*⁴ *de* *gong*¹ *zuo*⁴ *jiu*⁴ *ying*¹ *gai*¹ *zhi*¹ *zu*² *le* ‘If you just find a job that matches your personal interests, you should be satisfied’. The particle could be omitted altogether and the meaning would be roughly the same; but the disyllabic version with the particle has a more specific meaning (‘to be in accord with, to match closely with’ as opposed to just ‘to fit’) than the monosyllabic 合 *he*², which has a more general meaning and broader application. In addition, the particle adds

an extra prosodic beat, i.e. fills out an expected disyllabic prosodic template, in a sentence composed largely of disyllabic lexical items. 順乎 *shun⁴hu¹* [to follow the grain + (particle)] ‘to go along with meekly’ is somewhat similar semantically; an example: 他們做了該做的事，順乎內心的要求 *Ta¹men zuo⁴le gai¹ zuo⁴ de shi⁴, shun⁴hu¹ nei⁴xin¹ de yao¹qiu²* ‘they did what they ought to have done: they went along with (and satisfied) their innermost needs’.

Another example is 外乎 *wai⁴hu¹* [outside + (particle)] ‘to go outside of a limited area’. 外 *wai⁴* can be an adjective, adverb or noun, but not usually a verb; 乎 *hu¹* combines with it to form a verbal compound, but one that is only used in the negative 不外乎 *bu⁴⁽²⁾wai⁴hu¹*, to mean ‘is none other than, does not go beyond/outside of’. An example: ...目的不外乎關係企業間的轉帳 *Mu⁴di⁴ bu⁴⁽²⁾wai⁴hu¹ guan¹xi qi⁴ye⁴.jian¹ de zhuan³zhang⁴* ‘...the purpose is none other than (does not go beyond) the transfer of funds between associated enterprises’. 外乎 *wai⁴hu¹* seems also to be analyzed as an adverbial phrase, since examples with the copular verb 是 *shi⁴* like the following are common: 我的生活很簡單，不外乎就是學校和家。 *Wo³ de sheng¹huo² hen³⁽²⁾ jian³dan¹; bu⁴⁽²⁾wai⁴hu¹ jiu⁴shi⁴ xue²xiao⁴ he² jia¹*. ‘My life is very simple; it is limited to/does not go beyond school and home.’ Perhaps because it is a somewhat less familiar usage from Classical Chinese, average speakers may use it as a verb, or reanalyze it as an adverbial phrase ‘no more than’ and use an additional verb.

An expression with semantic similarity to 外乎 *wai⁴hu¹* which is used in the affirmative is 超乎 *chao¹hu¹* [to exceed + (particle)] ‘to go beyond, surpass’. It is a slightly more formal synonym for 超過 *chao¹guo⁴* or 超越 *chao¹yue⁴* ‘to exceed, go beyond, surpass, transcend’, and is often used in expressions like 超乎想像 *chao¹hu¹ xiang³xiang⁴* ‘to exceed expectations’. An example: 除了心願和毅力，還要有超乎常人的耐心和自覺 *Chu²le xin¹yuan⁴ he² yi⁴li⁴, hai² yao⁴ you³ chao¹hu¹ chang²ren² de nai⁴xin¹ he² zi⁴jue²*. ‘In addition to motivation and perseverance, one must also have patience and self-awareness that surpass those of the average person.’

In the expression 出乎 *chu¹hu¹* [to go out, exit + (particle)] ‘to emanate from, to be due to’, 乎 *hu¹* is equivalent to 自 *zi⁴* ‘from’ or 自於 *zi⁴yu²* ‘proceeding from’; a synonymous expression for this compound is 出自於 *chu¹zi⁴yu²* ‘to emanate from’. These expressions are used in giving the reason or explaining the original source of something. Example: 只是出乎一時的好奇 *Zhi³ shi⁴ chu¹hu¹ yi¹⁽⁴⁾shi² de hao⁴qi²* ‘This was only due to fleeting curiosity’. It often appears, with the meaning of ‘to go beyond’, in phrases like: 這出乎我的意料之外 *zhe⁴ chu¹hu¹ wo³de yi⁴liao⁴ zhi¹ wai⁴* ‘This went

beyond what I expected; this was unexpected; I did not anticipate this', recalling the 超乎 *chao¹hu¹* 'to surpass' example. A related, less common verb is 本乎 *ben³hu¹* [root, base + (particle)], 'to be rooted in, based in, due to', e.g. 本乎關愛，作自己的決定... *Ben³yu¹ guan¹ai⁴, zuo⁴ zi⁴ji³ de jue²ding⁴* 'Make your own decision, based on love and caring...'

Another compound with 乎 *hu¹* is 關乎 *guan¹hu¹* [to be related to + (particle)] 'to have to do with, have a connection with'; this is roughly a synonym of 關係到 *guan¹xi⁴dao⁴* 'to have to do with, have a connection with, have an influence/effect on'; or 關及 *guan¹ji²*, which means about the same and will be discussed below. An example: ...因為這是關乎一生的，而不光是幾天、幾年而已... *yin¹wei⁴ zhe⁴ shi⁴ guan¹hu¹ yi¹⁽⁴⁾sheng¹ de, er² bu⁴ guang¹ shi⁴ ji³ tian¹, ji³ nian² er²yi³* '...because this will have an effect on one's whole life, and is not just a matter of a few days or a few years'. A similar expression is 繫乎 *xi⁴hu¹* [to tie, bind + (particle)] 'to have to do with, to consist in'. Both of these expressions are relatively literary and not very high frequency.

Two further examples are 同乎 *tong²hu¹* [to be similar to + (particle)] and 類乎 *lei⁴hu¹* [type, category + (particle)] 'to be similar to'. These are used mostly when writing in an elevated literary style.

Some 乎 *hu¹* expressions are exclusively adverbial, e.g. 幾乎 *ji¹hu¹* 'almost', and the related expressions 近乎 *jin⁴hu¹* [close + (particle)] and 幾乎 *ji¹jin⁴hu¹* [quite + close + (particle)] 'to be close to, nearly'; 慎乎 *shen⁴hu¹* [to be cautious + (particle)] 'carefully'; 斷乎 *duan⁴hu¹* [to sever + (particle)] 'absolutely'; and 似乎 *si⁴hu¹* [similar to + (particle)] 'apparently'; there is also the conjunction 況乎 *kuang⁴hu¹* [condition + (particle)], which means the same as 何況 *he²kuang⁴* 'how much the more so'; these are thus not included in the above category of verbs with 乎 *hu¹* as a second element.

A second Classical Chinese particle has, due to increasing semantic opacity, also bonded with various initial elements to form a number of verbal compounds: 諸 *zhu¹*, which is a contracted form of 之於 *zhi¹yu²* 'it to', i.e. an object pronoun plus preposition. It occurs in expressions such as 訴諸 *su⁴zhu¹* 'to resort to'. Compounds of this type should in theory take an oblique object without need for further particle marking, e.g. 訴諸暴力 *su⁴zhu¹ bao⁴li⁴* 'to resort to violence'. But because 諸 *zhu¹* has become opaque for many speakers, a pleonastic 於 *yu²* may be and often is added as well: 訴諸於暴力 *su⁴zhu¹ yu² bao⁴li⁴* 'to resort to [to] violence'. Further examples of compounds with 諸 *zhu¹*, many of which often appear with the redundant 於 *yu²* include: 付諸 *fu⁴zhu¹* 'to realize, put into practice'; 加諸 *jia¹zhu¹* 'to impose on, blame on'; 投諸 *tou²zhu¹* 'to put into s.t., invest in s.t.'; 歸諸 *gui¹zhu¹* 'to attribute

s.t. to, bring s.t. back to’; 本諸 *ben³zhu¹* ‘to base s.t. on’; 置諸 *zhi⁴zhu¹* ‘to put s.t. in a place’; 排諸 *pai²zhu¹* ‘to relegate to’; 比諸 *bi³zhu¹* ‘to compare s.t. to’; 形諸 *xing²zhu¹* ‘to put s.t. into the form of’; 公諸 *gong¹zhu¹* ‘to make public to’; 證諸 *zheng⁴zhu¹* ‘to be demonstrated in’; 揆諸 *kui²zhu¹* ‘to consider’; 還諸 *huan²zhu¹* ‘to return s.t. to’; 觀諸 *guan¹zhu¹* ‘to be seen in’; 藏諸 *cang²zhu¹* ‘to be hidden, incorporated in s.t.’; 蘊諸 *yun⁴zhu¹* ‘to hold, contain, have within’; 衡諸 *heng²zhu¹* ‘to weigh s.t. against s.t. else’.

To summarize, 乎 *hu¹* and 諸 *zhu¹* were the only particles found to be used in compound verb formation. And with a few notable exceptions, examples in which the particles appear are mostly frozen, low-frequency literary items in which the meaning of the particle tends to be relatively opaque.

5.3 RESULTATIVE AND DIRECTIONAL COMPOUNDS

Much has been written on Chinese resultatives. Most resultatives are separable and therefore constructions, not compounds. But there is also a smaller number of inseparable resultative and directional compounds in Chinese. As we have seen, Chinese has a limited repertoire of patterns of morphological concatenation, which tend to follow the patterns of general Chinese sentence-level syntax. The interpretation of any structure – sentence, clause, phrase, construction, compound – will tend to be pigeonholed into one of the available patterns, after considering the default grammatical categories of the morphemes and the semantics of the structure. For example, if the first element of a compound verb appears to be some kind of modifier, the compound will probably be interpreted as a prefixed or other kind of subordinate compound. If an element appears at the end that seems to be an outcome of the preceding verb – and this may be a verb, adverb, or adjective – it will likely be interpreted as a resultative, after the analogy of the resultative construction, even if it occurs in an inseparable compound. This is consistent with the principle of temporal linearity and iconicity that to a great extent drives Chinese syntax (Tai 1985:50). Resultative compounds are usually formed from an action verb in initial position plus a particular telic outcome of this action. Which complements may attach to which action verb is conditioned by semantics, logic, and convention.

An example of an inseparable resultative compound in Chinese is 說明 *shuo¹ming²* [to say + clear] ‘to explain, clarify’. Nothing may come between the two elements of this type of established compound, and neither element is very likely to be replaced by a different morpheme, though there is some

small degree of flexibility: 講明 *jiang³ming²* ‘to explain’ does occur twice in the Sinica Corpus and means about the same as 說明 *shuo¹ming²*; 講 *jiang³* is an especially common synonym of 說 *shuo¹* in southern versions of Mandarin like Taiwan Mandarin. A similar compound is 闡明 *chan³ming²* [to explain + clear] ‘to expound on, clarify’. Some further examples of resultative compound verbs are: 察覺 *cha²jue²* [to check + to feel] ‘to discover’; 聽信 *ting¹xin⁴* [to hear + to believe] ‘to believe something one hears’; and 講和 *jiang³he²* [to talk + to be in harmony with] ‘to become reconciled’.

Many of the following resultative compounds, which include both transitive and intransitive examples, involve a sense of ‘finishing up, conquest, destruction’: 克服 *ke⁴fu²* [to subdue + to accede to] ‘to overcome’; 消失 *xiao¹shi¹* [to vanish + to lose] ‘to disappear’; 取消 *qu³xiao¹* [to take + to disappear], 註銷 *zhu⁴xiao¹* [to register + to disappear] and 塗銷 *tu²xiao¹* [to blot out + to disappear] ‘to cancel’; 排除 *pai²chu²* [to exclude + to remove] ‘to eliminate’; 摧毀 [wreck + to destroy] ‘to destroy’; 逃亡 *tao²wang²* [to flee + be gone] ‘to flee and escape, be a fugitive, go into exile’; and 逃散 *tao²san⁴* [to flee + to scatter] ‘to flee and scatter’.

There are also directional compounds, such as 付出 *fu⁴chu¹* [to give + out] ‘to give (out), contribute’, 納入 *na⁴ru⁴* [to receive + in] ‘to take in’, and 躍升 *yao⁴sheng¹* [to leap + to rise, up] ‘to rise up sharply’.

There is a sizable group of resultative compounds with 及 *ji²*, ‘to reach, ‘achieve’, as a second element. 及 *ji²* is in these cases essentially a lexical counterpart of the syntactic/analytic form 到 *dao⁴*, ‘to arrive’, in its function as a telic marker of ‘achievement’. 到 *dao⁴* can be added to almost any verb to mark telicity and completion of an action; but the resulting construction is separable and thus not a compound. 及 *ji²* is a free morpheme in its function as the conjunction ‘and’, but often bound in its sense of ‘to reach, achieve’. Compound verbs with 及 *ji²* as a second element are necessarily transitive and must take an object; they are incomplete without one. It is notable that the first element in a number of the following examples is often not a verb; it may be a noun, adjective or adverb, as is the case with the 乎 *hu¹* compound verbs. The addition of 及 *ji²* establishes the compound as a whole as a verb regardless of the default grammatical category of the formative in initial position. This is similar to how some adjectives/stative verbs become compound verbs with the addition of 發 *fa¹* ‘to emanate, to become’ as the initial element, e.g. 發黑 *fa¹hei¹* ‘to blacken’. In the case of the 及 *ji²* resultative compounds, the compound as a whole has a meaning of ‘the situation of being (initial element, e.g. 廣 *guang³* or 普 *pu³* ‘widespread’) reaches all the way to...’, and thus is verbal.

Examples of resultative compounds with 及 *ji*² as a final element fall into a small number of semantic fields:

(1) Relating to, affecting, spreading to: 涉及 *she*⁴*ji*² [to wade + to reach] ‘to involve, relate to, touch upon’; 觸及 *chu*⁴*ji*² [to touch + to reach] ‘to touch on’; 推及 *tui*¹*ji*² [to push + to reach] ‘to spread to, reach by analogy’; 波及 *bo*¹*ji*² [wave, ripple + to reach] ‘to spread to, involve, have a ripple effect on’; 澤及 *ze*²*ji*² [to enrich + to reach] ‘to benefit’; 普及 *pu*³*ji*² [common, widespread + to reach] ‘to popularize, become widespread’; 遍及 *bian*⁴*ji*² [everywhere + to reach] ‘to spread everywhere’; 廣及 *guang*³*ji*² [widely + to reach] ‘to spread widely’;

(2) Speaking, remembering, considering: 論及 *lun*⁴*ji*² [to discourse on + to reach] ‘to mention, speak of’; 言及 *yan*²*ji*² [to speak + to reach] ‘to mention’; 說及 *shuo*¹*ji*² [to say + to reach] ‘to mention, speak of’; 談及 *tan*²*ji*² [to talk + to reach] ‘to speak of’; 提及 *ti*²*ji*² [to mention + to reach] ‘to mention’; 問及 *wen*⁴*ji*² [to ask + to reach] ‘to ask about’; 詢及 *xun*²*ji*² [to inquire + to reach] ‘to inquire about’; 憶及 *yi*⁴*ji*² [to remember + to reach] ‘to recall, remember’; 顧及 *gu*⁴*ji*² [to consider + to reach] ‘to take into consideration’; and

(3) Harm: 傷及 *shang*¹*ji*² [to injure + to reach] ‘to harm’; 損及 *sun*³*ji*² [to damage + to reach] ‘to hurt’; and 危及 *wei*²*ji*² [danger + to reach] ‘to endanger, threaten’.

Although the 及 *ji*² portion of the above compounds already marks them for telicity, a pleonastic 到 *dao*⁴ is often added after the compounds in actual usage, e.g. 觸及到 *chu*⁴*ji*²*dao*⁴ ‘to touch on’: ...喜歡看觸及到人性和人的生活的話題... *...xi*³*huan*¹ *kan*⁴ *chu*⁴*ji*²*dao*⁴ *ren*²*xing*⁴ *he*² *ren*² *de* *sheng*¹*huo*² *de* *hua*⁴*ti*²... ‘...[women] like to read about themes that touch on human nature and human life...’ Analogous to the situation with the 乎 *hu*¹ compound verbs, the telic force of 及 *ji*² is perhaps no longer felt as strongly as it was at an earlier time. In both compound types, the final, relatively empty element has bonded tightly with each respective initial element to form frozen, inseparable compounds. Both elements also serve the function of verbalizing the compound in which they occur as a whole, so this type shows some overlap with Verb + Particle compound verbs.

5.4 DEGREE-CHANGING DEADJECTIVAL COMPOUND VERBS

This pattern is basically a morphological process for converting certain adjectives or adverbs into verbs which describe an increasing or decreasing in the degree or intensity of a particular state or quality. Examples are 加強

jia¹qiang² [to add + strong] ‘to strengthen’ and 減短 *jian³⁽²⁾duan³* [to decrease + short] ‘to shorten’. This process is very similar to the addition of the English suffix *-en* to an adjective or noun, as in *widen*, *deepen*, *lengthen*, *strengthen*, and *tighten*. It is fairly productive, though as in English, it cannot be applied to just any adjective (or noun, in the cases of English *lengthen* and *strengthen*); *thicken* and *lighten* are fine; **thinnen* or **heavien* do not occur. Adjectival or adverbial concepts that succeed in being incorporated into established degree-changing type verbs in Chinese are mostly very basic ones, such as ‘long’, ‘deep’, ‘large’, ‘small’, ‘wide’, ‘strong’, and ‘slow’. In both English and Chinese, this verb type can be either transitive or unaccusative, often depending on context and the individual item. The following pairs of sentences illustrate the contrast in both languages; English: *The workers widened the path.* (transitive); *The road widened as we got closer to the town.* (unaccusative); Chinese: ...你爲什麼不減少小鴨的數目... ...*ni³wei⁴she²me bu⁴jian³⁽²⁾shao³⁽²⁾xiao³ya¹de shu⁴mu⁴...* ‘...why don’t you reduce the number of ducklings...?’ (transitive); ...漁民無法出海作業，收穫便減少... ...*yu²min²wu²fa³chu¹hai³zuo⁴ye⁴, shou¹huo⁴bian⁴jian³⁽²⁾shao³...* ‘The fishermen weren’t able to go out to sea for their operations, so their harvest was sharply reduced/dropped sharply...’ (unaccusative).

Unlike English, which uses an all-purpose suffix *-en* (except in the case of *low* : *lower*) regardless of the semantics of the stem, in Chinese there must generally be a semantically cognate relationship between the initial verbal element and its adjectival/adverbial complement. The initial verbal elements used for this process have meanings like ‘to add’ (加 *jia¹*, e.g. 加強 *jia¹qiang²* ‘to strengthen’); ‘to increase’ (增 *zeng¹*, e.g. 增長 *zeng¹chang²* ‘to lengthen’); ‘to raise’ (升 *sheng¹*, e.g. 升高 *sheng¹gao¹* ‘to rise, raise’); ‘to lessen, subtract’ (減 *jian³*, e.g. 減弱 *jian³ruo⁴* ‘to weaken’); ‘to lower’ (降 *jiang⁴*, e.g. 降低 *jiang⁴di¹* ‘to lower’); and so forth. The verb can be likened to a ‘plus’ or ‘minus’ sign (and in fact ‘plus’ and ‘minus’ are among the literal meanings of two of these verbs, 加 *jia¹* and 減 *jian³*) that marks the **direction** of the change in intensity of the state. A verb meaning ‘to add’ or ‘to increase’ goes with ‘strong/strength’ to form ‘strengthen’; one meaning ‘to lessen, decrease’ goes with the complement ‘weak’ to form ‘weaken’. The complement is not an object; one is not ‘reducing weakness’, but **reducing the intensity** of something so that it **becomes weaker**, or goes **in the direction of weakness**. The forms generated by this binary subsystem of Mandarin verb morphology are also not resultative constructions, since they are inseparable; but they could be roughly categorized as a very specialized, semi-productive subtype of resultative compounds.

Some of the compounds have natural opposites, for example, 增多 *zeng¹duo¹* or 加多 *jia¹duo¹* ‘to increase’ are opposed to 減少 *jian³⁽²⁾shao³* ‘to lessen’; but 加深 *jia¹shen¹* ‘to deepen’, has no corresponding opposite using the morpheme 淺 *qian³* meaning ‘to make shallow’, beyond the analytic 變淺 *bian⁴qian³* ‘to make shallow’, just as English has no **shallowen* (though there is the relatively rare form *to shallow*). Admission of an item into the *-en* pattern type, in both English and Chinese, reflects in a general way greater expressive demand in the real world for it.

A few other initial-position verbs, in addition to the just-mentioned analytic verb 變 *bian⁴* ‘to change’, can be used with adjectives of either polarity (i.e. large/small, strong/weak); two examples are 調 *tiao²* ‘to adjust’ and 轉 *zhuan³* ‘to turn, change’. These also have wide application and tend to form more analytic, i.e. separable, constructions, e.g. 轉涼 *zhuan³liang²* ‘to turn cool’; and 調高 *tiao²gao¹* ‘to raise, adjust upwards’, as a salary or price.

Below are a number of examples of degree-changing deadjectival compound verbs, organized into pairs of natural opposites, though as already noted, symmetry does not always rule. Parentheses around a Chinese item signal that it does not have a corresponding opposite belonging to the same compound type; only a more generic and analytic initial-position verb like 變 *bian⁴* ‘to change’ can be used instead. Common alternates are also given where they occur. There is often but not always a specific semantic context or environment for each such alternate; for example, 加 *jia¹* ‘to add’ and 增 *zeng¹* ‘to increase’ are often fairly interchangeable; but 減 *jian³* ‘to decrease, subtract’ and 縮 *suo¹* ‘to shrink’ might be used in quite different contexts.

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|---|--|
| (1) 加長 <i>jia¹chang²</i> ‘to lengthen’; or
增長 <i>zeng¹chang²</i> ‘to lengthen’; or
拉長 <i>la¹chang²</i> ‘to lengthen’; or
伸長 <i>shen¹chang²</i> ‘to lengthen’ | 縮短 <i>suo¹duan³</i> ‘to shorten’; or
減短 <i>jian³⁽²⁾duan³</i> ‘to shorten’ |
| (2) 加強 <i>jia¹qiang²</i> ‘to strengthen’; or
增強 <i>zeng¹qiang²</i> ‘to strengthen’ | 減弱 <i>jian³ruo⁴</i> ‘to weaken’; or
削弱 <i>xiao¹ruo⁴</i> ‘to weaken’ |
| (3) 加大 <i>jia¹da⁴</i> ‘to enlarge’; or
擴大 <i>kuo⁴da⁴</i> ‘to expand’; or
拉大 <i>la¹da⁴</i> ‘to stretch, enlarge’ | 縮小 <i>suo¹xiao³</i> ‘to make
smaller’; or
減小 <i>jian³⁽²⁾xiao³</i> ‘to make
smaller’ |

- | | |
|---|--|
| (4) 加高 <i>jiā¹gāo¹</i> ‘to make taller, higher’; or
增高 <i>zēng¹gāo¹</i> ‘to make taller, higher’
also ‘to heighten’; or
提高 <i>tígāo¹</i> ‘to raise’ | 減低 <i>jiǎn³dī¹</i> ‘to lower’; or
降低 <i>jiàng⁴dī¹</i> ‘to lower’; or
壓低 <i>yā¹dī¹</i> ‘to lower’; or
放低 <i>fàng⁴dī¹</i> ‘to lower’; or
挫低 <i>cuō⁴dī¹</i> ‘to tumble’ |
| (5) 加重 <i>jiā¹zhòng⁴</i> ‘to make heavier’ | 減輕 <i>jiǎn³qīng¹</i> ‘to lighten’; or
放輕 <i>fàng⁴qīng¹</i> ‘to lighten’ |
| (6) 加快 <i>jiā¹kuài⁴</i> ‘to quicken’ | 減慢 <i>jiǎn³mǎn⁴</i> ‘to slow down’; or
放慢 <i>fàng⁴mǎn⁴</i> ; or ‘to slow down’; or
壓慢 <i>yā¹mǎn⁴</i> ; ‘to slow down’; or
拖慢 <i>tuō¹mǎn⁴</i> ‘to slow down, delay’ |
| (7) 加多 <i>jiā¹duō¹</i> ‘to increase in number’
增多 <i>zēng¹duō¹</i> ‘to increase in number’ | 減少 <i>jiǎn³⁽²⁾shǎo³</i> ‘to decrease in number’ |
| (8) 加緊 <i>jiā¹jǐn³</i> ‘to tighten, tauten’ | 放鬆 <i>fàng⁴sōng¹</i> ‘to loosen, slacken’ |
| (9) 加厚 <i>jiā¹hòu⁴</i> ‘to thicken’ | (變薄 <i>biàn⁴báo²</i> or <i>bó²</i> ‘to thin, make thinner’) |
| (10) 加粗 <i>jiā¹cū¹</i> ‘to thicken, coarsen, make stouter’ | (變細 <i>biàn⁴xì⁴</i> ‘to become/ make finer’) |
| (11) 加深 <i>jiā¹shēn¹</i> ‘to deepen’ | (變淺 <i>biàn⁴qiǎn³</i> ‘to become/ make shallow’) |
| (12) 加寬 <i>jiā¹kuān¹</i> ‘to widen’ | (變窄 <i>biàn⁴zhǎi³</i> ‘to narrow, become/make narrow’) |
| (13) 加廣 <i>jiā¹guǎng³</i> ‘to broaden’ | (變窄 <i>biàn⁴zhǎi³</i> ‘to narrow, become/make narrow’) |

(14) 加熱 *jiā¹re⁴* ‘to heat’

(變涼 *biàn⁴liáng²*; or
轉涼 *zhuǎn³liáng²* ‘to cool,
become cool’)

There are also two noteworthy literary expressions of this compound type: 加劇 *jiā¹ju⁴* and 加甚 *jiā¹shèn⁴*, both of which mean ‘to intensify’ or ‘to heighten’, neither of which has an obvious corresponding opposite; 變得很輕微 *biàn⁴de²hèn³qīng¹wēi²* ‘to become much less serious’ would be one analytic possibility.

The lines between this type of compound and the next step to an analytic, usually resultative, construction are not sharply drawn; some of these items can be both, depending on the context and syntactic requirements. Generally, if the initial verbal element has a more specific and context-restricted meaning rather than a general meaning that is less context-dependent, the whole will tend to be a resultative construction rather than an inseparable compound; three possible examples from the above list are 拉大 *lā¹dà⁴* [to pull + large] ‘to stretch, enlarge’, 拖慢 *tuō¹màn⁴* [to delay, procrastinate + slow] ‘to slow down, delay’, and 挫低 *cuō⁴dī¹* [to deflate + low] ‘to tumble (in price, value)’.

5.5 DEADJECTIVAL COMPOUND VERBS OF “BECOMING” WITH 發 *fa¹*

The use of 發 *fa¹* as an inchoative aspectual verb in 發 *fa¹* + Verb compound verbs was discussed in section 4.2.3. But 發 *fa¹* can also be combined with adjectives to form deadjectival verbs of “becoming” or “changing into” a specified state.

One semantic field in which this pattern is used is colors. The verbal element 發 *fa¹* ‘to emanate, give off’ plus a color word as an adjectival complement yields inseparable, tightly bound verbs meaning ‘to turn (color)’. Examples are: 發黑 *fa¹hēi¹* ‘to blacken’ (e.g. the skin, due to disease), 發白 *fa¹bái²* ‘to whiten’ (e.g. to go pale due to fright), 發紅 *fa¹hōng²* ‘to redden, flush, blush’, and 發黃 *fa¹huáng²* ‘to yellow’ (e.g. of paper, due to age). It is notable that these forms correspond closely with the allowable *-en* forms for colors in English (*to blacken*, *to whiten*, *to redden*) plus *to yellow*. These deadjectival verbs are both transitive and intransitive.

All of the verbs formed in this way are unaccusative in nature (Chao calls these “middle voice” forms (1968:703)), in that they are used to describe spontaneously occurring events, that is, they take place without conscious

control of an agent. Being unaccusative, they cannot take an object. Resultative constructions, often using a context-specific verb, and the particle 把 *ba*³ to mark the object, tend to be used for transitive, intentional changes of color, e.g. 把臉塗黑 *ba*³⁽²⁾ *lian*³ *tu*² *hei*¹ ‘to color/smear one’s face black’. From computer technology comes one instance of a newly-coined non-analytic verb compound referring to an active changing of color, with a function-specific verb in initial position. The Verb + Adjective combination 反白 *fan*³ *bai*² [to reverse + white] means ‘to highlight with a mouse (to change from black print on white background to white print on a dark background), mark (on a computer screen)’, e.g. 請反白此處; *qing*³ *fan*³ *bai*² *ci*³ *chu*⁴ ‘Please highlight this area’.

The 發 *fa*¹ + Adjective complement pattern is used to form other deadjectival verbs describing spontaneously occurring events as well, with many relating to emerging physical or mental states and sensations such as taste, pain, and perceived temperature. Examples: 發酸 *fa*¹ *suan*¹ ‘to turn sour’; 發苦 *fa*¹ *ku*³ ‘to turn bitter’; 發脹 *fa*¹ *zhang*⁴ ‘to bloat, feel bloated’; 發癢 *fa*¹ *yang*³ ‘to start to itch’; 發悶 *fa*¹ *men*¹ ‘to start to feel stifled, in low spirits’; 發慌 *fa*¹ *huang*¹ ‘to become flustered’; 發瘋 *fa*¹ *feng*¹ or 發狂 *fa*¹ *kuang*² ‘to go crazy, insane’; 發臭 *fa*¹ *chou*⁴ ‘to stink, turn fetid’; 發冷 *fa*¹ *leng*³ ‘to become, turn cold’; 發熱 *fa*¹ *re*⁴ ‘to become hot’; 發寒 *fa*¹ *han*² ‘to become (pathologically) cold’; 發燙 *fa*¹ *tang*⁴ ‘to become hot to the touch’; 發炎 *fa*¹ *yan*² ‘to become inflamed’; 發膩 *fa*¹ *ni*⁴ ‘to become cloying’; 發昏 *fa*¹ *hun*¹ or 發暈 *fa*¹ *yun*¹ ‘to start to feel dizzy, woozy’; 發虛 *fa*¹ *xu*¹ ‘to feel weak’; 發狠 *fa*¹ *hen*³ ‘to become determined’; 發懶 *fa*¹ *lan*³ ‘to become lazy’; 發急 *fa*¹ *ji*² ‘to become anxious’; and 發困 *fa*¹ *kun*⁴ ‘to become sleepy’.

These are all closely related to the inceptive verbs with 發 *fa*¹ as an initial aspectual element described in Chapter IV, though instead of forming a compound with embedding, the result is a more straightforward compound formed from an inceptive verb plus a predicative adjective complement. 發 *fa*¹ + Noun collocations such as 發芽 *fa*¹ *ya*² ‘to bud’ and 發財 *fa*¹ *cai*² ‘to earn a fortune’ are also very common, but these are separable VO phrases and outside of our area of concentration in this study. The 燒 *shao*¹ in 發燒 *fa*¹ *shao*¹ ‘to run a fever’ also seems to be nominal and to belong in this category, since it is separable and can be modified internally, e.g. 發高燒 *fa*¹ *gao*¹ *shao*¹ ‘to run a high fever’.

5.6 VERB + ADVERBIAL COMPLEMENT

There are a few Verb + Adverbial Complement verbs in which, like with degree-changing deadjectival compound verbs, the verb and adverb complement elements are semantically cognate. Because they are inseparable, they are not classified as resultative constructions, though they are similar in structure. They mostly involve position or movement in time or space, e.g. ‘to lead (and be in first position)’, ‘to postpone’, and so forth. Some examples: 領先 *ling³xian¹* [to lead + first] ‘to be in the lead’; 隨後 *sui²hou⁴* ‘to follow on behind’; 提前 *ti²qian²* [move + before] ‘to change to an earlier time’; 延後 *yan²hou⁴* [to extend + after, posterior] ‘to postpone’.

5.7 VERB/ADJECTIVE/ADVERB/NOUN + 化 *hua⁴* ‘-ize’

The majority of compound formation processes we have dealt with so far in this chapter are largely idiosyncratic, or have limited productivity, and are thus mainly **lexical**. So while we have identified several significant patterns, some of which on occasion still produce new analogical formations, we do not really have a set of consistent rules. If we did, we could unhesitatingly call the processes morphological: add this prefix or that suffix and you get a passive, or a causative. Of course, it should be remembered that much of the word-formation morphology of any language behaves in just this way; there are identifiable patterns which may have been historically productive, but which now have limited applicability or are restricted to closed sets of items. A few processes, however, follow widely applicable rules, and have almost unlimited productivity. In Chinese, these tend to be calques or loan translations from other languages, most notably English and Japanese. A case in point is the *-ize* type verbs, which are rendered with a final 化 *hua⁴* (‘to change, turn into’) suffix in Mandarin.

Although Wang (1987a: 346) suggests that the Chinese 化 *hua⁴* suffix – and it should be considered a bona fide suffix – is used to translate English verbs ending in *-ize* (e.g. *specialize*, *economize*), things are not quite that straightforward.

First, the source words are not just English verbs ending with *-ize*. English uses an assortment of other suffixes for the same purpose, such as *-ify* (*falsify*), *-ate* (*automate*) and *-en* (*deaden*).

Second, one of Wang’s examples is 機械化 *ji¹jie⁴* (or *xie⁴*) *hua⁴* ‘to mechanize’. However, in perhaps most contexts where this lexical item occurs,

the English equivalent would be *mechanical*, e.g. 很機械化的反應 *hen³ ji¹ jie⁴ hua⁴ de fan³ ying⁴* ‘a very mechanical reaction’; the item 機械化 *ji¹ jie⁴ hua⁴* is thus more often an adjective or adverb. Many of the 化 *hua⁴* forms are in fact primarily **not** verbs; another common adjective or adverb suffixed with 化 *hua⁴* is 情緒化 *qing² xu⁴ hua⁴* ‘emotional’. But though these examples correspond to an *-al* suffixed adjective in English, their derivation is similar conceptually to an English past participle used as an adjective, i.e. ‘mechanized’ or ‘emotionalized’, as illustrated by the item 兩極化 *liang³ ji² hua⁴* which means both ‘to polarize’ (verb) and ‘polarized’ (adjective).

Third, 化 *hua⁴* forms are often also nominal, frequently corresponding to an English gerund, which coincides with the *-ing* present participle form. 動脈硬化 *dong⁴ mai⁴ ying⁴ hua⁴* [artery + hard + -ize] is probably most frequently used as a noun, meaning ‘hardening of the arteries’. The same is true of 工業化 *gong¹ ye⁴ hua⁴* and 現代化 *xian⁴ dai⁴ hua⁴* which often mean ‘industrialization’ (or ‘industrialized’) and ‘modernization’ (or ‘modernized’) rather than ‘to industrialize’ and ‘to modernize’. But even though 化 *hua⁴* forms appear contextually as different parts of speech, they are all deverbal in nature. All involve a process of **change** from one state to another.

Fourth, and most importantly, as Wang and other authors note, 化 *hua⁴* is no longer used only to render English terms into Chinese – many of the Chinese examples do not have convenient synthetic English equivalents at all – but it has taken off completely on its own and become wildly productive in Mandarin, like an invasive weed. This is probably one reason why 化 *hua⁴* has received more notice than some of the other verb formation processes: it is easy to identify and has been neatly (though not always accurately) pegged to an English equivalent; it is consistent; and it is widely applicable. All kinds of nouns, adjectives and even verbs (e.g. 演化 *yan³ hua⁴* [to play out + -ize] ‘to evolve’) can take a 化 *hua⁴* suffix to create a new verb meaning something like ‘to become X’ or a ‘to make Y become X’. The almost total lack of any kind of constraint on this suffix in Chinese is actually another confirmation of its imported status; the productivity and distribution of *-ize*, *-ify* and related suffixes are much more restricted in English, the source language. In English the forms evolved naturally, together with various restrictions on each form. *-ize*, for example, cannot be used with just any base; one says *typify* not **typize*, *alienate* not **alienize*. But in Chinese no such idiosyncratic restrictions were imported along with the *-ize* concept; the 化 *hua⁴* ending became an almost universally applicable one. The virtually unlimited productivity of 化 *hua⁴* enables it to pick up some of the slack not covered or

allowed by other morphological processes, e.g. degree-changing deadjectival compound verbs.

As with the degree-changing deadjectival compound verbs in Mandarin, 化 *hua*⁴ suffixed verbs can be either transitive, usually implying a kind of causative, ‘to make or cause Y to become X’, or unaccusative, ‘to become X’. Transitive causatives may be used in a construction in which 把 *ba*³ marks the object. Some examples from the Sinica Corpus: 把作品神聖化 *ba*³ *zuo*⁴ *pin*³ *shen*² *sheng*⁴ *hua*⁴ ‘to **cause** a work to assume holy status, regard a work as holy’; 把社會的複雜面單純化了 *ba*³ *she*⁴ *hui*⁴ *de* *fu*⁴ *za*² *mian*⁴ *dan*¹ *chun*² *hua*⁴ *le* ‘**simplified** (i.e. **made simple**) the complex aspects of society’; and 當一個人把活用的知識教條化之後... *dang*¹ *yi*^{1(2)}} *ge* *ren*² *ba*³ *huo*² *yong*⁴ *de* *zhi*¹ *shi*⁴ *jiao*⁴ *tiao*² *hua*⁴ *zhi*¹ *hou*⁴ ... ‘after a person has **dogmatized** (i.e. **made into dogma**) real-world knowledge...’. Some unaccusative examples of 化 *hua*⁴ suffixed verbs: ... 種種因素有日漸式微，甚至惡質化傾向... ... *zhong*³⁽²⁾ *zhong*³ *yin*¹ *su*⁴ *you*³ *ri*⁴ *jian*⁴ *shi*⁴ *wei*², *shen*⁴ *zhi*⁴ *e*⁴ *zhi*² *hua*⁴ *qing*¹ *xiang*⁴ ‘there is a tendency for various elements to gradually decline, or even to **deteriorate** (i.e. **become worse**)’; ... 與戲中人同化之後... ... *yu*³ *xi*⁴ *zhong*¹ *ren*² *tong*² *hua*⁴ *zhi*¹ *hou*⁴ ‘...after **blending in** as a cast member (i.e. **becoming fully a part of** the cast)...’; and ... 受精卵約三十小時孵化... ‘...after about 30 hours the fertilized eggs **hatch** (i.e. **become mature and open up**)’.

In contrast to most verb compounds in Chinese, there are no syllabic restraints on 化 *hua*⁴-suffixed compounds; here are some longer examples from the Sinica Corpus: 人道主義化 *ren*² *dao*⁴ *zhu*³ *yi*⁴ *hua*⁴ [humanitarian + -ism + -ize] ‘to humanitarianize, “humanitarianism-ize”’; 社會主義化 *she*⁴ *hui*⁴ *zhu*³ *yi*⁴ *hua*⁴ [social + -ism + -ize] ‘to socialize, “socialism-ize”’; 人民公社化 *ren*² *min*² *gong*¹ *she*⁴ *hua*⁴ [people + commune + -ize] ‘to institute people’s communes, “to people’s-commune-ize”’; and 泛政治化 *fan*⁴ *zheng*⁴ *zhi*⁴ *hua*⁴ [general, pan- + politics + -ize] ‘to politicize everything, overpoliticize, “pan-politicize”’. It is notable that in these longer items, the calqued 化 *hua*⁴ suffix often co-occurs with other affixes calqued from English, such as 主義 *zhu*³ *yi*⁴ ‘-ism’ and 泛 *fan*⁴ ‘pan-’ (as in 泛美主義 *fan*⁴ *mei*³⁽²⁾ *zhu*³ *yi*⁴ ‘Pan-Americanism’).

As a relatively new kind of morphological process, 化 *hua*⁴ suffixation operates outside the rules of the system as it was (i.e. with a strong tendency toward disyllabicity) before influence from English, other Western languages, and from Japanese translations of same, became so pervasive. It obviously fills a big need, considering how widespread it has become; there are over 1,000 tokens of verb compounds formed with the 化 *hua*⁴ suffix in the

five-million-word Sinica Corpus. Below follow further examples: 國際化 *guo²ji⁴hua⁴* [international + -ize] ‘to internationalize’; 偶像化 *ou³xiang⁴hua⁴* [idol + -ize] ‘to idolize’; 中國化 *zhong¹guo²hua⁴* [China + -ize] ‘to Sinitize, make Chinese in character’; 綠化 *li⁴hua⁴* [green + -ize] ‘to green, “greenify”’; 明朗化 *ming²lang³hua⁴* [clear + -ize] ‘to make clear, explicit; to expose’; 最佳化 *zui⁴jia¹hua⁴* [most + excellent + -ize] ‘to optimize’; 個人化 *ge⁴ren²hua⁴* [individual + -ize] ‘to individualize’; 哲學化 *zhe²xue²hua⁴* [philosophy + -ize] ‘to philosophize’; 軟體化 *ruan³ti³hua⁴* [software + -ize] ‘to make something into software, “software-ize”’; 憲政化 *xian⁴zheng⁴hua⁴* [constitution + -ize] ‘to constitutionalize’. Some tend towards the technical: 氧化 *yang³hua⁴* [oxygen + -ize] ‘to oxidize’; 鹽化 *yan²hua⁴* [salt + -ize] ‘to salinize, make salty’; 向量化 *xiang⁴liang⁴hua⁴* [vector + -ize] ‘to vectorize’. There are some doublets with very similar meanings, e.g. 簡化 *jian³hua⁴* ‘to simplify’ and 簡單化 *jian³dan¹hua⁴* ‘to simplify, make something simpler and more straightforward’. The second of this pair is marked and has an ad hoc feel about it, sounding as though it were made up by one individual in response to a special need on a particular occasion.

It is clear that 化 *hua⁴*-suffixed items are in fact often coined on the spot, since many cannot be found even in large, fairly up-to-date Chinese dictionaries; though the number of hits with the Google search engine is currently perhaps a much better yardstick of actual usage. A newly formed term that has been at the center of hot discussion in the Taiwan media is 去中國化 *qu⁴zhong¹guo²hua⁴* [to remove, de- + China + -ify, -ize] ‘to de-Sinitize’, or ‘to remove Chinese influence’ (e.g. from school textbooks). A nonce usage once used in a radio broadcast: 除森林化 *chu²sen¹lin²hua⁴* [to remove + (forest (bound) + forest) + -ize] as an on-the-spot translation of *deforest(ation)*. A few of the more idiosyncratic corpus items: 空洞化 *kong¹dong⁴hua⁴* [empty + -ize] ‘to make vacuous, empty, unsubstantial’; 情報化 *qing²bao⁴hua⁴* [intelligence + -ize] ‘to provide military or political intelligence, “intelligencize”’; and 臉譜化 *lian³pu³hua⁴* [face + character design + -ize] ‘to maskify’ i.e. to emphasize the elaborate character face make-up in Beijing opera.

5.8 DEADJECTIVAL/DEADVERBIAL COMPOUND VERBS

A disyllabic adjective or adverb can in some cases become a deadjectival or deadverbial verb. Sometimes the meaning of the new verb has a transparent connection with its derivative adjective or adverb; in other cases the outcome

is highly unpredictable. Chao (1968:374) gives the example of the adjective 稀罕 *xi¹han⁴* [sparse + rare] ‘rare’, which can be used as a transitive verb meaning ‘to value as a rarity’. It is however often used in the negative with a quite different meaning: 我不稀罕! *wo³bu⁴xi¹han⁴* ‘I can do well enough without!’ or interrogative: 誰稀罕? *Shei²xi¹han⁴* ‘Who cares?’

Some adjectives with more straightforward connections to their verbal counterpart are 方便 *fang¹bian⁴* ‘convenient’, used to mean ‘to convenience’: 以方便使用者... *yi³fang¹bian⁴shi³yong⁴zhe³*... ‘in order to make things more convenient for the user...’ Another is 辛苦 *xin¹ku³* ‘arduous’, which can be used as a transitive verb meaning ‘to put someone to a lot of trouble’, as in the polite expression 辛苦你了 *xin¹ku³(2)ni³le* ‘Sorry to put you to so much trouble’.

The adjective 豐富 *feng¹fu⁴* ‘rich (in content)’ is often used as a transitive verb meaning ‘to enrich’, e.g.: ...卻能豐富民族生命、加強民族認同 *que⁴neng²feng¹fu⁴min²zu²sheng¹ming⁴,jia¹qiang²min²zu²ren⁴tong²* ‘...but it can enrich national life and strengthen national identity’. 輕慢 *qing¹man⁴* [light + slow] is an adjective meaning ‘disrespectful’; as a transitive verb it means ‘to fail to treat s.o./s.t. with due respect’. An example from the Internet: 輕慢紀律者將被掃地出門 *qing¹man⁴ji⁴lv⁴zhe³jiang¹bei⁴sao³di⁴chu¹men²* ‘those who make light of discipline will be swept out the door’.

The adjective 便宜 *pian²yi²* [convenient + appropriate] ‘cheap’ doubles as a transitive verb meaning ‘to give someone an undeserved advantage, to let someone off lightly’: 你這樣太便宜了他 *ni³zhe⁴yang⁴tai⁴pian²yi²le¹ta¹* ‘In doing this, you make it too easy for him/give him an advantage he hasn’t earned.’ The meaning is altered from the original adjective, but it is not too far-fetched.

Less semantically transparent is 左右 *zuo³you⁴*, literally ‘left, right’, which means ‘approximately’ when used adverbially, but which as a verb means ‘to control, to influence’, e.g. 我又不能左右人家 *wo³you⁴bu⁴neng²zuo³you⁴ren²jia¹* ‘I’m not in a position to go and tell others what to do.’ This is a headless and exocentric compound verb, with the meaning of ‘control’ dating back to at least the Spring and Autumn Period (770-467B.C.). Its core meaning cannot be linked to either element, but is a metaphorical construct from the two put together; according to a note cited in the *Ci Yuan* dictionary, the meaning of ‘control’ derives from the idea of one being able to go one way or the other (‘left’ or ‘right’) as one pleases. Another exocentric verb formed from two adjectives with opposing meanings is 寒暄 *han²xuan¹* [cold weather + hot weather] ‘to make small talk’, i.e. talking about the ‘weather’ or ‘temperature’. An example: 在路邊遇到同行，彼此寒暄、問候一下生意好

不好 *zai⁴ lu⁴ bian¹ yu⁴ dao⁴ tong² hang², bi³⁽²⁾ ci³ han² xuan¹, wen⁴ hou⁴ yi¹⁽²⁾ xia⁴ sheng¹ yi⁴ hao³ bu⁴ hao³* ‘You run into someone on the street in the same line of work, chat with him a while and ask how business is.’ These two verbs are analyzed in section 3.6 as antonymous coordinate compounds, but are mentioned here again since their components are adjectives/adverbs rather than verbs.

A humorous adjective-cum-verb is 臭美 *chou⁴ mei³* [stinky + beautiful]. It means ‘to sarcastically praise oneself in an exaggerated way’, as in 你別臭美啦 *ni³ bie² chou⁴ mei³ la* ‘Stop flattering yourself/showing off/boasting.’ It probably derives from the idea of presenting oneself as ‘beautiful’ in a ‘stinky’ or unpleasant way.

Advertising and technology occasionally add to the repertoire. The transitive verb 美白 *mei³ bai²* [beautiful + white] ‘to beautify the complexion by lightening skin color’ is heard in skin care product commercials; it is also used to mean ‘to whiten teeth’.

5.9 ADJECTIVE + NOUN COMPOUND VERBS

There are a few frozen, idiomatic expressions composed of an Adjective + Noun, some of which are slang expressions. Probably the best known and most common is 小心 *xiao³ xin¹* [little + heart], which is used as an exocentric verb meaning ‘to be careful’. Its structure can perhaps be better understood by comparing it with 細心 *xi⁴ xin¹* ‘to be very careful, fastidious’, or doing something with “fine” attention to detail; and considering it as an adjective formed from an adjective plus noun, extended to use as a verb which can take an external oblique object. It is somewhat similar to these VO compounds and phrases: 關心 *guan¹ xin¹* ‘to be concerned about’, 擔心 *dan¹ xin¹* ‘to worry about’ and 操心 *cao¹ xin¹* ‘to worry about’ (see section on bleached VO compound verbs below). It can be used intransitively in isolation: 要特別小心 *Yao⁴ te⁴ bie² xiao³ xin¹* ‘You must be extra careful/take extra care’; or it can be followed by a verb phrase complement: ...悄悄實施能力分班的學校則必須小心提防被檢舉... *qiao¹ qiao¹ shi² shi¹ neng² li⁴ fen¹ ban¹ de xue² xiao⁴ ze² bi⁴ xu¹ xiao³ xin¹ ti² fang² bei⁴ jian³⁽²⁾ ju³* ‘...Schools which have quietly instituted classes divided by ability must then take care to avoid being reported to the authorities’. As a compound verb with a bleached noun it can also take an additional external object: 你要小心這個人，太可怕了！ *Ni³ yao⁴ xiao³ xin¹ zhe⁴ ge ren², tai⁴ ke³ pa⁴ le!* ‘You have to watch out for this guy; he’s really scary!’; and 民眾更應特別小心財物保管 *Min² zhong⁴ geng⁴ ying¹*

te⁴bie² xiao³xin¹ cai²wu⁴ bao³⁽²⁾guan³ ‘People should be also be especially careful about the safekeeping of their property’.

There are a few common examples with 同 *tong²* as an initial element. One is 同意 *tong²yi⁴* [same + intention] ‘to agree to’; example: ...他們也同意我的看法 ...*ta¹men ye³ tong²yi⁴ wo³ de kan⁴fa³* ‘...they also agree with me’; though it more often takes a verbal complement, as in: ...後來日本同意禁止國民獵捕海龜 ...*hou⁴lai² ri⁴ben³ tong²yi⁴ jin⁴zhi³ guo²min² lie⁴bu³⁽²⁾ hai³gui¹* ‘...Japan subsequently agreed to forbid ordinary citizens to hunt sea turtles’. Another example is 同情 *tong²qing²* [same + feeling] ‘to sympathize with, feel sympathy for’. This is a very old and established compound in Chinese, but it originally meant only ‘to be of a like mind, to have similar feelings’, or ‘to be allies with someone’. Use of the expression in the meaning of ‘sympathy’, and especially as a transitive verb ‘to sympathize with’, seems to be relatively recent; the compound also happens to match up semantically with the Greek roots of the English word, so it may be a calque superimposed on a preexisting Chinese compound. An example: 我聽了，真有點同情他呢！*Wo³ ting¹le, zhen¹ you³⁽²⁾ dian³ tong²qing² ta¹ ne* ‘When I heard this, I really sympathized with him a bit.’

八卦 *ba¹gua⁴* is an Adjective + Noun denominal exocentric verb which was fairly recently coined in Hong Kong but is now popular in Taiwan and the Chinese mainland. It originally was a noun meaning the ‘Eight Trigrams’ of the *Book of Changes* 易經 *Yi⁴ Jing¹*. Probably because this work is used in fortunetelling, comparable to astrology in the West, the term 八卦 *ba¹gua⁴* came to be associated with personal comments on individuals: their personalities, strengths and weaknesses, and important life events. It has evolved to mean ‘gossip’, especially ‘celebrity gossip’, and can function as a noun, verb, and adjective/stative verb (e.g. 你好八卦！*Ni³⁽²⁾ hao³ ba¹gua⁴* ‘You’re really gossipy/into gossip!’). It is used as an intransitive verb in this example from the online ROC Ministry of Education dictionary: 希望她不要再八卦了，免得惹出更多是非 *Xi¹wang⁴ ta¹ bu⁴⁽²⁾yao⁴ zai⁴ ba¹gua⁴ le, mian³de² re³chu¹ geng⁴duo¹ shi⁴fei¹* ‘I hope she doesn’t keep on gossiping like that or she might stir up even more trouble’.

A humorous Adjective + Noun compound verb, which is also used adjectivally, is 臭屁 *chou⁴pi⁴*, literally, ‘stinky fart’. Like the previously mentioned 臭美 *chou⁴mei³*, it means ‘to boast in an exaggerated and ironic manner’. It is apparently a metaphor based on the expression 放臭屁 *fang⁴ chou⁴pi⁴* ‘to let a stinky fart’ – referring perhaps to the way a comment will likely be received by others. An example is found in this subject line of a reader post on the Internet: 蘋果電腦可以臭屁的軟體 *Ping²guo³dian⁴nao³*

*ke*³⁽²⁾*yi*³ *chou*⁴*pi*⁴ *de ruan*³⁽²⁾*ti*³ ‘Software that Apple can boast about/let off stinky farts about’. Another example from the Internet: 偶也趁著下班前再臭屁兩句就閃啦 *Ou*³⁽²⁾ *ye*³ *chen*⁴*zhe* *xia*⁴*ban*¹*qian*² *zai*⁴ *chou*⁴*pi*⁴ *liang*³*ju*⁴ *jiu*⁴ *shan*³ *la* ‘...just before the end of the work day he would sometimes spout off a few words of self-praise then take off in a flash’.

A recent addition to this category is 微波 *wei*²*bo*¹ [very-small, micro- + wave] ‘to microwave’. This is a back formation based on the noun 微波爐 *wei*²*bo*¹*lu*² ‘microwave oven’. Food containers are sometimes labeled as 可微波 *ke*³ *wei*²*bo*¹ ‘can be microwaved, microwavable’. This is not used only as a trisyllabic adjective; one can also say 能不能微波? *neng*²*bu*⁴*neng*² *wei*²*bo*¹ ‘Can it be microwaved?’

As with the Noun + Noun denominal compounds, Adjective + Noun verbs are found in Mandarin, but are not extremely numerous.

5.10 BLEACHED VERB + OBJECT COMPOUND VERBS

Similar to the situation with resultative compound verbs, the relationship between the elements of a small number of Verb + Object constructions tightened to the point that they became inseparable compounds, and able to take an additional external object.

An example is the VO compound 登陸 *deng*¹*lu*⁴ [to mount, ascend + land (n.)] ‘to land, disembark’, which is possibly a calque from English. An example sentence with 登陸 *deng*¹*lu*⁴ plus an external object is: 69年美國太空人登陸月球 *Liu*⁴*shi*²*jiu*³*nian*² *Mei*³*guo*² *tai*⁴*kong*¹*ren*² *deng*¹*lu*⁴ *yue*⁴*qiu*² ‘American astronauts landed (‘ascended land’) (on) the moon in 1969.’

Some VO compounds of this type can be viewed as having bleached objects that are no longer analyzed as nouns, with the compound as a whole being reanalyzed as having a verbal head; other compounds can be considered to allow the omission of particles or coverb constructions that would mark the external object as oblique, thus assigning a clear role to each of the two objects present, one direct and one oblique. In the example given, the particle 於 *yu*² ‘at, on’ could be added after 登陸 *deng*¹*lu*⁴ to mark the external object 月球 *yue*⁴*qiu*² ‘moon’ as oblique (‘on the moon’), thus resolving the contradiction of having two objects 陸 *lu*⁴ ‘land’ and 月球 *yue*⁴*qiu*² ‘moon’, one after the other. Other possible implied oblique markers besides 於 *yu*² for some VO compounds are the coverbs 爲 *wei*⁴ ‘for the sake, benefit of’, and 對 *dui*⁴ ‘toward’, both of which precede rather than follow the verb.

Some further examples with an understood and optional 於 *yu*² ‘at, in, into, on, from’ are:

- (15) 放眼 *fang*⁴*yan*³ [to cast + eye(s)] means ‘to set one’s sights (on), survey, consider’. This compound must take some kind of complement, either a verb complement, e.g. 放眼望去 *fang*⁴*yan*³ *wang*⁴*qu*⁴ [(to cast + eyes) + (to gaze + out)] ‘to survey with a broad perspective, set one’s sights broadly’, in which the object 眼 *yan*³ ‘eye(s)’, is the sole object; or with an external object, in which case the phrase could be viewed as omitting an oblique marker such as 於 *yu*² ‘on’, e.g. 放眼未來 *fang*⁴*yan*³ *wei*⁴*lai*² ‘to set one’s sights on the future...’; 放眼國際 *fang*⁴*yan*³ *guo*²*ji*⁴ ‘to set one’s sights on the international arena’.
- (16) 進軍 *jin*⁴*jun*¹ [to advance + army] ‘to march (into), advance (into)’; example: 另有七家正計畫進軍台灣 *Ling*⁴ *you*³ *qi*¹ *jia*¹ *zheng*⁴ *ji*⁴*hua*⁴ *jin*⁴*jun*¹ *Tai*²*wan*¹ ‘Seven other (Japanese companies) are currently planning to enter the Taiwan market’ (i.e. ‘to bring their “army” into Taiwan, to enter Taiwan in the manner of an army’).
- (17) 聞名 *wen*²*ming*² [to hear + name] ‘to be famous (in)’, e.g. 聞名世界 *wen*²*ming*² *shi*⁴*jie*⁴ [to hear a name + world] ‘world famous’ (‘famous in the world’).
- (18) 躋身 *ji*⁴*shen*¹ [to ascend + body] ‘to ascend and be counted (among)’, e.g. 如何躋身世界一流 *ru*²*he*² *ji*⁴*shen*¹ *shi*⁴*jie*⁴ *yi*¹⁽⁴⁾*liu*² ‘How to ascend and be counted among the best in the world?’
- (19) 住宿 *zhu*⁴*su*⁴ [to live + lodging] ‘to lodge (at)’, e.g. 住宿校外 *zhu*⁴*su*⁴ *xiao*⁴*wai*⁴ ‘to live off-campus’.
- (20) 駐足 *zhu*⁴*zu*² *bei*³*jing*¹ [to stop + feet] ‘to make a stop (in)’, e.g. 駐足北京 *zhu*⁴*zu*² *Bei*³*jing*¹ [to stop one’s feet + Beijing] ‘to make a stop in Beijing’.
- (21) 稱霸 *cheng*¹*ba*⁴ [to be called + supreme ruler] ‘to become leader (in)’, e.g. 稱霸全球 *cheng*¹*ba*⁴ *quan*²*qiu*² [to be called supreme ruler + entire globe] ‘to become the global leader’ (‘in the entire world’).

- (22) There are a number of VO compounds with 借 *jié*⁴ ‘to borrow’ in initial position. 借鑒 *jié⁴jiàn⁴* and 借鏡 *jié⁴jìng⁴* [to borrow + mirror] both mean ‘to use as a reference, draw lessons from, draw from the experience of’. These are often used without an additional object, but they also occur with an external oblique object: 仍需借鏡其他國家的經驗 *Réng²xū¹jié⁴jìng⁴qí²tā¹guó²jiā¹dé¹jìng¹yān⁴* ‘We still need to draw from the experience of other countries’. Another is 借助 *jié⁴zhù⁴* [to borrow + to help] ‘to enlist s.o.’s help, to obtain the help of s.o., obtain help from’, the external object of which may or may not be overtly marked as oblique. An example with oblique object marking: 亦必須借助於中國社會文化中的影響因素 *Yì⁴bì⁴xū¹jié⁴zhù⁴yú²zhōng¹guó²shè⁴huì⁴wén²huà⁴zhōng¹dé¹yǐng³⁽²⁾xiāng³yīn¹sù⁴* ‘We must also rely on help from influencing factors in Chinese society and culture’; one without marking: 這項工作有時可以借助電腦 *Zhè⁴xiàng⁴gōng¹zuò⁴yǒu³shí²kě³⁽²⁾yǐ³jié⁴zhù⁴dian⁴nao³* ‘A computer can sometimes be used to help do this task’. A fourth example is 借重 *jié⁴zhòng⁴* [to borrow + weight] ‘to rely on the efforts of, “borrow the weight of”’, e.g. 垃圾亂丟山區 取締借重民力 *Lè⁴sè⁴luan⁴diū¹shān¹qū¹qū³dī⁴jié⁴zhòng⁴mín²lì⁴* ‘We must rely on the efforts of the people to ban littering in mountain areas’. 重 *zhòng⁴* here is a deadjectival noun.
- (23) 效法 *xiào⁴fǎ³* [to imitate + method] ‘to emulate, follow the example of’; example: 如果有機會讓他環島一周, 我看他馬上會效法他的祖先賴在台灣不走了 *Rú²guó³⁽²⁾yǒu³jī¹huì⁴ràng⁴tā¹huán²dǎo³yì¹⁽⁴⁾zhōu¹wǒ³kàn⁴tā¹mǎ³shàng⁴huì⁴xiào⁴fǎ³tā¹dé²zǔ³xīān¹lái⁴zài⁴Tai²wān¹bù⁴zǒu³le* ‘If there were a chance for him to take a trip around the whole island, I think he’d immediately do just as his ancestors did and stay on in Taiwan and not want to leave.’ This compound can on occasion be followed by the oblique object marker 於 *yú²*.
- (24) 注意 *zhùyì⁴* [to concentrate + attention] ‘to pay attention to’ is used both with and without an external object, and often with a verbal complement: 我覺得用人要先注意品德, 再來才重視才能 *Wǒ³jùe²dé²yòng⁴rén²yào⁴xian¹zhū⁴yì⁴pín³dé², zài⁴lái²cái²zhōng⁴shì⁴cái²néng²* ‘I feel that when employing someone you should first pay attention to their moral character, (and only) then focus on their talents.’ It is occasionally followed by the oblique object marker 於 *yú²*, as is also the case with the following example.

- (25) 留意 *liu²yi⁴* [to retain + attention] ‘to watch out for, be alert for’ is similar to 注意 *zhu⁴yi⁴*: 小朋友可在這段日子多留意這類的廣告 *Xiao³peng²you³ ke³⁽²⁾yi³ zai⁴ zhe⁴ duan⁴ ri⁴zi¹ duo¹ liu²yi⁴ zhe⁴ lei⁴ de⁴ guang³gao⁴* ‘Children can watch out for this type of commercial during this period’.
- (26) 得罪 *de²zui⁴* [to obtain + guilt] ‘to offend s.o.’ This compound usually but not always takes an external oblique object; example: 可是他是我的上司，我怕會得罪了他 *Ke³shi⁴ ta¹ shi⁴ wo³ de² shang⁴si¹, wo³ pa⁴ hui⁴ de²zui⁴le⁴ ta¹* ‘But he’s my supervisor; I’m afraid I might offend him’; 於 *yu²* is understood and optional.
- (27) 怪罪 *guai⁴zui⁴* [to blame + guilt] ‘to blame’; this compound usually takes an oblique object, which is on occasion overtly marked as such; example: 「過多元主義」可以怪罪每一個人 *Guo⁴duo¹yuan²zhu³yi⁴ ke³⁽²⁾yi³ guai⁴zui⁴ mei³ yi¹⁽²⁾ ge² ren²* ‘Pluralism taken to extremes is something you can blame everybody for.’; with no external object: 他日見面若有怪罪 *ta¹ri⁴ jian⁴mian⁴ ruo⁴you³ guai⁴zui⁴...* ‘If on another day you meet him and he blames...’ (here the expression is nominal); oblique-marked object: ...自由派則怪罪於政治氣候的大右轉 *...Zi⁴you²pai⁴ ze² guai⁴zui⁴ yu² zheng⁴zhi⁴qi⁴hou⁴ de⁴ da⁴ you⁴zhuan³* ‘...The liberals blame it on the big turn to the right in the political climate’; 把 *ba³* marked fronted direct object and oblique-marked object: 主人把所有的錯都怪罪於牠，因此把牠趕出家 *Zhu³ren² ba³ suo³⁽²⁾you³de⁴ cuo⁴ dou¹ guai⁴zui⁴ yu² ta¹, yin¹ci³⁽²⁾ ba³ ta¹ gan³ chu¹ jia¹* ‘The master blamed all the wrongs on him (a dog), and for this reason drove him out of the house.’
- (28) 加害 *jia¹hai⁴* [to add, superimpose + harm] ‘to incur harm to’; example: 只怕他起來加害自己 *zhi³ pa⁴ ta¹ qi³lai² jia¹hai⁴ zi⁴ji³* ‘...it was only to be feared that he might get up and hurt himself...’; this can also be marked as oblique with 於 *yu²*: 生怕自己加害於他 *sheng¹pa⁴ zi⁴ji³ jia¹hai⁴ yu² ta¹* ‘he (A) was very much afraid he (A) might incur harm to him (B)’

In the following examples, a construction using the coverb 爲 *wei⁴* ‘for the sake of, for’ is understood and may be omitted:

- (29) 服務 *fu²wu⁴* [to serve (e.g. as in a prison sentence) + task] ‘to serve’: We see a contrast in treatment of this compound across the Taiwan Straits. A

popular mainland Chinese slogan is: 爲人民服務 *wei⁴ ren² min² fu² wu⁴* [for the sake of + (people + populace) + (serve + task)] ‘Serve the people’, ‘people’ being an oblique object, marked by the coverb 爲 *wei⁴* ‘for; for the sake of’. The equivalent slogan in Taiwan, on the other hand, is 服務民眾 *fu² wu⁴ min² zhong⁴* [(to serve + task) + (people + multitude)] ‘Serve the people’, though the mainland-style oblique construction is also used, and perhaps considered more formal. So in this case, one dialect group favors one construction, and the other an alternate one.

- (30) The compound 造福 *zao⁴ fu²* [to create + well-being] ‘to benefit, bring benefit to’ can take an unmarked additional oblique object, or it may also mark the oblique object with a 爲 *wei⁴* ‘for the sake of’ coverb construction; or the oblique object may also be marked after the verb with 於 *yu²*, with zero marking most common: 看病的人啊，多給醫生一點好臉色，可以造福下面的病人 *Kan⁴ bing⁴ de ren² a, duo¹ gei³ yi¹ sheng¹ yi¹⁽⁴⁾ dian³ hao³⁽²⁾ lian³ se⁴, ke³⁽²⁾ yi³ zao⁴ fu² xia⁴ mian⁴ de bing⁴ ren²* ‘To anybody going to see a doctor: do be pleasant and polite to the doctor; this will make life easier for the patients who come after you.’
- (31) The compound 負責 *fu⁴ ze²* [to bear + responsibility] ‘to take responsibility’ can also be used with a 爲 *wei⁴*-marked oblique object: 爲自己的容貌負責 *Wei⁴ zi⁴ ji³ de rong² mao⁴ fu⁴ ze²* ‘One must be responsible for one’s own appearance’; but much more often now it takes an unmarked oblique object: 我設法負責自己的事情 *Wo³ she⁴ fa³ fu⁴ ze² zi⁴ ji³ de shi⁴ qing²* ‘I’ll try to be responsible for my own affairs’, or a verb clause complement: 他只來負責交涉 *Ta¹ zhi³ lai² fu⁴ ze² jiao¹ she⁴* ‘He is only responsible for negotiating’.

There is a small group of compounds ending in the morpheme 心 *xin¹* ‘heart, mind’ that are usually used as VO compounds, and which occasionally take an external oblique object:

- (32) 操心 *cao¹ xin¹* [to hold + heart] ‘to worry’; example: 讓加盟店主去操心員工的薪水及日後的退休金問題 *Rang⁴ jia¹ meng² dian⁴ zhu³ qu⁴ cao¹ xin¹ yuan² gong¹ de xin¹ shui³ ji² ri⁴ hou⁴ de tu⁴ xiu¹ jin¹ wen⁴ ti²* ‘Let the individual franchise owners worry about the problems of the workers’ salaries and their future pensions’. This compound is sometimes used with the coverb 爲 *wei⁴*, e.g. 爲別人操心 *wei⁴ bie² ren² cao¹ xin¹* ‘to worry about other people’.

- (33) 放心 *fang⁴xin¹* [to release + heart, mind] ‘to put one’s mind at ease’; example with an additional external oblique object: ...但彼此有精神上的溝通, 我很放心他 ...*dan⁴ bi³⁽²⁾ci³ you³ jing¹shen²shang⁴ de gou¹tong¹, wo³⁽²⁾ hen³ fang⁴xin¹ ta¹* ‘...but we communicate on a spiritual level, and I don’t worry about him at all.’ This and the following compound sometimes mark the oblique object with 對 *dui⁴* ‘toward’, e.g. 因此在學業上我對他很放心 *Yin¹ci³ zai⁴ xue²ye⁴shang⁴ wo³ dui⁴ ta¹ hen³ fang⁴xin¹* ‘For this reason, I have full confidence in him as regards his academic performance.’
- (34) 關心 *guan¹xin¹* [to close + heart] ‘to show concern for s.o.’ more often than not takes an external oblique object. Example: 教育局呼籲家長應注意此情況, 多多關心青少年 *Jiao⁴yu⁴ju² hu¹yu⁴ jia¹zhang³ ying¹zhu⁴yi⁴ ci³ qing²kuang⁴, duo¹duo¹ guan¹xin¹ qing¹shao⁴nian²*. ‘The Department of Education calls on parents to be aware of this situation and to show special concern for teenagers.’; example with 對 *dui⁴*: ...學校的確對他很關心... *...xue²xiao⁴ di²que⁴ dui⁴ ta¹ hen³ guan¹xin¹...* ‘...the school is indeed very concerned about him...’.

The following examples are perhaps best analyzed as having a bleached nominal object that gives the compound as a whole the feel of being entirely verbal; no particles or coverbs are used with the following compounds. While compounds of this type usually take an external object, some can also occur without, in which case they may fall back on the original incorporated object. A number of this type of bleached VO compounds, e.g. 動員 *dong⁴yuan²* [to move + personnel] ‘to mobilize’, are translations of foreign concepts when they are not outright calques, and this might partly explain their exceptional behavior.

Examples:

- (35) 追蹤 *zhui¹zong¹* [to follow + tracks] means ‘to follow up on, pursue’: ...要求郵局追蹤發信人? ...*Yao¹qiu² you²ju² zhui¹zong¹ fa¹xin⁴ren²?* ‘...Should we require the post office to track down the sender of the letter?’ Without an external oblique object: ...沿著雪地裡的足印一路追蹤...*yan²zhe xue³di⁴li³ de zu²yin⁴ yi¹⁽²⁾lu⁴ zhui¹zong¹* ‘...they followed the clues all the way, being guided by the tracks in the snow.’

- (36) 經手 *jing¹shou³* [to cross + hand] ‘to handle’; example: 他經手上億元人民幣 *Ta¹jing¹shou³shang⁴yi⁴yuan²ren²min²bi⁴* ‘He handled over 100 million RMB (*renminbi*).
- (37) Similar to the previous example are 進口 *jin⁴kou³* [to bring in + port] and 出口 *chu¹kou³* [to put out + port], calques of the English *import* and *export*: 荷蘭在十七世紀時由土耳其進口鬱金香 *He²lan²zai⁴shi²qi¹shi⁴ji⁴shi²you²tu³⁽²⁾er³qi²jin⁴kou³yu⁴jin¹xiang¹* ‘Holland imported tulips from Turkey in the 17th century’; 他還背著中央，擅自出口糧食四億斤，以換取外匯 *Ta¹hai²bei⁴zhe⁴zhong¹yang¹,shan⁴zi⁴chu¹kou³liang²shi²si⁴yi⁴jin¹,yi³huan⁴qu³wai⁴hui⁴* ‘He even violated central government regulations and exported 400 million catties of grain/food in exchange for foreign currency’.
- (38) An oft-cited example is 動員 *dong⁴yuan²* [to move + personnel] ‘to mobilize’. Wang (1987a:311) dismisses it as a “bad translation” into Chinese for the English *mobilize*, and concludes “it need not be discussed further”. 動員 *dong⁴yuan²* usually takes an external object: 於是我們透過市民組織，動員一群義工 *Yu²shi⁴wo³men⁴tou⁴guo⁴shi⁴min²zu³zhi¹,dong⁴yuan²yi¹⁽⁴⁾qun²yi⁴gong¹* ‘Then we went through civic organizations to mobilize a group of volunteer workers.’; but it is also can appear without. Whether the final element is in this case analyzed as an object, or as bleached and part of the verb, is difficult to judge: 因應颱風來襲，環保局緊急動員，成立防颱中心 *Yin¹ying⁴tai²feng¹lai²xi²,huan²bao³ju²jin³ji²dong⁴yuan²,cheng²li⁴fang²tai²zhong¹xin¹* ‘In response to the onslaughts of typhoons, the Bureau of Environmental Protection is urgently mobilizing, and setting up a typhoon prevention center’.
- (39) 知道 *zhi¹dao⁴* [to know + the way] is so common few people would hardly think that 道 *dao⁴* ‘the way, truth’ is an fact a noun, albeit a bleached one, the object of 知 *zhi¹* ‘to know’. It can occur with an external object: 她其實早已知道了答案 *ta¹qi²shi²zao³⁽²⁾yi³zhi¹dao⁴le⁴da²an⁴* ‘Actually, she knew the answer long ago’ or without an additional external object: 大家想知道嗎? *Da⁴jia¹xiang³zhi¹dao⁴ma?* ‘Do you all want to know?’; or with a complement clause: 雖然知道這是天命，但該如何去超越它? *Sui¹ran²zhi¹dao⁴zhe⁴shi⁴tian¹ming⁴,dan⁴gai¹ru²he²qu⁴chao¹yue⁴ta¹?* ‘He knew that this was destiny; but how to transcend it?’

- (40) 出版 *chu¹ban³* [to put out, produce + printing plate, edition] ‘to publish’:
If the person or agency publishing a book is the subject, the item they publish can be an additional object: 每年又出版多少本書? *Mei³nian²you⁴chu¹ban³duo¹shao³⁽²⁾ben³shu¹* ‘And how many books do they publish every year?’ If the item published is the topic (it cannot be a true subject), there is no additional object: 本次研討會的論文集預計在七月底以前出版 *Ben³ci⁴yan²tao³hui⁴de lun⁴wen²ji²yu⁴ji⁴zai⁴qi¹yue⁴di³⁽²⁾yi³qian²chu¹ban³* ‘It is anticipated that the proceedings of this conference will be published before the end of July’.
- (41) 調劑 *tiao²ji⁴* [to adjust + dose] ‘to make adjustments, add some variety’;
example: 應該有一些康樂活動，來調劑精神 *Ying¹gai¹you³yi¹⁽⁴⁾xie¹kang¹le⁴huo²dong⁴, lai²tiao²ji⁴jing¹shen²* ‘You should have some recreational activities to bring yourself into better spiritual balance.’
- (42) The now inseparable VO compound 設計 *she⁴ji⁴* [to set, arrange + plan, scheme] ‘to design’ or ‘to scheme against’ was once a separable VO phrase, in its meaning of ‘to devise a scheme’; an example from the novel *Journey to the West* (Wu nd:924): 此乃上天所設之計 *Ci³⁽²⁾nai³shang⁴tian¹suo³she⁴zhi¹ji⁴* ‘This was a scheme designed by heaven.’ It can now be used alone, or take an external object, in both meanings; in the meaning of ‘to design’, with an external object: 老師可事先設計簡單菜單 *Lao³shi¹ke³shi⁴xian¹she⁴ji⁴jian³dan¹cai⁴dan¹* ‘The teacher can design a simple menu ahead of time’; ‘setting up a trap’, with an animate external object: 他好像想要設計我 *Ta¹hao³xiang⁴xiang³yao⁴she⁴ji⁴wo³* ‘It seems as though he’s trying to entrap/deceive me.’ It can also take a verbal complement, as in 設計陷害 *she⁴ji⁴xian⁴hai⁴* ‘to plot to entrap s.o.’.
- (43) 應徵 *ying⁴zheng¹* is a Verb + Deverbal Noun compound that means literally ‘to respond to recruitment efforts’, but in effect ‘to be interviewed (for a job), to apply for a job or position’ or ‘to interview (for a job)’ (note use of the English unaccusative with the same meaning as the passive form ‘to be interviewed (for a job)’). It subsequently came to allow an additional object like 工作 *gong¹zuo⁴* ‘work, job’, e.g. 超過四十歲以後應徵工作很少被雇用 *Chao¹guo⁴si⁴shi²sui⁴yi³hou⁴ying⁴zheng¹gong¹zuo⁴hen³⁽²⁾shao³bei⁴gu⁴yong⁴* ‘People over 40 who apply for a job are seldom hired’. A similar example is 應試 *ying⁴shi⁴* [to respond to + test] ‘to take, undergo a test’. An example with an additional external

object: 去應試了幾家 *qu⁴ ying⁴ shi⁴ le ji³ jia¹* ‘went and tested (to see if qualified for employment) at a number of companies’.

- (44) A recent item is 傳真 *chuan² zhen¹* [to transmit + true] ‘to fax’. In fact this compound existed in Classical Chinese, and meant ‘to draw a portrait’, so it is a reasonably good translation for ‘to fax’. It is perhaps best analyzed as a verb plus a deadjectival noun. It often takes an external object: 必須傳真基本資料 *Bi⁴ xu¹ chuan² zhen¹ ji¹ ben³ zi¹ liao⁴* ‘You must fax basic personal information’.
- (45) Sometimes 錄影 *lu⁴ ying³* [to record + shadow, image] ‘to video-record’ takes an external object, as in 錄影全程 *lu⁴ ying³ quan² cheng²* ‘to video-record the entire proceedings’. This is not the case, on the other hand, with 錄音 *lu⁴ yin¹* ‘to tape record’, which is separable and not a compound, and cannot take an external object.
- (46) Her (1997:48-61) proposes a dual listing solution for classifying certain constructions which can be both separable, with no added object; and inseparable, able to take an added external object. An example is 擔心 *dan¹ xin¹* [to bear + heart, mind] ‘to worry, be concerned’. It can be a separable VO phrase: ...根本沒必要擔這個心... *gen¹ ben³ mei² bi⁴ yao⁴ dan¹ zhe⁴ ge xin¹* ‘...you don’t have to worry about that at all’; it can also stand alone: 以那樣的成績去參加聯考，令人十分擔心 *Yi³ na⁴ yang⁴ de cheng² ji¹ qu⁴ can¹ jia¹ lian² kao³, ling⁴ ren² shi² fen¹ dan¹ xin¹* ‘Going to take the entrance examinations with that kind of grades makes one worry’; or it can be inseparable, with a clause as a complement: 我自己因此聞癌色變，很擔心是否會得癌症... *Wo³ zi⁴ ji³ yin¹ ci³ wen² ai² se⁴ bian⁴, hen³ dan¹ xin¹ shi⁴ fou³ hui⁴ de² ai² zheng⁴*... ‘So I pale whenever I hear the word “cancer”; I worry whether I might contract cancer...’; or inseparable, with an additional external object: 我擔心母親，悄悄窺看她房間 *Wo³ dan¹ xin¹ mu³ qin¹, qiao¹ qiao¹ kui¹ kan⁴ ta¹ fang² jian¹* ‘I was concerned about Mother, so I went to peek inside her room’. It can also be used with the coverb 爲 *wei⁴* ‘about, for’ or 替 *ti⁴* ‘on behalf of, about’, e.g. 不用替他擔心 *bu⁴(2) yong⁴ ti⁴ ta¹ dan¹ xin¹* ‘you don’t have to worry about him’. 擔心 *dan¹ xin¹* can thus be included as an example of a VO compound that can take an external object in its listing as an inseparable compound.
- (47) 消毒 *xiao¹ du²* [to eliminate + poison, microbe] ‘to sterilize’ can be used alone or it can take an external object, and it is on occasion separable.

Examples: 用優碘消毒臍帶，有後遺症 *Yong⁴ you¹ dian³ xiao¹ du² qi² dai⁴, you³ hou⁴ yi² zheng⁴* ‘Sterilizing the umbilical cord with iodine has aftereffects’. This item is occasionally separable: 居然無一人的車輛消過毒 *Ju¹ ran² wu² yi¹⁽⁴⁾ ren² de che¹ liang⁴ xiao¹ guo⁴ du²* ‘Surprisingly, there was not a single person whose vehicle had been sterilized’.

- (48) We have a similar situation with 隨便 *sui² bian⁴* [to follow + convenience], which in addition to its adverbial and adjectival (‘sloppily, sloppy, in any old way’) usage can also be a verb compound meaning ‘to do as one prefers’. One can say: 可以隨便 *Ke³ yi³ sui² bian⁴* ‘You can follow your preference.’ (used alone, no external object); or it can be separable: 隨你的便 *sui² ni³ de bian⁴* ‘do according to your preference’; or it can be an inseparable compound with an external object: 隨便你 *sui² bian⁴ ni³* ‘do according to your preference’.

5.11 OTHER BLEACHED VERBS

Three examples are offered here as formations which have been reanalyzed as belonging to a different part of speech than originally. Two of the three are marginal uses that would be widely considered incorrect, yet they appear in popular usage.

The first, and probably most “acceptable” and recognized usage of the three is 可憐 *ke³ lian²*, originally an adjective meaning ‘to be pitiable’. This has come to be reanalyzed as a **transitive verb** meaning ‘to feel sorry for’, e.g. 我只是在可憐我自己 *Wo³⁽²⁾ zhi³ shi⁴ zai⁴ ke³ lian² wo³ zi⁴ ji³* ‘I’m just feeling sorry for myself’. There exist more straightforward verbs meaning ‘to pity’, such as 憐憫 *lian² min³*, and 同情 *tong² qing²* ‘to sympathize with, feel sympathy for’. The first, however, is not that common in speech outside of religious contexts, and the second is more formal, and specifically means ‘to sympathize with’ rather than ‘to pity’; and it cannot be used reflexively. It seems that the adjectival form was perceived to be a more precise description of the feeling referred to, and was simply adopted as a convenient and expressive deadjectival verb, ‘to feel sorry for’. There are 15 out of about 230 occurrences of the item in the Sinica Corpus that are used transitively, which would suggest a fairly high acceptance rate. No other expressions with 可 *ke³* + Adjective or Stative Verb used transitively were found.

An expression based on what could be called an incorrect reanalysis seems to be picking up in popularity: 愛現 *ai⁴ xian⁴*, a phrase consisting of an

auxiliary verb plus main verb, meaning ‘to like to show off’. It is used both as an intransitive verb and as an adjective. The auxiliary part of the compound, 愛 *ai*⁴ has become bleached, so that the whole is perceived as meaning only ‘to show off’. So to express that someone **likes** to show off, an additional analytic auxiliary verb may be added to generate sentences like: 你¹很喜歡愛現⁴: 天天都到最亮、人最多的地方去「愛現」 *ni³ hen³⁽²⁾ xi³ huan¹ ai⁴ xian⁴: tian¹ tian¹ dou¹ dao⁴ zui⁴ liang⁴, ren² zui⁴ duo¹ de di⁴ fang¹ qu⁴ ai⁴ xian⁴* ‘You really like to show off: every day you go to the brightest places with the most people to “show off”’. 愛現 *ai⁴ xian⁴* is clearly used here as an action rather than a “perception” type complex verb. This usage seems to be only marginally acceptable now; two occurrences of it out of a total of nine tokens were found in the Sinica Corpus, and the example cited here is placed between quotes; but acceptance of the form as “normal” and correct seems to be growing.

Another form is still generally considered an incorrect usage, but it is becoming increasingly common. In the analytic, i.e. separable, passive verb phrase 挨打 *ai¹ da³* ‘to be hit’, the initial passive-marking element 挨 *ai¹* seems to have become bleached and absorbed into the meaning of the main verb, ‘to hit, strike’. 挨 *ai¹* is an adversative passive marker meaning ‘to suffer having something done to one’, similar to what 被 *bei⁴* used to be, like 遭 *zao¹* or 遇 *yu⁴*. However, one now hears forms like 他被挨打 *ta¹ bei⁴ ai¹ da³*, which would gloss as something like ‘He has been was hit’. No examples appear in the Sinica Corpus, but Google gives over 4,500 hits for the expression.

SUMMARY

This is a catch-all chapter in which are examined numerous verb compound types that do not belong to the three main types described in the previous chapters. The reason most do not fit is overwhelmingly due to borrowings from other compound or construction types, reanalysis, changes in grammatical function, and calques from other languages.

CHAPTER VI: CONCLUSION

In this study we have examined in relative detail a strictly defined area within the Chinese morphological system, that of compound verbs. If we wished to present a more complete survey of the Mandarin verb system, we would also need to include separable resultative and directional constructions, as well as Verb-Object phrases. But the approach adopted here is to use pure verb compounds as a starting point to build a system from scratch based on the particular features of the Chinese language, in order to thoroughly understand each formation on its own terms, rather than blindly applying existing definitions or frameworks which use languages other than Chinese as their main point of departure and database.

We begin by establishing a rigorous definition of “compound”. While many researchers have mentioned “separability” as a possible way to distinguish compounds from non-compounds, no study so far seems to have applied it consistently and comprehensively to Chinese verbs.

The importance of developing rigorous and language-appropriate definitions and applying them consistently reveals itself in many areas. Had we, for example, simply applied current concepts of what an “affix” is to our data, we would have missed some important phenomena in Chinese verbal morphology. Morphemes that have previously been accepted as verbal “affixes” in Chinese seem mostly to have been chosen because of their close resemblance to English affixes, e.g. 化 *hua*⁴ which started out as a conscious translation of English *-ize*, and 複 *fu*⁴, which is similar in distribution and semantics to English *re-*. Yet the many morphemes listed in Chapter II as prefixes, which are no different in principle from 複 *fu*⁴, were mostly passed over in previous works. The majority of morphemes in the Chinese language are free, so it makes sense in the context of Chinese to question the condition that affixes must be bound forms. In so doing, we uncovered a rich and wide-reaching system of verbal prefixation. Whether one accepts that the phenomenon is true “prefixation” in an Indo-European sense or not is in fact immaterial; what is significant is that there is a system very much like prefixation worthy of close study and incorporating into the edifice of Chinese verbal morphology, whatever one ends up calling it.

Trying to apply the current generative notion of syntactic “head” to our analysis would have yielded confusing and misleading results, e.g. that “verbs have their canonical head on the left, and nouns have their canonical head on the right.” This conclusion regarding divided headedness properties in

Chinese is simply a product of a heterogeneous definition of “head”. Once we settle on a consistent and immutable – i.e. Bloomfieldian – notion of what a “head” is, the “dividedness” disappears, and we uncover a perfectly consistent right-headed system, with no exceptions discovered so far.

Another area where we reap benefits by adhering to a rigorous definition of a compound, i.e. that its elements must be inseparable, is embedded compounds. These have interesting properties not found in regular syntactic constructions, namely, that the two verbs in the formation can take different subjects and objects which need not be expressed explicitly. In a compound causative verb with embedding, for example, the two verbs taking different arguments appear together with no intervening material, e.g. ...因爲面臨房東逼遷窘境 ...*yin¹wei⁴ mian⁴lin² fang²dong¹ bi¹qian¹ jiong³jing⁴* ‘...because they face the awkward situation in which **the landlord** is forcing (**them**) to move’ (literally, [because they face landlord force-move awkward situation]). To express the same thing in a syntactic causative construction rather than a lexical compound, one would need to explicitly include, somewhere between the two verbs, the newly introduced argument, which in this case is both the object of the first verb and subject of the second: ...因爲他們面臨房東逼迫他們遷走的窘境 ...*yin¹wei⁴ ta¹men mian⁴lin² fang²dong¹ bi¹po⁴ ta¹men qian¹zou³ de jiong³jing⁴* [because they face landlord force **them** move (particle) awkward situation]. This is further evidence that compounds, with their feature of inseparability, have special properties worthy of investigation.

The underlying thread running through this study is that Chinese compounds are not “black boxes” containing unexplainable phenomena that need to be written off to “lexicalization” (Packard 2000:233). Processes of lexicalization do not appear out of nowhere; they come from the syntax; yet they often have unique properties not found in the syntax. It is perhaps partly because of the “black box” notion of Chinese lexical items that compound verbs have largely been left out of, for example, studies on aspect and voice in Chinese. But once we undertake to examine the lexicon in the same way we examine the syntax of Chinese, we open up a whole new realm of possibility and discovery.

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Abbreviations:

Romanization of Chinese language publication names is provided to clarify connections to the abbreviations used.

HYXX: 漢語學習 (*Han⁴yu³xue²xi²*) *Chinese Language Study*.

JCL: *Journal of Chinese Linguistics*.

JCLTA: *Journal of the Chinese Language Teachers Association*.

XHBYX 現代漢語補語研究資料 (*Xian⁴dai⁴Han⁴yu³bu³⁽²⁾yu³yan²jiu⁴zi¹liao⁴*) *Materials on Complementation in Modern Chinese*. 1992. 北京語言學院語言教學研究所 Beijing College of Languages, Institute of Language Pedagogy, ed. Beijing: 北京語言學院 Beijing College of Languages.

YWJSTX: 語文建設通訊 (香港) (*Yu³wen²jian⁴she⁴Tong¹xun⁴(Xiang¹gang³)*) *Chinese Language Review (Hong Kong)*.

YWXX: 語文學習 (*Yu³wen²xue²xi²*) *Language Learning*.

YWYJ: 語文研究 (*Yu³wen²yan²jiu⁴*) *Language Studies*.

YYWZX: 語言文字學 (*Yu³yan²wen²zi¹xue⁴*) *Language and Philology*, 中國人民大學書報資料中心 Chinese People's Center for University Books and Materials.

YYYYJ: 語言研究 (*Yu³yan²yan²jiu⁴*) *Language Studies*.

ZGYW: 中國語文 (*Zhong¹guo²yu³wen²*) *Chinese Language*.

YYJXYJ: 語言教學與研究 (*Yu³yan²Jiao¹xue²yu³yan²jiu⁴*) *Language Teaching and Research*.

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漢語複合動詞

本論文的研究主題是漢語複合動詞的結構與特性。在有關漢語語法的文獻中，著重於句法方面的研究遠超過有關詞彙的研究；部分原因可能是因為詞彙常被認為是一個「黑盒子」，很難做出有系統的分析，因此「詞彙化」的概念應該就足以說明複合詞內在結構的一切現象。然而實際上，在詞彙層次裡同樣存在著許多類似於漢語句法裡的功能，如工具格、動貌、被動式等。

在排除了可分的結構之後，如動賓、動作結果、與動作方向的結構，我們可以確定漢語複合動詞的兩項特徵：一、複合動詞和複合名詞一樣，中心語一律在右，換言之，修飾語在被修飾語之前；二、複合動詞絕大多數是雙音節，僅有少數的例外。

我們根據語素在複合詞裡的詞類，以及語素與語素之間的關係，將複合動詞分為並列式、偏正式、嵌入式、以及「其他類」等四種類型。

一般認為，詞綴在漢語裡的應用極為有限；但是我們的研究發現，在偏正式複合動詞的結構裡存有一個廣泛的前綴系統。在並列式複合動詞裡，同一個語素有時會因為出現的位置不同，或左或右，而反映出該語素不同的語意或用法。嵌入式複合動詞則包括了動貌、被動式、與使動式等結構。當嵌入式的動貌主要句動詞出現在詞的第一個位置時，所表現的是有意、有目的的動作；這與動結句式的補語十分不同，後者所表現的是動作自然衍生出來的結果，而不是有意的、受控制的動作。歸納於「其他類」的複合動詞，許多是經由某種句法類型轉變而成的，例如，動結複合動詞與及物動賓複合動詞。少數「其他類」的複合動詞是外來語或是受外語影響而形成的結構。雖然研究中所使用的例子大多數是漢語中既有的詞彙，但是以類比方式所創造出結構相同的新詞卻是不斷的出現。

總之，一個詞組的可分性可作為辨別複合詞的可靠標準；一般而言，漢語複合動詞所依循的規則與漢語句法的規則相當一致，其中最重要的原則就是詞序。

SAMENGESTELDE WERKWOORDEN IN HET MANDARIJN CHINEES

Dit proefschrift is het resultaat van een studie van de structuur en eigenschappen van samengestelde werkwoorden in het Mandarijn Chinees. De woordenschat van het Mandarijn Chinees is bij lange na niet zo uitgebreid bestudeerd als de zinsbouw van het Mandarijn Chinees. De beperkte aandacht voor de woordenschat van het Mandarijn Chinees is wellicht te verklaren uit de gangbare opvattingen dat samenstellingen op zich nauwelijks verklaarbaar zouden zijn en dat processen die samengevat worden onder de noemer *lexicalisatie* ons reeds voldoende inzicht zouden bieden in de wijze waarop de verschillende componenten van samenstellingen worden samengevoegd. In feite zijn veel van dezelfde eigenschappen die typerend zijn voor de zinsbouw van het Mandarijn Chinees, zoals bijvoorbeeld instrumentele, aspectuele en passieve constructies, ook op lexicaal niveau te herkennen.

Bij woordgroepen die bestaan uit werkwoorden en objecten, alsmede bij resultatieve en directionele constructies, kunnen we zeggen dat de elementen onderling van elkaar te scheiden zijn. Door dergelijke scheidbare constructies apart te bestuderen, kunnen we vaststellen dat bij werkwoorden, net als bij zelfstandige naamwoorden, de bepaling altijd voorafgaat aan datgene wat bepaald wordt (*right-headedness*). Bovendien kunnen we stellen dat samengestelde werkwoorden op slechts enkele uitzonderingen na altijd tweelettergrepig zijn.

Samengestelde werkwoorden kunnen worden onderverdeeld in onderschikkende (*subordinate compound verbs*), nevenschikkende (*coordinate compound verbs*), ingebedde (*embedded compound verbs*) en diverse andere uiteenlopende soorten samengestelde werkwoorden, waarbij we uitgaan van de verschillende woordklassen van de samenstellende morfemen (die afhankelijk zijn van de context) en hun onderlinge relatie.

In tegenstelling tot het wijd verbreide idee dat er vrijwel geen voorbeelden van affigering in het Mandarijn te vinden zijn, geven onderschikkende samengestelde werkwoorden blijk van een uitgebreid systeem van verbale prefigering. Wanneer een morfeem in nevenschikkende samenstellingen in verschillende posities voorkomt, kan de relatieve positie van het morfeem een onderscheid tussen de verschillende betekenissen van het morfeem aangeven. Bij ingebedde samengestelde werkwoorden kunnen we aspectuele, passieve

en causatieve constructies op lexicaal niveau herkennen. Aspectuele *matrix* werkwoorden in initiële positie geven bijvoorbeeld uitdrukking aan opzettelijke, doelbewuste handelingen, in tegenstelling tot bepalingen van resultatieve constructies, die het natuurlijke resultaat van handelingen aangeven. Veel van de werkwoordstypes in de categorie "uiteenlopende soorten werkwoordstypes", zoals resultatieve samenstellingen en overgankelijke werkwoord-object samenstellingen (*VO compounds*), weerspiegelen andersoortige structuren; een klein aantal andere werkwoordtypes binnen deze categorie is ontleend aan andere talen.

Het merendeel van de voorbeelden die in dit proefschrift gegeven worden is ingeburgerd en maakt reeds deel uit van het lexicon, maar soortgelijke en vergelijkbare nieuwe samenstellingen worden regelmatig in het leven geroepen.

Samenvattend kunnen we zeggen dat de onderlinge scheidbaarheid van de samenstellende elementen kan dienen als een duidelijk en waardevol criterium bij het vaststellen van wat wel of geen samengesteld werkwoord genoemd kan worden in het Mandarijn Chinees. In het algemeen blijken samengestelde werkwoorden in het Mandarijn Chinees regels te volgen die vergelijkbaar zijn met de regels van de zinsbouw in het Mandarijn Chinees, waarbij we kunnen vaststellen dat woordvolgorde het belangrijkste richtsnoer vormt.

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MANDARIN COMPOUND VERBS

This is a study of the structure and properties of compound verbs in Mandarin Chinese.

By excluding separable structures such as Verb-Object phrases and resultative and directional constructions, we are able to establish that verbs, like nouns, are invariably right-headed, i.e. modifiers always precede what they modify; and also that compound verbs with relatively few exceptions are disyllabic.

Compound verbs are divided into subordinate, coordinate, embedded, and other miscellaneous compound verb types, based on the contextual part of speech of the component morphemes and their relationship with each other. Subordinate compound verbs are found to exhibit an extensive system of verbal prefixation, contradicting the popular idea that there are few examples of affixation in Mandarin. Different relative position in a coordinate compound verb sometimes distinguishes different senses of the same morpheme. Included among embedded compound verbs we find lexical aspectual, passive, and causative structures. Many of the compound verb types in the “other types” category, such as resultative compounds and transitive VO compounds, mirror other structural types; a few are foreign imports. While most of the examples given in this study are established lexical items, new analogical formations continue to be created.

In short, separability serves as a clear criterion of what is and is not a compound verb in Mandarin. And in general, Mandarin compound verbs are found to strictly follow rules very similar to those of Mandarin syntax, with word order the most important guiding principle.

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