Generic Pronouns in Mandarin Chinese

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Abstract

Although genericity is a widely and extensively explored phenomenon cross-linguistically over the past few decades, there are comparatively fewer studies on generic pronouns, among which the nature and behaviour of generic pronouns in Mandarin Chinese awaits more attention.

There are three types of generic pronoun in Chinese, based on Holmberg and Phimsawat's (2015) definition of such pronouns. These are: the inclusive generic pronoun *ren* 'one' or *ni* 'you', referring to people in general including the speaker, the addressee and others; the quasi-inclusive generic pronoun *women* 'we', referring to people in a restricted period or region, including the speaker and associates without the addressee or others; and the exclusive generic pronoun *tamen* 'they' referring to certain group of others in a restricted time period or geographical region, excluding the speaker, the addressee or both sides' associates. Chinese generic pronouns may be overt or covert, including the forms above, as well as *pro* and PRO. *Ren* has different interpretations ranging over kind, inclusive generic, and referential ones.

I propose a dual operator system for my analysis (cf. Dobrovie-Sorin, 2001), with one generic operator binding DPs and the other binding event variables. Each of the two generic operators competes in principle with existential, universal or other quantificational element of a similar type.

My goal is to clarify the interpretations of the different pronouns according to their linguistic and contextual environments. As Chinese is a language without agreement and inflection, contextual information is very important in restricting the interpretation(s) of DPs. The (c)overtness of the generic pronouns mainly depends on contextual factors and cannot simply be derived from their syntactic phi-features (as was proposed for Thai by Holmberg and Phimsawat (2015)).

Through this research, I aim to provide an overview of the interpretation and distribution of generic pronouns in Mandarin Chinese at the interface of syntax, semantics and pragmatics. I hope to fill the gap in the studies of Chinese genericity, and further contribute to the investigation of pronouns among *pro*-drop languages.

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Abbreviations

ASP	aspect marker		PASS	passive
BA	passive marker in the *ba* construction		PL	plural
			Q	question mark
CL	classifier		SG	singular
DE	genitive			

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Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

Chapter 1

Introduction

Genericity is a long-standing issue cross-linguistically, the main focus of which falls on kind nouns and generic events. There are comparatively fewer accounts on generic pronouns, among which the nature of generic pronouns in Mandarin Chinese (henceforth Chinese) remains insufficiently addressed.

My thesis aims to provide an overview of generic pronouns in Chinese at the interface of syntax, semantics and pragmatics, via the observation of and analysis of their various distributions and behaviours. Through this study, I hope to fill a gap in the studies of Chinese genericity, and further contribute to the investigation of Chinese among *pro*-drop languages, in both its shared and individual properties.[1]

1.1   Chinese as a radical *pro*-drop language

There are three types of *pro*-drop language: consistent *pro*-drop languages which have rich agreement that can identify null subjects; radical *pro*-drop languages which have no agreement but allow null arguments rather freely; and partial *pro*-drop languages which have more restrictions on *pro* drop (Holmberg, Nayudu, & Sheehan, 2009; Holmberg & Phimsawat, 2015). Chinese belongs to the radical *pro*-drop type, which allows null arguments without much restriction, on condition that the interpretation of the unpronounced components can be recovered from context. In Chinese, an argument in an oral or written sentence often occurs in bare form and can be covert rather freely in pursuit of the economy of expression. Research on empty categories in Chinese has been developed extensively and intensively in the past decades, yet the behaviour of generic pronouns awaits comprehensive and intensive exploration.

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[1]   All errors in this thesis are mine.

1.2 Genericity

Genericity has been widely and intensively probed in the areas of syntax, semantics, pragmatics, cognition, language acquisition, etc. over the past decades. Two main types of genericity are involved, which are generalisation over events, or over individuals, i.e. generic sentences and generic DPs.

1.2.1 Generic sentences and DPs

Generic sentences express a certain law-like principle or habit that is true within a certain period, which is generalisation of events. This kind of genericity is usually identified through a non-episodic predicate.

(1) a. The sun rises in the east
   b. Dogs bark
   c. John smokes cigars
    (Dahl, 1975, p. 99)

'Dogs' in (1b) is an example of a generic DP. A generic DP is not inherently a quantifier, but introduces a variable to be bound by some adverbial of quantification or a generic operator, which in most cross-linguistic data and literature is a covert quantifier over individuals/events and which differs itself from universal quantifiers by allowing exceptions.

Detailed analysis of genericity and the generic operator will be presented in Chapter 3.

1.2.2 Kind-referring nouns

Although generic DPs generally refer to individuals as a group or kind, they are arguably different from kind-referring nouns, as the latter do not require binding by a generic operator, but are indicated by a kind-denoting predicate. For example the subject 'The mammoth' in (2) refers to the species mammoth as a whole without exceptions literally, and the predicate is itself kind-denoting..

(2) The mammoth is extinct.

Detailed analysis of kind-referring nouns and inclusive generic pronouns will be presented in Chapter 2.

1.3 Generic Pronouns

Generic pronouns mainly refer to people in general and have been divided into three types in the literature according to their different sizes of generic inclusion: the inclusive, quasi-inclusive, and exclusive generic pronouns (Ackema & Neeleman, 2018; Holmberg & Phimsawat, 2015; Phimsawat, 2011). The inclusive generic pronoun, e.g. non-anaphoric 'one' or 'you' in (3), refers to anyone in and outside a discourse, while allowing exceptions. As highlighted by Ackema and Neeleman (2018), the exceptions of the inclusive generic pronoun do not include the speaker or the addressee. The quasi-inclusive generic pronoun such as 'we' in (4) refers to people in general within a certain locality or period, including the speaker but excluding the addressee. The exclusive generic pronoun like 'they' in (5) denotes people in general within a certain locality or period with no inclusion of the speaker or the addressee.

(3)   One/You should always have dreams.   (inclusive generic pronouns)

(4)   We like smoked fish in Finland.   (quasi-inclusive generic pronouns)
        (Holmberg & Phimsawat, 2017, p. 13)

(5)   In the south they feed on rice.   (exclusive generic pronoun)

As Holmberg and Phimsawat (2015) claim, the representations of quasi-inclusive and exclusive generic pronouns are much alike across languages (though the conditions for their overtness or covertness vary cross-linguistically), whereas the representation and distribution of inclusive generic pronouns differ between different types of pro-drop language, or even between languages of the same type. For example, under different conditions, a reflexive or clitic can seemingly function as an inclusive generic pronoun (e.g. *ziji* 'self' in Chinese; however I will in fact argue that it cannot independently serve as a subject, object or possessor with an inclusive generic reading in Chapter 5) or as a marker for the inclusive generic pronoun (e.g. 'si'/'se' as a good example in Italian, cf. Cinque (1988); Holmberg et al. (2009); Holmberg and Phimsawat (2015)). Therefore, the distribution and interpretation of the inclusive generic pronoun in Chinese receive more focus in my thesis. The quasi-inclusive and exclusive generic pronouns in Chinese behave much like those in English, but follow some particular rules to be overt or covert, which will be covered in Chapters 4 and 5.

Cross-linguistic data have shown that common referential pronouns can be recruited as generic pronouns.

1.3.1   First person pronouns

There seem to be no empirical data proving that the inclusive genericity is expressed by first person singular pronouns. Instead, first person plural pronouns are used to serve as inclusive generic pronouns across languages (cf. Ackema & Neeleman, 2018; Wiltschko, 2016).

First person plural referential pronouns like 'we' in English may refer to a group containing the speaker, the addressee and others, or a group containing the speaker and the addressee, or a group containing the speaker and others. The first two are termed as inclusive and the third as exclusive. Here 'others' may refer to associates of the speaker, of the addressee, or of both. The amount of 'others' varies according to context.

According to Ackema and Neeleman (2018), first person inclusive generic pronouns like 'we' refer to any individual, or people in general, including the speaker, the addressee, and others. They claim that the inclusion of first inclusive generic pronouns is larger than first person inclusive referential pronouns, and actually approximates to universal quantification, but allowing exceptions.

Note that by expressing genericity, first person plural pronouns are used in two ways, one is as inclusive generic pronouns, as in (6), and the other is quasi-inclusive generic pronouns, as in (7). One key distinction between the two is the inclusion or exclusion of the addressee. In (6) 'We' refers to almost any individual, obviously including the speaker, the hearer and any other person, and thus is quasi-universal, i.e. an inclusive generic. (7), if uttered by a Thai person to a foreigner, indicates the subject 'We' refers to local people in Thailand, excluding the hearer as a stranger there, therefore serving as a quasi-inclusive generic pronoun. Nevertheless, if (7) is uttered by a Thai senior to young Thai people about their communal traditional customs, although the speaker, the hearer, and others are included, all of them are restricted locally, and 'we' here can only be construed as first person plural inclusive referential pronoun.

(6)   **We** live to learn.   (inclusive generic pronoun)
        (Wang, 1984, p. 482)

(7)   **We** have vegetarian food in October.   (quasi-inclusive generic pronoun)
        (Phimsawat, 2011, p. 66)

1.3.2 Second person pronouns

Second person singular 'you' with a generic reading can be an alternative of generic 'one' (cf. Ackema & Neeleman, 2018; Holmberg et al., 2009; Kitagawa & Leherer, 1990; Malamud, 2012; Phimsawat, 2011, among others).

(8)   You should never drive on the wrong side of the road. (Ackema & Neeleman, 2018, p. 105)

If there is no implication of the reference restricted to a certain group which definitely excludes the speaker and the addressee, 'you' just like 'one' may refer to anyone among the people in general.

(9)   In the 19th century, you would often encounter famous artists in Viennese cafés. (Gruber, 2013, p. 118)

Different from 'one', whose difference from numeral 'one' and pro-form 'one' which stands for an antecedent is easy to detect from contexts, the denotations of 'you' are comparatively ambiguous and may involve the intention of the speaker and the empathy of the addressee, which in turn may result in different understandings of 'you' by the two sides of an interlocution.

The use of 'one' as inclusive generic in a deontic environment refers to people in general. If we alternate 'one' with 'you', the sentence becomes instead a common imperative with a second person singular or plural referential pronoun as its subject, referring to the addressee maybe with his/her associates.

(10)   a.   One should not lie.
              (Moltmann, 2010, p. 442)
         b.   You should not lie. (imperative)

As Ackema and Neeleman (2018) point out, generics hold valid under certain conditions. If some condition is added to the sentence, like (11), then a generic construal of 'you' is acceptable, as well as a common referential personal pronoun reading, depending on the context.

(11)   You as a parent should not lie.

In languages which have honorific forms, there seems to be no data showing that an honorific form of the 2nd person pronoun can have a generic reading. This is because an honorific 2nd person referential pronoun is strongly addressee-oriented; in other words, the speaker won't be included in its reference, which violates the obligatory inclusion requirement of the speaker for an inclusive generic pronoun. A comparison between 2nd person singular pronoun *ni* 'you' and honorific 2nd person singular pronoun *nin* 'you' in Chinese is shown in (18) in 1.4.1.

1.4 Genericity in Mandarin Chinese

The three types of generic pronouns exist in Chinese, and overt or covert forms of generics occur under different conditions. Typical examples of these generic pronouns in Chinese are illustrated in bold in (12-14) respectively.

(12)　**Ren/Ni** zong　yao　　you　mengxiang.　　　　　(inclusive generic pronoun)
　　　　one/you　always　should　have　dream
　　　　'One/You should always have dreams.'

(13)　Zai Zhongguo **women** tuichong　　　hexie.(quasi-inclusive generic pronoun)
　　　　in　China　　we　　hold in esteem　harmony
　　　　'In China we hold harmony in esteem.'

(14)　Zai nanfang **tamen** meiyou　jizhong-gongnuan.　(exclusive generic pronoun)
　　　　in　south　　they　have not　central heating
　　　　'In the south they don't have central heating.'

1.4.1 Inclusive generics in Mandarin Chinese

The main representations of the inclusive generic pronoun in Chinese are *ren*, *ni*, *pro* or PRO. I will generalise their distribution and interpretation based on empirical observation, and attempt to provide a theoretical analysis of their properties. More focus will be put on *ren* in my thesis, because in a bare form with unspecified features, *ren* has more different possible interpretations. A starting example is shown in (15), which shows the inclusive generic use of *ren* has long existed in Chinese.

(15) Ren   zai shijian ai   yu   zhizhong, du   sheng du   si,   du
      person at world attachment desire in,   alone born alone die, alone

      qu du   lai.   (*The Infinite Life Sutra*)
      go alone come

      'Amid worldly desires for attachments, one was born alone and dies alone,
      comes alone and goes alone.'

Wang (1984) and Zhou (1990) both confirm that *ren* as an indefinite pronoun in ancient
Chinese serves as an inclusive generic just like 'man' in German and 'on' in French,
referring to people in general. Wang (1984) points out that *ren* resembles German
'man' very closely in that they both derive from the connotation of *renlei*/human.[2]
Wang (1984) categorises *ren* in (16) as a pronoun instead of a noun because of its
inclusion of both the speaker and hearer, although he admits that this kind of use may
not really distinguish noun and pronoun. This kind of use is different from collective
nouns like *renlei* 'human beings' or bare plurals indicating kinds, as exemplified in
(17), both of which refer to kinds as a whole (C.-T. J. Huang, 2010).

(16) Ren   wu yuan lü,   bi   you jin you. (*The Analects of Confucius*)
      person no far   concern, must have near worry

      'One must have near worries if one has no plan for future.'

(17) Lang pao-de kuai.
      wolf run   fast

      Wolves run fast.'
      (C.-T. J. Huang, 2010, p. 272)

Zhou (1990) points out that *ren* with an inclusive generic reading always occurs alone.
However, there is in fact a modified alternative to inclusive generic *ren*, a NumP *yi-ge
ren* 'a person', which as claimed by Wang (1984), is due to the influence of English.

As mentioned previously, an honorific second person pronoun cannot have a generic
reading. For example in Chinese, the dedicated honorific 2nd person pronoun *nin* as in
(18) can only be definite and referential.

(18) a. Yudao zhe-zhong qingkuang, ni   zhineng jieshou.
          meet   this-CL   situation,   you can but accept

          'Confronted with such a situation, **one/you** can only accept it.' (inclusive

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[2] The French inclusive generic 'on' also derives from the noun 'homme' and further back to Latin
     'homo', both meaning 'human'.

generic pronoun)

'Confronted with such a situation, **you**/****one** can only accept it.' (2nd person singular referential pronoun)

    b.   Yudao zhe-zhong qingkuang, nin zhineng jieshou.

        meet   this-CL   situation,   you can but accept

'Confronted with such a situation, **you** might have nothing to do bu accept it.' (honorific 2nd person singular referential pronoun)

1.4.2   A short introduction about the generic operator

It is widely accepted, though variant claims exist, that a generic operator plays a role in sentential and nominal generics. This operator, covert in form, binds individual and event variables, functioning similarly to overt quantification adverbials such as 'generally' or 'usually'. (cf. Carlson & Pelletier, 1995; Mari, Beyssade, & Prete, 2013, among others) This operator is assumed to also play a part in sentences with generic pronouns. (cf. Holmberg & Phimsawat, 2015; Moltmann, 2006, among others)

In Chinese, it seems that tsuch a generic operator cannot distinguish between generic *ni* and inclusive generic *ren*, or between *ren*s as a kind noun or a generic pronoun. The ambiguous readings of the following examples need contextual information. Detailed analysis will be presented in Chapter 3.

1.5   Questions and proposals

In my thesis, I mainly seek to investigate the following issues:

What features do Chinese generic pronouns have and how do such features determine the behaviour of the generic pronouns?

What features distinguish generic pronouns from non-generic pronouns?

What features do the three types of generic pronoun have: inclusive, quasi-inclusive, and generic?

What interdependencies are there between a generic pronoun and other arguments or the predicates?

Under what conditions can Chinese generic pronouns be covert? Are there some conditions under which a generic pronoun must be covert? Are there some conditions under which a generic pronoun must be overt?

What common and individual properties do Chinese generic pronouns have in comparison to those in other languages, especially other radical pro-drop or partial pro-drop languages?

My proposals are:

1. There are three types of generic pronouns in Mandarin Chinese, i.e. inclusive generic *ren* 'person, one', quasi-inclusive generic *women* 'we', and exclusive *tamen* 'they'.

2. The inclusive generic pronoun *ren* derives from the noun *ren* 'person, people, human beings', but has distinct distribution and interpretation from those of the kind-referring noun *ren*.

3. There are two generic operators on inclusive generics: one on the predicate and one on the generic argument. For Chinese, the generic operator on the predicate is less obvious than that in English, while the generic operator on arguments derives from the syntactic and discourse contexts.

4. The (c)overtness of the generic pronouns mainly depends on contextual restriction rather than their phi-features.

1.6   Outline of the thesis

The whole thesis is set out as follows:

Chapter 2 summarises the distribution and interpretation of *ren*, explores the distinctions between kind *ren* and inclusive generic *ren*, focusing on their distinct phi-features, and then attempts to clarify the ambiguous NumP *yi-ge ren*.

Chapter 3 investigates the generic operator. Different from the generic operator on kind nouns widely accepted in the literature, I argue that there are two generic operators on inclusive generics. Different elements of context function variously on the interpretation of inclusive generic pronouns. Syntactic context may help to identify the antecedent and some phi-features of an argument and decide its interpretation, as well as serve as important element in domain restriction of an argument. I argue that there are two generic operators: one binds an event variable and is present in generic sentences involving kind nouns. That same operator also appears in the interpretation of generic sentences involving generic pronouns, but those pronouns are bound by the other generic operator, which is dedicated to binding argument variables.

Chapter 4 looks at the quasi-inclusive generic pronoun *women* 'we' and exclusive generic pronoun *tamen* 'they' in Mandarin Chinese, which are much like those in English.

Chapter 5 generalises the conditions under which generic pronouns can or should be (c)overt.

Chapter 6 is a conclusion of my thesis. Based on empirical data from Chinese, I propose *ren* in Chinese can be a kind-denoting noun meaning 'human beings', as well as an inclusive generic pronoun resembling impersonal 'one' in English, besides other interpretations. The two types of *ren* are distinct in phi-features.

Chapter 2

Inclusive Generic *Ren* vs. Kind *Ren*

2.1   Introduction

Chinese words often occur bare in form with most of their features unmarked. A word may belong to several categories, e.g. *ren* can be a noun meaning 'human being, person' or a pronoun referring to some other persons, and has various readings within the same category, e.g. *ren* as a noun may refer to some abstract property of a person or the whole group of human beings. The distinctions between the singular and plural form of a noun, between a noun and a verb, and between different tenses and aspects of a verb, are not expressed in form and can only be detected from larger aspects of the syntactic and discourse contexts.

In this chapter, I will look at the denotation and distribution of *ren*s and explore their distinct features to support my claim that there are two different *ren*s to express genericity in Chinese. One is a kind-referring noun *ren*, equating to *renlei* in Chinese and 'human beings' in English, the other is an inclusive generic pronoun *ren*, parallel to *ni* in Chinese, and impersonal 'one/you' in English.

This chapter is mainly organised as follows: Section 1 is a general introduction; section 2 presents various readings of unmarked *ren*; section 3 attempts to distinguish kind *ren* and inclusive generic *ren* empirically through their behaviours and distribution; section 4 generalises the main distinctions between kind *ren* and inclusive generic *ren* via features; section 5 looks at the ambiguity in reading NumP *yi-ge ren*; section 6 is a summary of this chapter.

2.2 Unmarked *ren* with various readings

There are no articles or inflections in Chinese. According to the position of a bare noun and its interrelationship with other arguments, various readings are obtained, e.g. definite, indefinite, or generic, or even in a few cases we may find a noun in bare form is in essence a pronoun. A good example illustrating such cases is *ren*.

Ren in a bare form can be a noun or a pronoun, and its features are largely implicit. Only the human feature is morphologically obvious in most cases. The number and person features are unspecified and must be recovered from contextual information. *Ren* is currently classified as a noun in authoritative dictionaries like *Modern Chinese Dictionary* (7th Edition), with various meanings like 'human', 'person', 'people', 'others', 'quality of a person', etc. However, judging from its current interpretations and functions, it is plausible to distil pronominal properties from its various usages as well. In ancient Chinese, *ren* often behaved as an indefinite pronoun meaning 'others', or non-anaphoric 'one' with an inclusive generic interpretation (Zhou, 1990), and these kinds of usage have been inherited into contemporary Chinese (Chao, 1968; Wang, 1984). In this section I present the several main types of *ren*, i.e. *ren* as a common noun, a kind-referring noun, a referential pronoun, an abstract noun, and an inclusive generic pronoun.
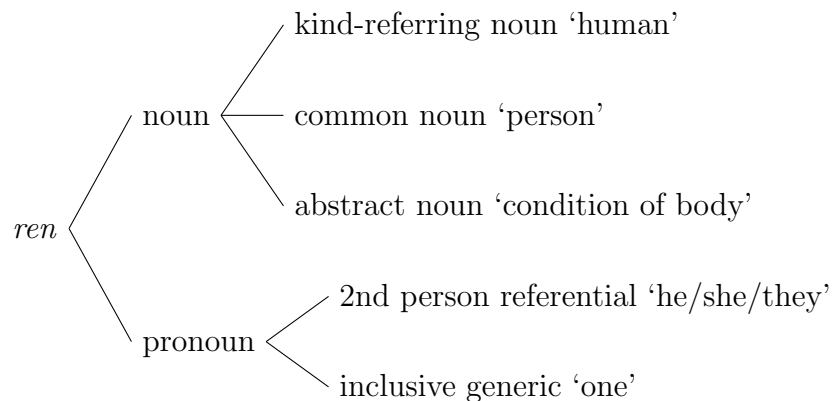
Figure 2.1: Main categories of *ren*

2.2.1 *Ren* as a kind-referring noun

The most basic definition of *ren* is 'human being', a creature characterised by language, making tools, walking uprightly, etc. The predicate in (1) describes a property of the subject *ren* as a species. The property of belonging to mammals is the summarisation of *ren* as a whole kind, and thus indicates that *ren* is a generic noun.

(1) Ren shi burudongwu.   (generic noun)
     person be mammal
     'Human beings are mammals.'

2.2.2 *Ren* as a common noun

The most basic and usual use of *ren* is as a common noun meaning 'person', as ex-
emplified in (2) in a NumP with an existential reading, and in (3) as a subject with a
plural meaning.

(2) You yi-ge ren   da dianhua gei ni.
     have one-CL person call   to you
     'There was a person who called you.'

(3) Ren   shuo Shanxi hao fengguang.
     person say Shanxi good scene
     'People say Shanxi (Province) is scenic.'

2.2.3 *Ren* as a referential pronoun

It's not easy to decide whether *ren* is a noun or pronoun when it appears alone. One
feasible method is to guess its meaning from the context, e.g. other arguments, the
meaning of the predicate, and other (c)overt information outside the sentence. In (4),
the verb *lai* 'come' with a perfective aspect marker *le* indicating an episodic event has
ren as its subject. In this situation *ren* refers to a person or people mentioned in context
who are known to the speaker, or both the speaker and the listener, and cannot have
an inclusive generic meaning. *Ren* with this meaning is considered to be a referential
pronoun, which may also occur in object position, as shown in (5). In (5), the human
subject of the predicate *jian* 'see' is always excluded from the reference of the object
ren, which disqualifies this *ren* from being inclusive generic.

(4) Ren   lai le.
     person come ASP
     'He/She has come.'
     'They have come.'

(5)   (Ni) jian zhao ren   le   ma?
          (you) meet ASP person ASP Q
          'Have you met him/her?'

As Chinese is a radical *pro*-drop language, many elements in a sentence can be dropped without much restriction, and their interpretations may only be recovered from the predicate or context. For instance, example (6) looks similar to (4) in construction. The difference between the two lies in that there is a universal quantification marker *dou* or *quan* 'all' inserted between the subject *ren* and the predicate in (6). As C.-T. J. Huang, Li, and Li (2009) point out, *dou* is a distributive marker emphasising individuals. The cooccurrence of *dou/quan* 'all' with *ren* restricts the reading of *ren* in this sentence to definite 3rd person plural pronoun.

(6)   Ren   dou/quan lai   le.
        person all   come ASP
        'They have all come.'
        'Everyone has come.'

2.2.4   Indefinite pronoun: another/others

Ren with this reading may be singular or plural. The precise reading of it depends on the properties of other arguments and the predicate.

(7)   hui   ren   bu juan
        teach person not tire
        'not to tire of teaching others'

2.2.5   *Ren* as an abstract noun

In certain cases, *ren* is a mass noun representing personality in (8), 'condition of body' in (9), etc. Due to its abstract property, the form of *ren* with these denotations is always bare, without any modifiers or the plural suffix -*men*.

(8)   Ta ren   laoshi.
        he personality honest
        'He/She is honest.'
        (Dictionary Compilation Department, Institute of Language Research, CASS,

2016, p. 1090; translated and interpreted by me)

(9)   Zhe liang tian ren   bu da   shufu.
      the two   day body not quite comfortable
      'I'm not quite well recently.'
      (Dictionary Compilation Department, Institute of Language Research, CASS,
      2016, p. 1090; translated and interpreted by me)

2.2.6   *Ren* as an inclusive generic pronoun

A generic DP may be a kind-referring noun, like what is illustrated in 2.2.1 or (10) here. Otherwise it may be a generic pronoun, as in (11), when the discourse participants are talking about some characteristic or predilection that may be found in anyone, i.e. any individual will plan for his/her own interest.

(10)   Ren   bu jubei zhezhong jineng.   (kind)
       human not have this kind function
       'Humans don't have this kind of function.'

(11)   Ren   hui you ziji de dasuan.   (inclusive generic pronoun)
       person will have self DE plan
       'One may have his/her own plan.'

A generic pronoun with this kind of denotation is termed as an inclusive generic pronoun. For the convenience of distinguishing the two generic expressions in my analysis, I will use 'inclusive generic *ren*' to refer to *ren* as an inclusive generic pronoun like in (11), and 'kind *ren*' for *ren* as a kind-referring noun like in (10).

2.3   Tests to distinguish between kind and inclusive generic *ren*s

In this section I present the main empirical observations and devices to identify *ren* with different readings, mainly the kind reading and inclusive generic reading.

2.3.1 Modifiers

Ren as a pronoun, be it a referential pronoun or a generic one, cannot be modified by
an adjective, an adverbial or a relative clause. Modifiers assign a [definite] value to the
noun or pronoun being modified. As to *ren* as a pronoun, be it referential or generic, a
modifier before it is unacceptable, as shown in (13), compared with (12). Furthermore,
different from other common referential pronouns, the plural affix *men* cannot attach
to *ren* used as a pronoun. If *ren* is used as a referential pronoun, it occurs alone and
can be construed as singular or plural based on contextual information, as illustrated
in (12). More situations will be looked at in section 4.5.

Compare example (4) which is repeated here as (12) and (13).

(12)   Ren   lai   le.   (referential pronoun)
         person come ASP
         'He/She has come.'
         'They have come.'

(13)   [Ni yao zhao de] ren   lai   le.   (noun)
         you want find   DE person come ASP
         'He/She has come.'
         'The person you want has come.'

Another points to be noticed is that, when acting as a modifier, *ren* must be a noun
meaning 'human', while *ren* used in the genitive may be kind-referring or inclusive
generic.

(14)   a.   renxin 'human heart'   (noun)
         b.   Ren   de xin   he quantou yiyang da.   (kind *ren*)
              human DE heart be fist   same   big
              'A human's heart is as big as his/her fist.'
         c.   Ren   de xin   hui bian.   (inclusive generic pronoun)
              person DE heart may change
              'One's mind may change.'

2.3.2 Alternatives

Both kind *ren* and inclusive generic *ren* are mainly present in a generic sentence, although there are exceptions. As there is no morphological or phonetic distinction between the two generic items, ambiguity or misinterpretation may arise between them in a generic environment.

One direct and effective way to distinguish kind *ren* and inclusive generic *ren* is to replace each of them with another equivalent expression without distorting the construal. The alternative to kind *ren* is *renlei* 'human beings', which explicitly means the special species on the earth, while the alternative to inclusive generic *ren* is the impersonal single second person *ni* 'you'.

The two alternatives could at first help to identify both generic interpretations, i.e. kind *ren* and inclusive generic *ren*, among bare *ren* expressions, as illustrated in (15). A generic sentence mostly characterised with non-episodic present tense, modals, etc. is more likely to trigger a generic interpretation of the arguments. Therefore in (15), two plausible readings arise: kind-referring noun *ren* and inclusive generic pronoun *ren*. Another two readings in (15d-e), indefinite singular common noun *ren* and 2nd person referential pronoun *ren*, are excluded due to structural constraints (an indefinite noun cannot take the initial subject position) and pragmatic judgment (a speaker will not give comment in a didactic tone on a third person using *ren* instead of *ta* 'he/she').

(15)   a. **Ren** yinggai xiang qian kan.   (generic)
           person should towards front look
           'One should look forward.'

       b. **Ni** yinggai xiang qian kan.   (inclusive generic)
           you should toward front look
           'You should look forward.'

       c. **Renlei**   yinggai xiang qian kan.   (kind-referring)
           human being should toward front look
           'Human beings should look forward.'

       d. *'Some person should look forward.'   (indefinite)

       e. *'He/She should look forward.'   (referential)

Note that (15a) is still an ambiguous statement as it may be construed as (15b) or (15c). The two readings can be further construed in different contexts as follows. Without explicit context information, (16a) is a default interpretation for (15a), as such context in (16b) is much less common than in (16a).

(16)   a.   One should look forward and overcome difficulties.

            b.   Human beings should look forward and try to survive in the space.

Despite the above examples, the replacement test can distinguish between kind *ren* and inclusive generic *ren* in many cases. Making tools is a plausible distinction between human beings and beasts, therefore in (17) *renlei* is a perfect, or more formal, replacement of *ren* referring to the kind. Anyone may seek success in his/her life, which is irrelevant to the property of a species, but just common to any individual, thus impersonal *ni* can replace *ren* as an inclusive generic pronoun, as shown in (18).

(17)   a.   Zhizao gongju shi **ren**   yu dongwu de qubie   zhiyi.

                make   tool   be human and beast   DE distinction among

                'Making tools is one of the distinctions between humans and beasts.'

            b.   Zhizao gongju shi **renlei**   yu dongwu de qubie   zhiyi.

                make   tool   be human being and beast   DE distinction among

                'Making tools is one of the distinctions between human beings and beasts.'

            c.   *Zhizao gongju shi **ni** yu dongwu de qubie   zhiyi.

                make   tool   be you and beast   DE distinction among

                'Making tools is one of the distinctions between you and beasts.'

(18)   a.   **Ren**   yao xiang chenggong, jiu de   nuli.   (inclusive generic *ren*)

                person if   want succeed,   then must work hard

                'One must work hard if one wants to succeed.'

            b.   **Ni** yao xiang chenggong, jiu de nuli.

            c.   *****Renlei** yao xiang chenggong, jiu de nuli.

However, as the replacement does not always work, the choice between *ren* and *renlei*, or *ren* and *ni*, depends on more specific contextual information, which helps with a final appropriate interpretation.

2.3.2.1 Inclusive generic *ren* vs. *ni*

Second person singular pronouns are commonly employed across languages to express an inclusive generic expression (cf. Ackema & Neeleman, 2018; Holmberg & Phimsawat, 2017, among others). In Chinese, second person singular pronoun *ni* 'you' can be exchangeable with the inclusive generic pronoun *ren* 'person, one' in a generic sentence, as illustrated in examples (15) and (18), and the following example (19).

(19)   **Ren/Ni** zong   yao   you mengxiang.
         one/you always should have dream
         '**One/You** should always have dreams.'

Nevertheless, *ni* in the following statements (20b-c) is ambiguous. When the speaker is talking about a general countermeasure for anyone when in a plight, he/she may use either *ren* or *ni*. This context applies for both examples (20a) and (20b). When a coach is telling a learner to look forward while driving, he/she may utters (20c), in which *ni* is 2nd person referential pronoun.

(20)   a.   Wulunruhe,   **ren**   yinggai xiang   qian kan. (inclusive generic)
              whatever happens, person should towards front look
              'Whatever happens, one should look forward.'
         b.   Wulunruhe,   **ni** yinggai xiang   qian kan.   (inclusive generic)
              whatever happens, you should towards front look
              'Whatever happens, you/one should look forward.'
         c.   Wulunruhe,   **ni** yinggai xiang   qian kan.   (referential: 2SG)
              whatever happens, you should towards front look
              'Whatever happens, you should look forward.'

The sentences in (20) show that *ni* cannot replace inclusive generic *ren* in an out-of-the-blue utterance while maintaining the same interpretation. It relies more on context to receive a clear reading. A felicitous explanation for this restriction is that the inclusive generic pronoun must include the speaker and the addressee, i.e. although inclusive genericity allows exceptions, the discourse participants must not be excluded. An out-of-the-blue utterance cannot provide sufficient information to indicate whether its *ni* argument is referring to the hearer only, or including interlocutors of both sides, thus causing ambiguity, as seen in the two interpretations of (21).

(21)   a.   One should not lie.
              (Moltmann, 2006, p. 258)
         b.   Ren bu yinggai sahuang.   (inclusive generic)
              person not should lie
              'One should not lie.'
         c.   Ni bu yinggai sahuang.   (referential/inclusive generic)
              you not should lie
              'You should not lie.' (referential)
              'One should not lie.' (inclusive generic)

The sentences in (22) further show that there are multiple readings of *ren* even if the sentence is a generic statement, and *ren* cannot always be replaced by *ni*, e.g. in (22c), when the speaker is describing a third person with the addressee. In this situation *ren* cannot be replaced by *ni* and neither of them is generic. Note that (22c) is different from (15e) in that (22c) just mismatches with (22a) in meaning, but is grammatically acceptable when describing a third person, while (15e) has no interpretation referring to a particular third person. Without sufficient contextual information, (22b) can only refer to the addressee, e.g. when the speaker is analysing some characteristic of the addressee in a face-to-face way.

(22)   a. **Ren** zong you ruodian. (generic)
          person always have weakness
          'One always has one's weaknesses.'

      b. **Ni** zong you ruodian. (referential: 2SG)
          person always have weakness
          'You always have your own weaknesses.'

      c. **Ren** zong you ruodian. (referential: 3SG)
          he/she always have weakness
          'He/She always has his/her own weaknesses.'

Besides the ambiguity in replacement with *ni*, there are also cases in which *ni* cannot appropriately replace inclusive generic *ren*. For example, inclusive generic *ren* in the topic position cannot be replaced by *ni* while keeping the same reference. This is because to fill the topic position, a Chinese NP must be generic or definite, like (23a) and (23b) respectively and non-exchangeably.

(23)   a. [$_\text{TOP}$ **Ren** ma], *pro* zong you ruodian. (inclusive generic *ren*)
          person MA, always have weakness
          'As to a person, he always has his weaknesses.'
          'One always has one's weaknesses.'

      b. [$_\text{TOP}$ **Ni** ma], *pro* zong you ruodian. (referential: 2SG)
          you MA, always have weakness
          'You always has your weaknesses.'

Another case is that *ni* can never replace the inclusive generic *ren* in idioms, e.g. examples (24-25).

(24) Meili   de jingse [ling **ren**   shenwang].
      beautiful DE scenery make person yearn for
      'The beautiful scenery makes one yearn for it.'
      'The beautiful scenery is fascinating to one.'

(25) **Ren** wu   yuan lü,   bi   you jin you.
      person hasn't far   concern, must have near worry
      'If one has no concerns for the future, one must have imminent worries.'

2.3.2.2 Kind *ren* vs. *renlei*

In many cases, kind *ren* can be exchangeable with *renlei* without any variance in meaning. There are mainly two elements that hinder their exchange between each other. One is the need of phonetic harmony and balance, e.g. phrases like *renlei jinbu* 'human development' always requiresthe disyllable *renlei* rather than the monosyllable *ren*.

(26) renlei jinbu
      *ren jinbu
      *ren de jinbu
      'human development'

Another reason is that *renlei* is a collective term while *ren* may be collective or any individual from the whole class, which will also affect the choice between *ren* and *renlei*.

(27) Yi-ge ren   neng sikao shi ta   yu dongwu de qubie.
      one-CL human can   think be he/she and animal   DE distinction
      'The capacity of thinking distinguish between a human and an animal.'

2.3.3   Negation

There are several negators in Chinese, of which *bu* 'not' and *fei* 'be not' are to be employed here. *Bu* 'not' mainly negates a verb or an adjective.

(28) Ta   **bu xihuan** na-bu   dianying.   (*bu* + verb)
      he/she not like   that-CL film
      'He/She doesn't like that film.'

(29)   Na-bu   dianying **bu haokan**.   (*bu* + adj.)
        that-CL film   not interesting
        'That film is not interesting.'

Some Chinese nouns can occasionally be negated by *bu* in certain phrases, while pronouns cannot in any cases. Firstly, as C.-T. J. Huang et al. (2009) point out, the NP that *bu* negates must be a single character and in certain paired constructions. Two typical constructions are (bu+N$_1$+bu+N$_2$) like *bu ren bu gui* 'not human not ghost' and (N$_1$+bu+N$_1$, N$_2$+bu+N$_2$) like *ren bu ren, gui bu gui* 'human not human, ghost not ghost'. Secondly, according to Lü (2002), the noun that is negated by *bu* has in fact been used as a verb or an adjective. Therefore such negated phrases may function as modifiers or predicates metaphorically. These phenomena can be seen in (30a-b) and (30c-d) respectively, where *bu ren bu gui* and *ren bu ren, gui bu gui* facilitated by *de* modify *yangzi*, and *bu ren bu gui* and *ren bu ren, gui bu gui* serve as predicates. The two characteristics render the following examples (30a-d) acceptable while (30e) is odd.

(30)   a. [bu ren   bu gui   de] yangzi   (modifier)
            not human not ghost DE looking
            '(of a human) ugly looking'

        b. [ren   bu ren,   gui bu gui   de] yangzi   (modifier)
            human not human, ghost not ghost DE looking
            '(of a human) ugly looking'

        c. Ta   xianzai [bu ren   bu gui].   (predicate)
            he/she now   not human not ghost
            'He is now miserable.'

        d. Ta   xianzai [ren   bu ren,   gui bu gui].   (predicate)
            he/she now   human not human, ghost not ghost
            'He/She is now miserable.'

        e. *bu ni   bu wo
            not you not me   (*bu* + pronoun)

Another negator *fei* 'be not' contains the force of the copula *be* and therefore can negate either a noun or a pronoun, as illustrated in (31). Unlike parallel *bu*-phrases, parallel *fei*-phrases don't have a metaphoric sense.

(31)   a.   Laizhe fei   ren   fei   gui   (negating nouns)

              arriver be not human be not ghost

              'The arriver is not a human or a ghost.'

    b.   Wo zhi-de   fei   ni fei   wo   (negating pronouns)

              I   point-DE be not you be not me

              'What I'm referring to is not you or me.'

However, empirically inclusive generic *ren* or *ni* still cannot occur in such a construction. A tentative explanation is that the two NPs in such a construction are usually synonyms or antitheses to each other, which obliterates the potential reading of *ren* as an inclusive generic pronoun, as obviously it has no appropriate counterparts in juxtaposition with it. Further explanation will be presented in 2.3.6.

2.3.4   Focus

Here I mainly look at focus constructions like *zhiyou...* 'only...', *lian...dou/ye*[1]*...* 'even... also...', and object preposing. In the first two focus constructions, it is what follows *zhiyou* 'only' or *lian* 'even' that is focused, while in the last focus, it is the preposed object that is highlighted. Empirical data have shown that interpretations like kind-referring 'humans' and a common/abstract noun are felicitous for *ren* in focus constructions (cf. Cohen, 2004, for kind-referring DPs in focus constructions), as illustrated in (32-33) respectively. Referential *ren* may appear in a focus construction, but *ta/tamen/renjia* 'he/she/they' are empirically preferred.

(32)   Zhiyou ren   neng zhili   xingzou (, qita   dongwu buneng).   (kind *ren*)

        only   human can   erectly walk   (, other animal   cannot)

        'Only humans can walk erectly (while other animals cannot).'

(33)   Zhi ren   lai   jiu xing (, buyao dai   liwu).   (abstract noun)

        only body come just fine   (, don't   bring gift)

        'It's already fine that you come.'

Ren in the focus environment can not be read as an inclusive generic pronoun. This is because impersonal generic *ren* refers to anyone in general, while a focus construction

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[1]   In literature of focus construction, *lian* is glossed as 'even', *dou/ye* is termed as a special element *DOU/YE* which helps to form the whole 'even' focus construction. However, based on the denotation of this focus construction, 'even the highlighted constituent is/are also included', I choose to gloss *dou/ye* here as 'also'.

like *zhiyou...* 'only...' restricts the reference of the highlighted and emphsised constituent to a certain set and contrasts it with other entities implicitly or explicitly, e.g., kind *ren* vs. *qita dongwu* 'other animals' in (32), and abstract noun *ren* 'body' vs. *liwu* 'gift' in (33). In (32), the predicate 'walk erectly' is a taxonomic property of the kind 'humans', which further selects *ren* as the subject with a kind-referring interpretation.

Ren in (34) is in subject position above *only*, and the salient reading of it is inclusive generic, implying that it is true for anyone that *zhiyou nuli* 'only if one works hard' (the focused conditional) can one succeed.

(34)   Ren   zhiyou nuli   cai   neng chenggong.   (inclusive generic *ren*)
        person only   work hard then can   succeed
        'One can only succeed through hard working.'

Compare with the next sentences. It seems that *ren* is focused but has an inclusive generic reading, but actually it is the embedded clauses signalled by DE that are focused, i.e. 'what one/humans/he/she cannot accomplish' and 'what one/humans/he/she cannot think of'. Therefore the inclusive generic, kind-referring, or referential readings are all possible for the embedded subject *ren*.

(35)   Zhiyou [ren   xiang bu dao   de], meiyou [ren   zuo
        only   person/human think not complete DE, no   person/human do
        bu dao   de].   (inclusive generic *ren*)
        not complete DE
        'There's nothing that one/humans/he/she cannot accomplish, but only what one/humans/he/she cannot think of.'

Another typical focus constructions in Chinese is *lian...dou...* 'even...also...', which serves a contrastive function, and the whole picture may need to be completed by context. The inclusive generic reading is not available as I have explained above. It is observed that the referential reading is rare for *ren* focused in this construction. In (36), what it means is that 'Even humans cannot conquer nature, not to say other animals.'

(36)   Lian ren   ye   bu neng zhengfu ziran.   (kind *ren*)
        even human also not can   conquer nature
        'Even humans cannot conquer nature.'

Object preposing is a kind of SOV structure like (37), where the object is relocated between the subject and the predicate (cf. Shyu, 1995). As Shyu (1995) proposes, object proposing is mainly used for contrast, as exemplified by (37). Therefore an inclusive generic reading of *ren* is again excluded. The referential reading is possible, with rare examples. The kind *ren* and abstract noun *ren* readings are acceptable in appropriate structures.

(37)   Wo pijiu he   guo (, baijiu   mei he   guo).
        I   beer drink Asp (, Chinese liquor not drink Asp)
        'I have had beer (, not Chinese liquor).'
        (Adapted from Shyu, 1995, p. 117)

(38)   Wo ren   mei jian guo, dan shiji tingshuo guo.   (abstract noun)
        I   body not see ASP, but deeds hear   ASP
        'I haven't seen him/her, but have heard of his/her deeds.'

2.3.5   Predicative noun/pronoun

2.3.5.1   Kind *ren* in normal predicate positions

The sentence in (39) illustrates both kind *ren*, which serves as predicate, and generic *ren*, which fills the subject position.

(39)   (Yi-ge) ren,   shouxian shi ren,   ranhou cai   shi nanren huozhe nüren.
        one-CL person, first   be human, then   really be male   or   female
        'A person/One is at first human, then is a male or a female.'
        (Li Yinhe; translated by me.)

In either English or Chinese, a predicate NP indicates the property of the subject, which normally requires a noun instead of a pronoun in such a position. Therefore, the pronoun 'one' or *ren* 'one' with an inclusive generic interpretation won't appear in the predicate position.

(40)   *Na   shi ren.
        that be one
        '*That's one (inclusive generic pronoun).'

In the following example (41), *ren* 'human', representing a living status, is antithetic to *gui* 'ghost', representing a status of death. This reading is acceptable in that as a predicate the noun *ren* denotes the property of being a human (being alive).

(41)   Na   shi ren,   bu shi gui.
         that be human, not be ghost
         'That's a human, not a ghost.'

This phenomenon has been observed by Li (2013) with a conclusion that when the predicate is a bare noun, the subject is either an individual like *Xiaowang* in (42a), or a subkind of the kind denoted by the predicate noun, like the subkind *jing* 'whale' belonging to the kind *dongwu* 'animal' in (42b).

(42)   a.   Xiaowang shi zhongguo-ren.
              Xiaowang be Chinese-man
              'Xiaowang is a Chinese.'
              (X. Li, 2013, p. 108)
         b.   jing   shi dongwu.
              whale be animal
              'Whales are animals.'
              (X. Li, 2013, p. 112)

Obviously (41) is an example of the first type stated in X. Li (2013). *Ren* as a kind DP should occur in an argument position, while *ren* in the predicate position as in (41) has switched to a predicate NP denoting the property of being/belonging to the kind 'humans'. This may well explain why *renlei* 'human beings' is not an appropriate replacement of *ren* in (41), as *renlei* always refers to a kind. [2]

Recall (1), repeated here as (43), which is a good example of the second type identified by X. Li (2013). The subject *ren* as a kind-referring generic noun, is a subkind of the kind *burudongwu* 'mammals' denoted by the predicate NP. Inclusive generic *ren* fails to function as the subject of such a predicate, as it would in English if the example was 'One is a mammal', which seems unacceptable.

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[2] In informal expressions *renlei* may replace *ren* in the predicate position:

(i)   Wo shi renlei.
         I   be human
         'I am a human.'

   This example may not be accepted as standard usage by dictionaries.

(43)   Ren   shi burudongwu.
        person be mammal
        'Human beings are mammals.'
        *'One is a mammal.'

The predicate nouns in (41) and (43) can also be NumPs, modified by *yi-ge* and *yi-zhong*, as illustrated in (44) and (45) respectively.

(44)   Na   shi yi-ge   ren,   bu shi yi-ge   gui.
        that be one-CL human, not be one-CL ghost
        'That's a human, not a ghost.'

(45)   Ren   shi yi-zhong burudongwu.
        person be one-kind mammal
        'Human beings are a kind of mammals.'

We may regard *yi-zhong* as a variant of *yi-ge* preceding a kind-denoting noun. According to Heim and Kratzer (1998), 'a(n)' before a predicate noun is semantically vacuous. Therefore *yi-ge* 'a(n)' and *yi-zhong* in (44-45) do not necessarily signify indefiniteness, nor do they necessarily indicate quantity. They just exemplify that the predicate noun denotes a set of individuals or subkinds. If the subjects are plurals, only bare noun forms are allowed in the predicate position of a Chinese sentence, as illustrated in (46-47).

(46)   Tamen shi ren,   bu shi gui.
        they   be human, not be ghost
        'They are humans, not ghosts.'

(47)   Ren   he   jingyu dou shi burudongwu.
        person and whale all   be mammal
        'Human beings and whales are all mammals.'

2.3.5.2   Predicative *ren* in pseudo-cleft constructions

In contrast with the behaviour of *ren* in predicate position in the above subsection, *ren* in the following construction may receive a 'kind' reading. A construction like (48) is termed as pseudo-cleft construction (cf. C.-T. J. Huang et al., 2009). What follows the copula is a DP rather than an NP, in which case *ren* refers to kind, which can occur

in an argument position. The two parts before and after the copula can be exchanged without distorting the whole sentence's meaning. However, some changes are necessary to make the statement more fluent and natural.

(48) a. Kepa   de shi ren,   bu shi gui.
          terrifying DE be human, not be ghost
          'It is human beings that are terrifying, not ghosts.'
      b. Ren,   er bu shi gui, cai shi kepa   de.
          human, but not be ghost, then be terrifying DE
          'It is human beings rather than ghosts that are terrifying.'

Ren in (48) is in comparison with *gui* 'ghost', both signalling a type of entity. The emphasis is on some property of *ren* as a kind in contrast to the kind of ghost, rather than on distributing the property among individuals of a kind. Therefore *ren* in (48) can be replaced by *renlei*, though the latter is not quite a perfect choice from the perspective of prosody and pragmatics.

Note that in pseudo-cleft constructions, what appears in the predicate position, like the focused part in the cleft sentence 'It is...that', can logically reside in an argument position. In this case, a generic pronoun is presumed to be acceptable in such a position. However, according to empirical observation, only impersonal *ni* 'you' can appear in the predicate position of a pseudo-cleft sentence like (50), which can have a range of references, from a definite single person, to the speaker, or generically indicating that the situation applies to any one who doesn't try hard. However, in most cases, the consistence in using the same pronoun in the same position of two clauses are preferred.

(49) Ni yinggai nuli,   fouze   ni jiu wufa chenggong.   (referential *ni*)
      you should try hard, otherwise ni then cannot succeed
      'You should try hard. Otherwise you cannot succeed.'

(50) Ren   yinggai nuli,   fouze   chenggong de jiu bu shi ni. (generic *ni*)
      person should try hard, otherwise succeed   DE then not be you
      'One should try hard. Otherwise it is not you that will succeed.'

(51) Ren   yinggai nuli,   fouze   *pro*/ren/?ni   jiu wufa chenggong.
      person should try hard, otherwise *pro*/person/*you then cannot succeed
      'One should try hard. Otherwise one/?you cannot succeed.'

2.3.6 *Ren* as arguments of certain predicates

2.3.6.1 Reappraisal of inclusive generic *ren* vs. indefinite singular noun *ren*

According to Cohen (2001), among others, an indefinite singular generic cannot go with predicative adjectives on its 'necessary, essential, inherent, or analytic' properties, e.g. in (52).

(52)   a.   Madrigals are popular.
        b.   *A madrigal is popular.
           (Cohen, 2001, p. 183)

This generalisation holds for inclusive generic pronouns. We cannot judge an indefinite object out of the blue, unless some restriction is provided in context. Therefore, there is only the kind interpretation available for (53), summarising a common property of the species humans. If some restriction or modal force is added, then *ren* may be inclusive generic, as shown in (54).

(53)   Ren   shi zisi   de.
       human be selfish DE
       'Humans are selfish.'

(54)   Dang sheji qieshen liyi,   ren   keneng shi zisi   de.
       when about personal interest person may   be selfish DE
       'One may be selfish when one's immediate interests are involved.'

A third person referential reading may be acceptable if we change the predicate to a more existential one with some emotion attributed, as shown in (55).

(55)   Ren   ke zhen gou   zisi   de.
       he/she ASP really enough selfish DE
       'It's really selfish of him/her.'

2.3.6.2 Plural/reciprocal predicates

The features of the predicate require arguments with matching features. In (56), the adjective *duo* 'many/much' functions as the predicate and determines a plural nominal

meaning 'people' of the subject *ren*.

(56)   [Jiejiari li]   [lüyou jingdian] ren   hen   duo.
         holiday during tourist spot   person very many
         'There are many people in resorts in holidays.'

The reciprocal predicate *hubanghuzu* 'help each other' in (57) requires a subject with a plural/collective reading. Therefore the subject is interpreted as the plural common noun 'people' or the kind noun 'human beings'. Inclusive generic *ren* is always singular in syntactic/semantic construal; thus the inclusive generic reading of the subject is excluded in (57).

(57)   Ren   yinggai hubanghuzu.
         human should   help each other
         'People/Human beings should help each other.'

2.3.6.3   Kind predicates

As observed by Carlson and Pelletier (1995), there are certain predicates that require kind-referring NPs as their arguments, e.g. *be extinct*. Such predicates are termed as 'kind predicates' by Carlson and Pelletier (1995) or 'kind-level predicates' by Chierchia (1995b).

(58)   The lion will become extinct soon.
         (Carlson & Pelletier, 1995, p. 10)

We can find this rule applies to kind *ren* in Chinese, which can be replaced by *renlei*, as shown in (59). Here *miejue* 'become extinct' can only be applied to the total and permanent death of a species, not any particular individual or a portion of the species, and thus requires a kind reading of the subject argument, which inclusive generic *ren* cannot satisfy as it always refers to any individual with exceptions.

(59)   Ren/Renlei hui miejue ma?   (kind *ren*)
         human   will extinct Q
         'Will humans be extinct?'

Recall (1) repeated here as (60). Now *ren* in (60) is interchangeable with *renlei* as a

whole species, and the statement classifies the species as a whole. And again inclusive generic *ren* fails to function as the subject of such a predicate.

(60) Ren   shi burudongwu.   (kind *ren*)
      person be mammal
      'Human beings are mammals.'

Although generic expressions are widely accepted as quasi-universals with exceptions, examples in (59-60) have shown that kind-referring nouns are more close to universal inclusion than generic pronouns in certain generalisations, e.g. every individual of a kind *ren* is dead when we say *Ren hui meijue* 'Humans will be extinct', or every individual is termed as a mammal when we utter *Ren shi burudwu* 'Humans are mammals'. There's hardly an exception for it.

Note that both (59) and (60) may be presented with different aspect and tense in various contexts. For example, the speaker is an advanced creature in the future and talking about humans as an ancient extinct species. Then both (59) and (60) will be narrated in the past tense. In both cases, the source of genericity comes from the VP, instead of generic binding from the aspect or tense. That is to say, this is a type of VP-driven genericity, not genericity from the binding by a sentential generic operator (cf. Borik & Espinal, 2015). Generally speaking, kind *ren* may appear within various temporal environments. On the contrary, inclusive generic *ren* usually fills the argument positions of a statement in the present tense, or sometimes in the future tense, as shown in (61).

(61) Ren   hui sui huanjing   gaibian.   (inclusive generic *ren*)
      person will with environment change
      'One will change along with (the change of) environment.'

If we change the tense of (61) to the past tense, like in (62a), the episodic predicate excludes an inclusive generic reading. The subject cannot be an indefinite without *you* before it. Therefore a plausible reading of the subject in (62) is definite referential 3sg or 3pl. However the most appropriate reading of *ren* here is abstract noun 'property of a human', while the topic is *pro* referring to a definite person/people, as shown in (63). The final interpretation of the whole sentence (62) remains the same.

(62)   Ren   sui   huanjing   gaibian le.   (referential *ren*)
       person with environment change ASP
       'He/She/They changed along with (the change of) environment.'

(63)   (*pro*) Ren   sui   huanjing   gaibian le.   (abstract noun)
              property with environment change ASP
       'He/She/They changed along with (the change of) environment.'

2.3.7   Other arguments/elements in the same domain

The interpretation of the target argument depends on the denotation of other arguments in the same or parallel structure, as well as the relationship between them. For example, *ren* receives a human reading in contrast to *gui* 'ghost' in the parallel construction.

(64)   PRO Hua gui   rongyi PRO hua   ren   nan.
            draw ghost easy   draw human difficult
       'It's easy to draw a ghost but difficult to draw a human.'

As Malamud (2012) suggests, (65) is acceptable if the speaker supposes himself/herself to be the possible agent. Here 'you' is used as a generic. However, as the speaker and the addressee are included in the referents of the inclusive generic pronoun, it seems contradictory for the same person to be the agent and part of the receivers simultaneously, not to say 'our' in this example seems an instance of generic 'we'. Further, similar examples in Chinese in (66) are unacceptable: *ren* is excluded from the domain of *women* in (66a), thus it is not inclusive generic; inclusive generic *ren* won't antecedent itself, but it can antecede *ziji*, as in (66b-c). Detailed illustration of these interpretations can be found in Chapter 5. (66d-e) are more natural and acceptable expressions instead of (66a).

(65)   a.   One/You can't destroy our spirit. (Malamud, 2012, p. 13)
       b.   Damals konnte man dich   für den kleinsten Fehler ins Gefängnis
            Then   could man you.acc for the smallest error in jail
            stecken.
            stick
            'In those days, one could stick you in jail for the smallest error.
            (H simulates victim)
            (Malamud, 2012, p. 14)

(66)   a.   ?Ren   wufa   cuihui   women   de   jingshen.
              person   cannot   destroy   we   DE   spirit
              'One cannot destroy our spirit.'

     b.   *Ren   wufa   cuihui   ren   de   jingshen.
              person   cannot   destroy   person   DE   spirit
              'One cannot destroy one's spirit.'

     c.   Ren   wufa   cuihui   ziji   de   jingshen.
              person   cannot   destroy   self   DE   spirit
              'One cannot destroy one's own spirit.'

     d.   Taren   wufa   cuihui   women   de   jingshen.
              others   cannot   destroy   we   DE   spirit
              'Others cannot destroy our spirit.'

     e.   Ren   wufa   cuihui   taren   de   jingshen.
              person   cannot   destroy   others   DE   spirit
              'One cannot destroy others' spirit.'

Examples to interpret *ren* with the assistance of the predicate and other arguments are illustrated in (67-71). In (67), the imperative sentence implies that the subject should be a 2nd singular/plural personal pronoun, and *ren* in object position refers to someone/some people other than the subject, which may be roughly interpreted as 'he/she', 'they', or even 'me' or 'us' referring to or including the speaker. The subject *zhe* 'this' in (68) refers to a certain situation in which the object *ren* may refer to a certain person or certain people affected by such a situation, or functions as an inclusive generic pronoun meaning 'one'. *Ren shuo* in (69) which resembles (3) is similar to 'It is said/People say...' in English, and the universal quantification marker *dou* 'all', just like in (6), helps to confirm that the subject *ren* is a plural noun referring to 'people'. In (70), contrasting with the object *tian* 'heaven'/'nature', *ren* must refer to its original meaning 'human being' and more precisely it denotes human beings as a whole in contrast to nature, thus having a collective reading. Different from (57) in which *ren* may be a plural common noun or a kind-referring noun, the subject *ren* in (71) can only refer to human beings as it is contrasted with *ziran* 'nature'.

(67)   Kuai   jiao   ren.
         hurry   greet   person
         '(You) should greet him/her/them/me/us right away.'

(68)   Zhe jiao   ren   ruhe shi hao?
         this cause person   how   be   good

'How should a person/one react to this?'

(69)   Ren   (dou) shuo Shanxi hao   fengguang.
        person all   say   Shanxi good scenery
        'People speak highly of Shanxi Province for its scenery.'

(70)   Ren   ding   sheng   tian.
        human certain conquer heaven
        'Human beings are certain to conquer nature.'

(71)   Ren   yu ziran xianghu   yicun.
        human and nature one another exist
        'Human beings and nature depend each other for existence.'

The interpretations of *ren* in more ambiguous or complicated constructions in the following examples (72-76) are also based on the contrasts between *ren* and other arguments in the same domain. In (72), *ren* contrasts with *ziran* in possessor position and can be alternated by *renlei*. In (73), *ren* is compared with *shiwu* 'things' and thus gets a kind reading. In (74) the kind reading of *ren* derives from the contrast with *yao* 'monsters', both of which are distinctive types. The example (75) is a bit misleading in that the first two words often forms a DP *taren* 'others', but here *Ta* hosts topic position, and the description about *ta* is 'his/her voice was earlier heard than his/her body was seen'. The abstract nouns *qianxu* 'modest' and *jiaoao* 'conceit' won't exclude any person from the referent domain of *ren* in (76) and thus entail it inclusive generic reading, as this applies to any individual among us, but not emphasising on any individual among a species.

(72)   a.   Ziran de bianhua shi ren   zaocheng de.   (kind *ren*)
               nature DE change   be human cause   DE
               'The change of the nature is caused by humans.'
        b.   Ziran de bianhua shi renlei zaocheng de.

(73)   Buzhi   **ren**   zai bianhua, suoyou **shiwu** dou zai bianhua.   (kind *ren*)
        not only human be change, all   thing all be change
        'Not only human beings, but also everything is changing.'

(74)   **Ren**   he **yao**   you shenme qubie?   (kind *ren*)
        human and monster have what   distinction
        'What's the distinction between humans and monsters?'

(75)　[TOP Ta]　　[**ren** 　wei zhi 　　**shengyin** yi 　　　dao].
　　　　　he/she 　body not arrive voice 　　　already arrive
　　　　　'His/Her voice has already be heard while he/she has not appeared yet.'

(76)　Qianxu shi 　ren 　　jinbu, 　　jiaoao shi 　ren 　　luohou.
　　　　modest make person progress, conceit make person fall behind
　　　　'Modesty makes one make progress, while conceit makes on lag behind.'

2.4 Distinctions between kind *ren* and inclusive generic *ren*

In section 2.3 I have generalised how to distinguish between kind *ren* and inclusive generic *ren* mainly with their distributions and behaviours as empirical sifters. In this section I aim to further analyse my empirical observation of the two expressions via their morphosyntactic and semantic features. I will focus on features which validate the distinctions between kind *ren* and inclusive generic *ren*.

As observed in section 2.3, kind *ren* can serve as both an arguments and a predicate, while inclusive generic *ren*, as a pronoun, can only occur in argument position.

This just serves as a *post hoc* generalisation of how to recognise kind *ren* instead of other uses of *ren* as shown in 2.3.

2.4.1 The inclusion and representation of phi-feature hierachy

Cross-linguistic empirical data have shown that a singular impersonal pronoun like 'one', 1st person plural like 'we' or 2nd person singular like 'you' may all be representations of the inclusive generic pronoun (cf. Ackema & Neeleman, 2018). Here in this section, I mainly based my analysis of *ren* on literature about the phi-features of the first type like impersonal 'one' in English.

Canonically phi-features contain person, number and gender, among which the person feature is fixed on nouns as 3rd person. To look at the distinction between nouns and pronouns in a more specific and accurate way, more features could be included in phi-features through more representations, e.g. animacy, definiteness, honorification, etc. Animacy and humanness are often subsumed to the gender feature (cf. Ackema & Neeleman, 2018; den Dikken, 2011; Harbour, Adger, & Béjar, 2008, among others).

There is a rich cross-linguistic literature, either contradictory or supplementary, on the construal and representations of phi-features. In this section, based on Holmberg and Phimsawat's (2015, 2017) and Moltmann's (2006) accounts on the phi-features of the inclusive generic pronoun, in combination with Ackema and Neeleman's (2018) analyses of person features, I will try Heim and Kratzer's (1998) and Harley and Ritter's (2002) models of phi-features, and show in next section particular characteristics of Chinese generic expressions, specifically the distinction between kind *ren* and inclusive generic *ren*.

2.4.1.1 Holmberg and Phimsawat (2015, 2017) on features of the inclusive generic pronouns

Person

Holmberg and Phimsawat (2015, 2017) claim that the inclusive generic pronoun is semantically plural with the widest inclusion in reference, ranging over people in general including the speaker, the hearer and other people. Therefore, the person feature of the inclusive generic pronouns cannot be valued via 1st, 2nd or 3rd, but instead must be expressed in terms of concepts of who is included in the reference, such as 'speaker', 'addressee', etc.

Number

Although their plural reference in the person feature to show the inclusivity has been widely accepted in literature, many of the inclusive generic pronouns are syntactically singular. For example, 'one' in English is morphologically singular in the number feature. This value for the inclusive generic pronouns does not hold cross-linguistically, for example in Hebrew it's 3PL. The value of the number feature in inclusive generic pronouns varies (cf. Holmberg & Phimsawat, 2015, 2017).

Gender

Holmberg and Phimsawat (2017) highlight humanness as the root feature of the inclusive generic pronoun, partially because cross-linguistic data have shown instances of the inclusive generic pronoun deriving from a noun with the 'human' meaning in their language.

> 'The relation between the human feature and the (other) φ-features is an interesting issue. We assume it is lower than the other φ-features, since it restricts the values that the other features can have, particularly gender and person. For example, 1st person requires [HUM].' (Holmberg & Phimsawat, 2015, p. 61, fn. 9)

In addition, according to the referential property of the inclusive generic pronoun, which includes both interlocutors, they point out that the humanness feature is an obligatory feature of the inclusive generic pronoun.

Holmberg and Phimsawat (2015) demonstrate that the reference of an inclusive generic pronoun ranges variously across languages. While suggesting humans as the only reference of the inclusive generic 'one'[3] in English, as shown in (78), they notice that in Thai the covert inclusive generic pronoun can have both human beings and plants in its reference, as shown in (77). However it is unclear whether the predicates in (77) are plural in agreement with the null subject with a plural interpretation.

(77)   thâa Ø dâayráb khwaamrák khwaamʔawcaysày Ø kôo cá   too   rew.
         if   get   love   care   then FUT grow fast
         'If ones (animals, plants included) get love and care, ones will grow up faster.'
         (Holmberg & Phimsawat, 2015, p. 60) .

(78)   One grows well, if one gets good care and a lot of nutrition.
         (Holmberg & Phimsawat, 2017, p. 19)

Holmberg and Phimsawat (2015, 2017) point out that although the inclusive generic pronoun may also contain other animate entities, it does not exclude human speaker and hearer, but just turns the value of the gender feature from [+human] to [±human], or from [+animate] to [±animate].

2.4.1.2   Moltmann (2006)

Person

Moltmann proposes a '1st person' element in the phi-features of the inclusive generic pronoun. The speaker is not necessarily in a real situation, but puts himself/herself in the shoes of others in subjunctive situations. Moltmann (2006) insists that this kind of generic generalisation is made over sentient individuals, not a group, a class or a kind. She builds this property into the covert sentential generic operator which she proposes.

Number

Moltmann suggests that generic 'one' does not refer to a group, class or kind, due to

---

[3]   Holmberg and Phimsawat (2017) think English impersonal 'one' and numeral 'one' share the same linguistic derivation, and in turn suggest that an impersonal pronoun is not necessarily to originate with a human denotation for its human reference. However, in literature we may find English impersonal 'one' may be traced back to French 'on', which derives from Latin 'homo' meaning 'human' (cf. Malamud, 2012, among others).

the fact that generic 'one' does not go with a collective predicate. Generic 'one' cannot be the antecedent of a reciprocal expression like 'each other' in (79a), nor can it be the subject of a kind-referring predicate like 'rare' in (79b).

(79)   a. *One does not know each other well.
         b. *One could become rare.
         (Moltmann, 2006, p. 260)

Gender

By presenting the following example, Moltmann (2006) suggests that the referents of generic 'one' is not restricted to human beings, but conscious beings in general.

(80)   If one is a Martian, one is not susceptible to human disease.
         (Moltmann, 2006, p. 259)

2.4.2   Phi-features of kind *ren* and inclusive generic *ren*

The phi-features of nouns and pronouns in Chinese are more morphosemantic properties and generally do not involve syntactic manifestation. Take the person feature for example, I will focus on its inclusivity, i.e. the content of participants, rather than 1st, 2nd and 3rd person.

Person

As claimed by Moltmann (2006), the inclusive generic pronoun 'one' is speaker-oriented. Inclusive generic *ren* is also used this way, at least forming an important part of its construal. A kind-referring DP is taken as a proper name and has third person reference. The referential domain of inclusive generic *ren* overlaps with that of kind *ren*, or more precisely, approximating to that of kind *ren*, considering the latter contains a truly 'universal' reading like in the statement 'Human beings are mammals', while the former always allows exceptions.

I argue that the semantic construal of an inclusive generic pronoun is not the speaker, the hearer, and other people as a whole, but any individual among this set.

Number

I assume inclusive generic *ren* is [SINGL] in number. Based on the behaviour of Chinese inclusive generic pronoun *ren*, I demonstrate that the inclusive generic pronoun *ren* is both semantically and syntactically singular, referring to any individual among the set of referents including the speaker, the addressee, and all others. This argument is

underpinned by examples like (81), when a reciprocal relation is required among agents by the predicate modified by *xianghu* 'reciprocally' and therefore a plural subject is needed.

(81) a. Ren   yinggai xianghu   zunzhong.
          person should   reciprocally respect
          'People should respect each other.'

      b. [$_{\text{AdvP}}$ Ren   yu ren   zhijian] *pro* yinggai xianghu   zunzhong.
          person and person between   should   reciprocally respect
          'People should respect each other.'

Gender

As examples from empirical data may show a conflation between humans, other animals, plants, or even some inanimate kinds, either the animacy or humanness features may be employed accordingly. For example, based on Ackema and Neeleman (2018), den Dikken (2011) and Harbour et al. (2008), and the potential extension of the inclusive generic pronoun to include other animate, or even inanimate, entities besides human beings, I suggest that the animacy feature should also be used in the analysis of generic *pro* and PRO, which cannot be marked solely by [±human] in the gender feature.

2.4.3 The phi-feature hierachy

2.4.3.1 Heim and Kratzer (1998)

Accounts of phi-features rank them in various orders based on agreement requirement and other linguistic characteristics of a certain language, e.g.

(82)   Noyer's (1992) Universal Feature Hierarchy
        person features > number features > gender features > class features
        (repeated from Harley & Ritter, 2002, p. 484)

The stratified structure of the phi-features of a pronoun by Heim and Kratzer (1998), as shown in (83), sorts individual phi-features by 'functional application' and hosts them in respective nodes within DP.

(83)   DP
              ╱╲
      [third person]   DP
                  ╱╲
            [feminine]   DP
                      ╱╲
                [singular]   DP
                              │
                            she₁
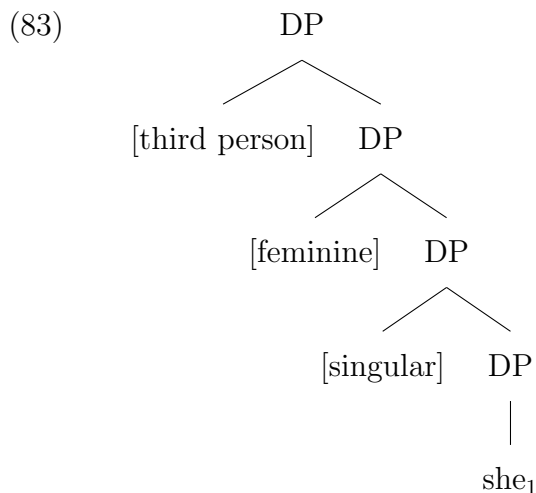
(Heim & Kratzer, 1998, p. 244)

Based on the structure in (83), I try analysing the phi-feature layers of *ren*s with a generic reading in a different order from that of (83), i.e. the gender feature, the number feature, and the person feature, as shown in (84).

The sub-feature humanness of the gender feature is claimed to be the fundamental feature of an inclusive generic pronoun by Holmberg and Phimsawat (2017). Apart from this, the value of this feature is morphologically obvious in Chinese.

The number feature of Chinese DPs is implicit in most cases, but reacts more directly in accordance to the predicate, other arguments, and its modifiers, e.g. the subject of *miejue* 'extinct' must be a group like species, the subject of *jihe* 'gather' must be plural, and a DP modified by *dou* must be mass or plural.

The person feature may also get construed via the predicate and other arguments, but is more context-sensitive. This structure is not appropriate for the person feature with multiple inclusions. Therefore I just list all acceptable referents here for now, and will adjust this node in the following steps, until an ideal representation of it finally shows up. Besides, I will leave other relevant features, e.g. animacy[4], for my following analysis on (c)overt generic expressions in Chinese in Chapter 5, e.g. a generic pronoun that might also includes non-human referents in its person domain.

---

[4] Some challenging data may exist in the inclusive generic *pro*, which could include more animate objects besides human beings. However, firstly I haven't find any exact example up to now and secondly this is not the focus of this writing.

(84)

```
                    DP
                   /  \
              Person   DP
                      /  \
                 Number   DP
                         /  \
                    Gender   DP
                             /\
                            /__\
                            ren
```
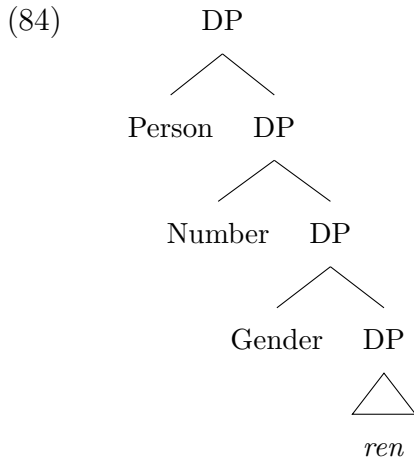
The phi-feature structures of inclusive generic *ren* and kind *ren* with detailed values at this stage are shown in (85a-b) respectively. For the person feature, I list all the referents in the referential domain of inclusive generic *ren*. This feature node clearly shows the difference between kind *ren* and inclusive generic *ren* in their semantic interpretations. For the sub-feature humanness of the gender feature, I adopt the privative form, i.e. [human], as it is its almost default value. Exceptional values may be covered in further analysis, and this node will be adjusted accordingly.

The question mark in the following structures shows that this node is one that I am tentatively proposing, to highlight some missing aspects of the original proposal, which will be modified below. I clarify this further below.

(85)   a.

```
                              DP
                         /         \
                    Person          DP
                       |           /   \
                  ┌──────────┐ Number   DP
                  │ Speaker  │    |     /  \
                ? │ Hearer   │   [SG] Gender  DP
                  │Other people│        |      |
                  └──────────┘       [human] (generic) ren
```

b.

```
                              DP
                    ┌──────────┴──────────┐
                 Person                   DP
                    │              ┌───────┴───────┐
        ?[The whole human species] Number          DP
                                   │          ┌─────┴─────┐
                                [SG/PL]     Gender         DP
                                             │             │
                                          [human]    (kind) ren
```
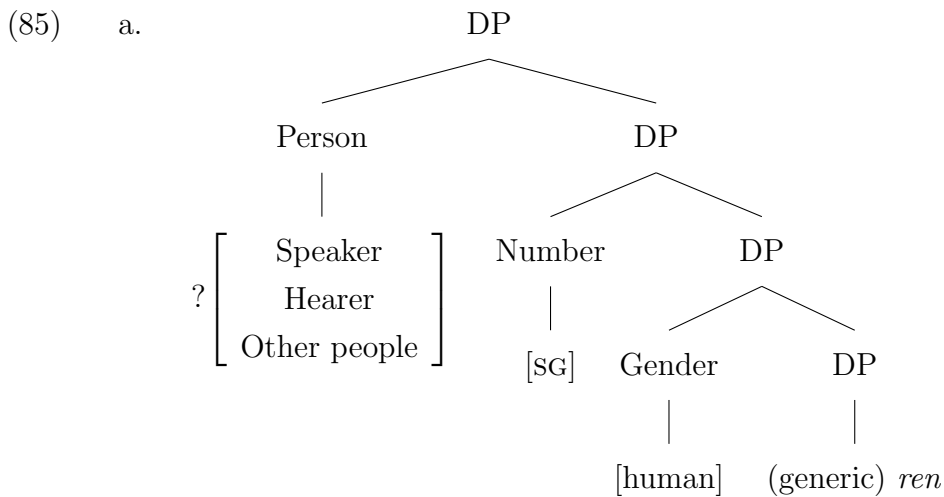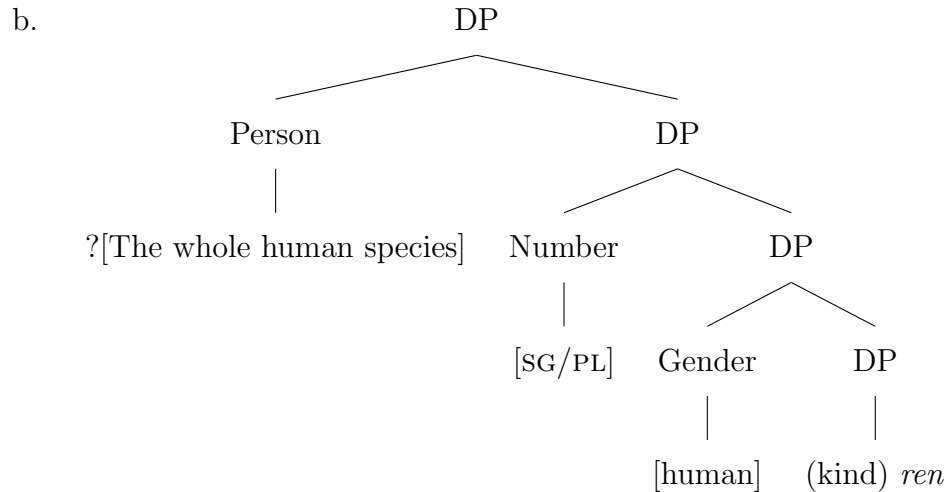
Kind *ren* ontologically refers to 'human beings' as a species, which obviously is [+human] in the humanness feature. Its number feature is [sg/pl], depending on its compatibility with the verb and other arguments. For example, if we relate the environmental changes with human beings' activities in (86), here kind *ren* is plural or collective in meaning; if we compare a human being with a machine in (87), here kind *ren* may be understood as a singular individual instance, or collective as a species/group.

(86)   Huanjing   bianhua yu   ren   youguan.
        environment change   with human relevant
        'The environmental change is relevant with human beings.'

(87)   Ren   shi fuza   de, jiqi   bushi.
        human BE complicated DE, machine not be
        'A human being is complicated, while a machine is not.'/
        'Human beings are complicated, while machines are not.'

Besides the two reasons in previous accounts for assigning humanness as the root feature of the inclusive generic pronoun, inclusive generic *ren* takes the identical morphological form of kind *ren* with ontological reference to 'human beings', which is a direct proof of the two expressions being cognate.

2.4.3.2 Harley and Ritter (2002)

Inspired by the phonological feature geometry, Harley and Ritter (2002) proposed a morphological feature geometry to represent the hierarchical configuration of phi-features of referential expressions, as illustrated in Figure 2.2.

Referring Expression (= Pronoun)

PARTICIPANT   INDIVIDUATION

Speaker Addressee   Group   Minimal   CLASS

Augmented Animate Inanimate/
Neuter

Feminine   Masc ...
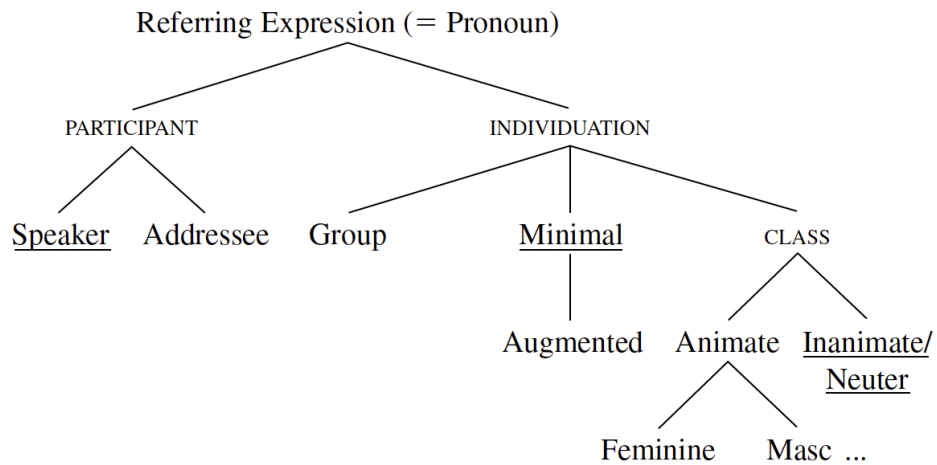
Figure 2.2: Feature geometry of pronouns (Harley & Ritter, 2002, p. 486)

In this geometry, the interrelationship of phi-features is directly demonstrated via the dependency relations between them. Both discourse-dependent and -independent features of referential expressions, as well as the dependency relations between the features are presented in this structure. For each feature, only positive values are shown. This does not affect the representation of 3rd personal pronouns, as the PARTICIPANT node may have zero dependents (or there is no PARTICIPANT node at all; cf. Harley and Ritter (2002)).

In this section I adopt Harley and Ritter's (2002) feature geometry to present distinct phi-features of the two *ren*s, as shown in (88) and (89) respectively, with their main distinction in REFERENT and values of number, both are highlighted with wavy underlines. As their original feature geometry only involves referential pronouns, the description of a kind noun and a generic pronoun entails certain adjustments to the nodes. For example, it cannot show properly a generic pronoun whose person reference includes the speaker, the addressee, and anyone else, with exceptions. To deal with this problem, I change PARTICIPANT to REFERENCE, so as to include all the objects that the inclusive generic pronoun is referring to. Then I add a new dependent 'nonpartici- pants' beneath the REFERENT node to indicate any others apart from the speaker and addressee but involved in a statement. However, the inclusive generic pronoun *ren* is syntactically singular. Further, considering the utterance may be spoken, written or through some other method, and may be a monologue instead of a dialogue or some other interlocution, I change 'speaker' to 'author' here, a term based on Noyer (1992) (repeated from Harbour et al., 2008).

(88)

(generic) *ren*

REFERENCE — INDIVIDUATION

REFERENCE: Author, Addressee, ? Nonparticipants, Minimal

INDIVIDUATION: Minimal, CLASS

CLASS → Animate → Human

(89)

(kind) *ren*

REFERENCE — INDIVIDUATION

REFERENCE: ? The whole human species

INDIVIDUATION: Group, CLASS

CLASS → Animate → Human
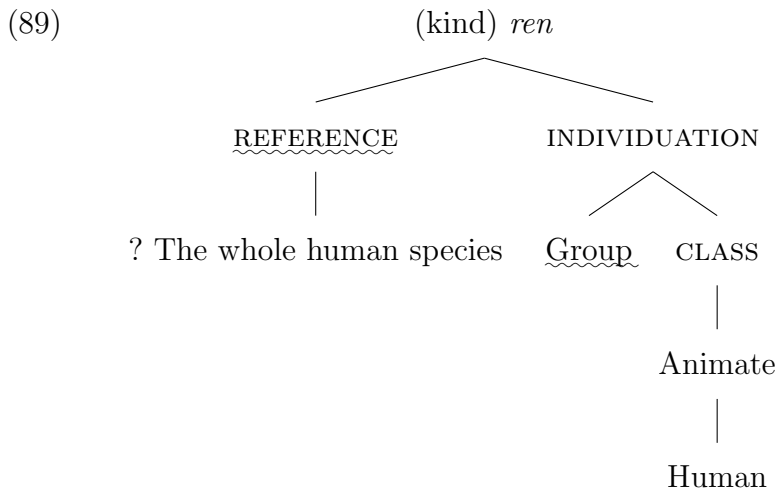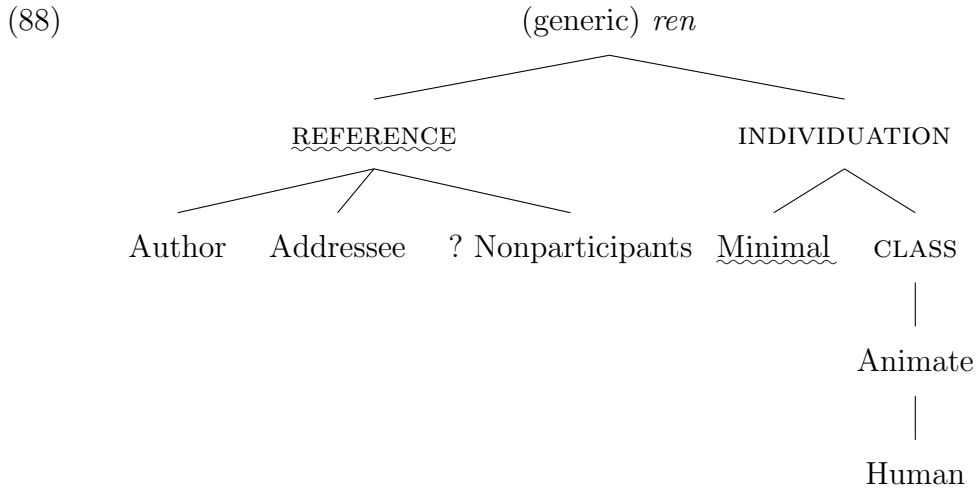
2.4.3.3 Ackema and Neeleman (2018)

One of the promising solutions to the issue of how to present the person feature of kind and inclusive generic *ren*s appropriately and comprehensively is from Ackema and Neeleman (2018).

One characteristic that Ackema and Neeleman (2018) share with Harley and Ritter (2002) is that their representations of person features are privative.

Ackema and Neeleman (2018) divide the referents of pronouns according to their participation in a discourse, and symbolise the three types of them as i for speaker, u for addressee, and o for others. Further, Ackema and Neeleman (2018) divide 'others' into three types, i.e. others associated with the speaker (with the symbol a_i), others associated with the addressee (with the symbol a_u), and o is preserved for absolute others without any association with the speaker or the addressee.

According to Ackema and Neeleman (2018), 'various languages have dedicated impersonal pronouns, that is, pronouns exclusively used for impersonal readings. A case in point is English *one* in sentences like *One should never drive on the wrong side of the road*' (p. 105). They claim that dedicated impersonal pronouns are syntactically singular while semantically plural in agreement. These pronouns function singularly in syntactic agreement, but are semantically construed as 'people in general', including the speaker, the addressee, and all the others. This phenomenon has been observed in Holmberg and Phimsawat (2015, 2017) and Moltmann (2006) too.

Here I will refer to Carlson's (1999) figure to show the relationship between kind *ren* and inclusive generic *ren*. Suppose kind *ren* is a universal concept, referring to all humans, or a species as a whole. With background knowledge the interlocutors realise that the statement is not biological human species but a certain set of common people. Then the restriction of the inclusive generic quantification identifies that certain set of people. The inclusive generic operator binds the overlap domain. By inclusive generic quantification we have the understanding that there are exceptions.
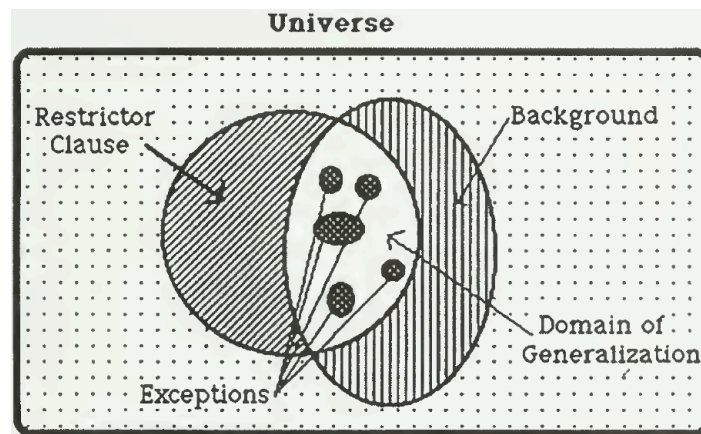
Figure 2.3: Universal closure (Carlson, 1999, p. 19)

The terminology 'arbitrary' in Ackema and Neeleman (2018) may lead to confusion with the typology of generic pronouns by (Holmberg & Phimsawat, 2015) which is the starting point of my analysis of generic pronouns. See Chapter 1 for relevant introduction and detailed discussion in Chapter 4. I will use 'quasi-inclusive generic' instead of 'arbitrary' in Holmberg and Phimsawat's (2015) account and will return to this topic in Chapter 4.

Within the referent domain, the readings of the three types of generic pronouns may roughly be represented as follows. The proportions of the three types of referents in (90), in terms of *i*, *u* and *o* borrowed from Ackema and Neeleman (2018), do not and cannot reflect the true proportions in real world. The main reason is that none of them are constant, but vary according to situations in which they occur. One thing

that may be for certain in most cases is that the subset of o is larger than those of i and u. $i + a_i$ in (90b) decodes 'we' with a quasi-generic reading in a temporally or locatively restrained statement, referring to the speaker and his/her associates in a certain temporal/locative situation. o in (90c) refers to others apart from the speaker and addressee, but it is also restricted temporally or locatively and seldom takes that large proportion as (90c) shows.

(90)

(a) inclusive   (b) quasi-inclusive   (c) exclusive
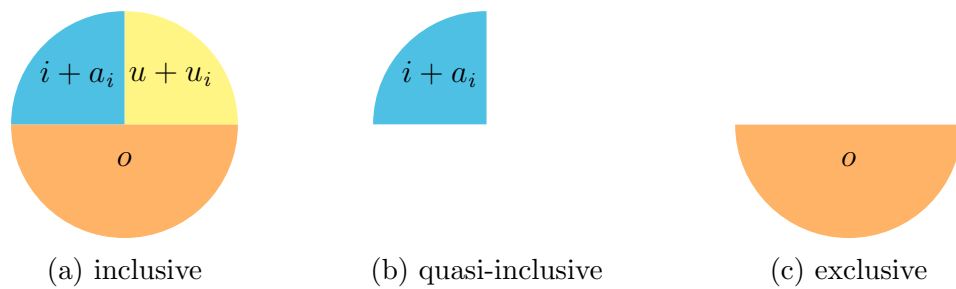
Figure 2.4: Generic pronouns

Having explored various claims and structures of phi-features, together with the characteristics of kind *ren* and inclusive generic *ren*, I propose the following structures for displaying the phi-features of Chinese generic expressions.

(91)   a.

b.

```
                         DP
                        /  \
                Reference    DP
                   |        /  \
                  S_o   Number   DP
                          |     /  \
                        [pl]  Class   DP
                                |      |
                           [human]  (kind) ren
```
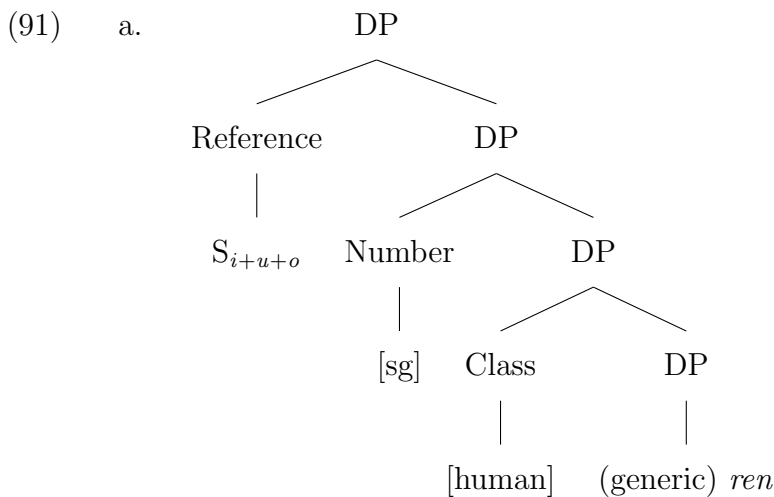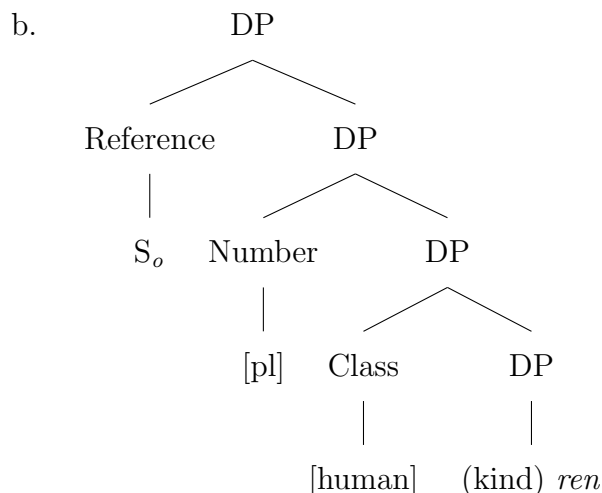
So far, I have presented how kind *ren* and inclusive generic *ren* are distinct in their phi-features. How these features are valued will be shown in Chapters 3 and 4, and in turn the features and values serve as an influential element on the (c)overtness of generic pronouns in Chapter 5.

2.4.4   Proportion

There are arguments on whether the generic operator, which is assumed to be a quasi-universal generalisation, is a quantifier at all, and if it is, what valid percentage a generic expresses.

Recall section 2.3.6.3. Predicates like *miejue* 'extinct' require their agent be an entire group, not any individual nor parts of them. Carlson (1977) thinks that (92a) amounts to strictly universalness, while (92b) allows exceptions. (92a) is a kind of taxonomic judgement, which requires the generalisation apply to every member of the group, or the group as a whole, with no exceptions. Therefore it is a universal generalisation. (92b) is not kind-denoting, but a near-universal generalisation based on the speaker's subjective judgement. There must be exceptions independent of the speaker's personal comment.

(92)   a.   Dogs are mammals.
        b.   Dogs are good pets.
             (Carlson, 1977, p. 439)

Cohen (1999) points out that the generic operator is analogous to the adverb of quantification 'usually'. However, he also agrees that 'usually' is the counterpart of 'most',

which in fact invalidates his parallelism of the generic operator and 'usually'. This is because for a generic to be true, the portion of the individuals that possess that certain property may vary between a part to all, while 'most' does not extend as far as 'all'.

Although the statement in (93a) is true for the pheasants as a species, as it is describing 'the mode of giving birth' (Carlson & Pelletier, 1995, p. 58), it is only female pheasants that can actually lay eggs. Therefore it does not amount to 'Most pheasants lay speckled eggs'. In Chinese *kongque* refers to the peafowl, and needs a gender word to indicate a particular gender, i.e. *gong kongque* 'male peafowl' and *ci kongque* 'female peafowl'. It is the male peafowl (peacock) that has a very long tail which can be spread like a fan. The probabilities for pheasants that lay eggs and peafowls that have very long tails are definitely less than 1, and possibly fluctuating around 0.5. Similar examples are *taisheng dongwu* 'viviparous animals' and *buru dongwu* 'mammals'. Although it is female animals of their species that bear living young that have already developed in their bodies and suckle their young, the whole species is thus entitled.

(93)   a.   A pheasant lays speckled eggs.
           (Carlson & Pelletier, 1995, p. 58)
     b.   Ducks lay eggs.
           (Liebesman, 2011, p. 411)

(94)   Kongque kai   ping.
       peafowl   spread screen
       'A peafowl/peacock spreads its tail.'

Certain important properties belonging to an individual or some individuals, if they are of essential significance for the whole kind, can also be considered as the properties of the whole kind (cf. Carlson & Pelletier, 1995). For example, 'cubic equations' were reported to be solved in different continents and different centuries, while in Europe they were firstly solved by three mathematicians respectively in the 16th century. As it is an important step for the development of human knowledge, the following statement may be uttered and acceptable based on the interlocutors' understanding.

(95)   Man learned to solve cubic equations in the 16th century.
       (Carlson & Pelletier, 1995, p. 83)

As another example, not all mosquitoes carry malaria. There are distinctions in gender, season, region, etc. for mosquitoes to carry malaria. Nevertheless carrying malaria is considered a typical capability of mosquitoes. Therefore as long as some mosquitoes

are found to be carrying malaria, they are enough to validate the statement.

(96)   Mosquitoes carry malaria.

Kind-referring DPs may also refer to a part of it restricted in certain regions or periods. In (97), either 'man' can only refer to humans in different regions. It cannot include mankind throughout the time, nor can it even include all human beings in such periods as mentioned below.

(97)   a.   Man lived in Australia for at least 40,000 years.
              (Carlson & Pelletier, 1995, p. 65)
         b.   Man has lived in Africa for more than 2 million years.
              (Carlson & Pelletier, 1995, p. 6)

As for inclusive generics, they do not appear in a taxonomic judgement or with a property predicate. They generalise over certain conditions and this kind of generalisation quantifies on any individual within some restriction, though allowing exceptions.

To sum up, although certain predicates matching kind *ren* describe the characteristic property of the species, the composition proportion may vary, and the number of individuals bearing that property may range from 1 to all; the predicate matching inclusive generic *ren* provides a generalisation that can apply to any individual among a certain group or the group of all humans, though allowing exceptions. The composition proportion is therefore supposed to be approaching the total number of that group.

2.5   The ambiguous *Yi-ge ren*

Inclusive generic *ren* can only appear in bare form or as shown here a NumP *yi-ge ren*. For example, to generalise that anyone has his/her own way of life, either (98a) or (98b) is applicable without deviation in meaning.

(98)   a.   Ren   you ren   ziji de huofa.
              person have person self DE life style
              'One has one's own life style.'
         b.   Yi-ge ren   you yi-ge ren   ziji de huofa.
              one-CL person have one-CL person self DE life style
              'One has one's own life style.'

An interesting property of *yi-ge ren* is that apart from being just a common NumP, in many cases it is a fixed phrase in which no element can be alternated. For example, no other numerals or other NPs are applicable for the NumP *yi-ge ren* to be an alternative of inclusive generic *ren*. The interpretation of *yi-ge ren* is ambiguous without necessary information from context, and has its own particular distribution, the main types of which are summarised as follows.

2.5.1 *Yi-ge ren* as a NumP indicating quantity

In Chinese, *yi-ge ren* is a NumP [number-classifier N] in form, which in many accounts is subsumed to an indefinite and cannot appear in subject or topic position. However, in empirical data a NumP in subject position like (99) is acceptable in some cases.

(99) [$_{\text{NumP}}$ San-ge xuesheng] jiu gou   le.   (NumP indicating quantity)
       three-CL student   just enough ASP
      'Three students are just enough.'

This phenomenon can be analysed according to Y.-H. A. Li's (1998) account of 'quantity number expressions' and 'non-quantity indefinite individual-denoting expressions', as represented in (100).

(100)   a. [$_{\text{NumP}}$ san[-]ge   xuesheng]
                three[-]CL student
        b. [$_{\text{DP}}$ D [$_{\text{NumP}}$ san[-]ge   xuesheng]]
                        three[-]CL student
        (Y.-H. A. Li, 1998, p. 696)

The structural distinction between the two identical numeral expressions decides their distributional distinction. The amount indicating NumP *san-ge xuesheng* in (100a) can serve as the subject in (99). *Yi-ge ren* 'a person' has similar distributions to those of *san-ge xuesheng* as shown in the following examples.

(101)   [$_{\text{NumP}}$ Yi-ge ren]   jiu gou   le.   (NumP indicating quantity)
              one-CL person just enough ASP
        'One person is enough.'

When such a NumP occurs after a personal pronoun, it may form a compound con-

stituent with that personal pronoun like in (102).

(102)   [Tamen [san-ge   ren]]   shi hao   pengyou.
         they   three-CL person be good friend
         'The three of them are good friends.'

2.5.2   *Yi-ge ren* as an indefinite DP

Yi-ge ren may function as a nominal and express a specific or indefinite meaning referring to a certain person or certain people, e.g. in examples (103-105).

(103)   San   ren   cheng hu.   (idiom)
         three person make tiger
         'If there are three people saying there is a tiger, then people will believe there
         is one indeed.'/
         'A lie repeated by many people will be accepted as a truth.'

Different from (103) as an idiom, an indefinite like the non-amount-indicating but individual-denoting expressions *san-ge xuesheng* in (104) and *yi-ge ren* in (105) cannot reside in subject position independently, because the null D in the DP *san-ge xuesheng* doesn't have any proper governor (cf. Longobardi, 1994). It has to follow the existential marker *you* to serve as the subject while keeping the indefinite reading.

(104)   You san-ge   xuesheng bei   pai   qu dasao jiaoshi.
         exist three-CL student   PASS assign to clean classroom
         'There were three students who were assigned to clean the classroom.'

(105)   You yi-ge   ren   bei   tamen zhao le   lai   dasao fangjian.
         have one-CL person PASS they   find ASP come clean room
         'A person was found by them to clean the room.'

(106) is grammatical because here the indefinite DP in object position is existentially bound (cf. C.-T. J. Huang et al., 2009; Y.-H. A. Li, 1998, for relevant account).

(106)   Laoshi pai   le yi-ge   xuesheng/san-ge xuesheng dasao jiaoshi.
         teacher assign LE one-CL student/three-CL student   clean classroom
         'The teacher assigned a student/three students to clean the classroom.'

2.5.3 *Yi-ge ren* as an adverbial intensifier

Yi-ge ren as an adjunct to the *v*P is an adverbial intensifier meaning 'alone/on one's own', as illustrated in (107).

(107) Ni/Ta   wufa   [yi-ge   ren]   wancheng   zhe-xiang renwu.
      you/he/she cannot [one-CL person] accomplish this-CL   task
      'You/He/She cannot accomplish this task alone.'

Compare with (108), where the subject is understood as plural, and so the intensifier is modified accordingly into *san-ge ren*. This is characteristic of adnominal intensifiers.

(108) Wo dasuan wo he   Laoli Laozhang [san-ge   ren]   qu.
      I   plan   I   and Laoli Laozhang three-CL person go
      'I plan to go with Laoli and Laozhang.'

The example (109) seems to be similar to (101) in that in these two sentences, the subject position seems to be occupied by the same phrase *yi-ge ren*. However here the subject in (109) should be the agent of the action *wancheng zhe-xiang renwu* 'accomplish this task', and neither an indefinite DP nor a quantity-indicating NumP *yi-ge ren* can take this role in subject position. Therefore we must posit the existence of a covert subject *pro* in (109), i.e. the omission of the subject, with the phrase *yi-ge ren* acting as an adnominal intensifier restricting reference to a person and may also indicate 'alone/on one's own' in some cases.

(109) (*pro*) [Yi-ge   ren]   wufa   wancheng   zhe-xiang renwu.
          one-CL person cannot accomplish this-CL   task
      'A single person cannot accomplish this task.'

A number feature mismatch between the subject *nimen/tamen* (2PL) and the intensifier *yi-ge ren* (SG) will cause a sentence to be ungrammatical, as shown in (110).

(110) *Nimen/Tamen [yi-ge   ren]   wufa   wancheng   zhe-xiang renwu.
      you (2PL)/they [one-CL person] cannot accomplish this-CL   task
      'You/They cannot accomplish this task alone.'

Unlike other NumP, *yi-ge ren* is mainly used to emphasise 'alone/on one's own', be

it an adnominal intensifier or an adverbial intensifier for the predicate. NumPs with other numerals act more as adnominal intensifiers. The nuance in emphasis is shown in the following two examples. (111) implies that it's 'you/they' not others that cannot accomplish this task.

(111)   Nimen/Tamen [liang/ji-ge   ren]   wufa   wancheng zhe-xiang renwu.
         you (PL)/they [two/several-CL person] cannot accomplish this-CL   task
         'You/They cannot accomplish this task alone.'

(112)   *Nimen/Tamen wufa   [liang/ji-ge   ren]   wancheng   zhe-xiang renwu.
         you (PL)/they cannot [two/several-CL person] accomplish this-CL   task
         'You/They cannot accomplish this task alone.'

The NumP *yi-ge ren* as an adverbial intensifer behaves just like the reflexive adverbial *ziji* as presented in (113-114).

(113)   Ni/Ta   wufa   [ziji] wancheng   zhe-xiang renwu.
         you/he/she cannot self   accomplish this-CL   task
         'You/He/She cannot accomplish this task alone.'

(114)   Nimen/Tamen wufa   [ziji] wancheng   zhe-xiang renwu.
         you (2PL)/they cannot self   accomplish this-CL   task
         'You/They cannot accomplish this task alone.'

The distinction between *yi-ge ren* and *ziji* lies in that either single or plural noun/pronouns (*ni/ta* 'you (2SG)/he/she' and *nimen/tamen* 'you (2PL)/they') as shown in (113-114) can have *ziji* as an intensifier, while the condition for a NumP functioning as an adverbial intensifier is that the numeral must always be *yi* 'one', and the noun must always be *ren* 'person' (cf. C.-T. J. Huang et al., 2009). This restriction renders (115) ungrammatical.

(115)   *Nimen/Tamen wufa   [san-ge   ren]   wancheng zhe-xiang renwu.
         you/they   cannot [three-CL person] accomplish this-CL   task
         *'You/They cannot three people accomplish this task.'

2.5.4 *Yi-ge ren* denoting genericity

Apart from the alternatives illustrated above, in many cases the alternative *yi-ge ren* 'a person' is employed to replace inclusive generic *ren*, just like 'a person' to replace 'one' in English and similar alternatives in some other languages. Wang (1984) thinks that indefinite 'one' in English derives from numeral 'one' (there are different claims on the origin of impersonal 'one' which have been presented before), which differs from *ren* in Chinese as *ren* derives from 'human' *ren*. However, Wang (1984) also observes the occurrence of *yi-ge ren* in modern Chinese, which parallels generic *one*.

Unlike data from other languages, in which the two expressions may differ obviously in form, the common alternative *yi-ge ren* shared by both inclusive generic *ren* and kind *ren* brings with it the question of whether bare *ren*s are uniformly of the type noun.

My claim is that firstly, *yi-ge ren* is not a felicitous alternative to the two generic expressions in all cases, the three forms differing in interpretation and distribution; secondly, various interpretations could be induced from their features, as well as their compatibility with the verb, the tense, another argument in the context if it exists, and discourse information.

Apart from being an amount indicating NumP, a bare indefinite DP in the subject position may be interpreted as a generic expression (generically construed as 'any one of a certain group'), in which case it is bound by a generic operator, as illustrated in (116).

(116)   Op$_g$ [$_{DP}$ Yi-ge   ren]   hui you ziji de dasuan.   (inclusive generic)
              one-CL person may have self DE plan

         'A person may have his/her own plan.'

Or this NumP can replace kind *ren* in (74), as shown in (117). Notice the two arguments must be parallel in form.

(117)   Yi-ge   ren   he yi-zhi yao   you shenme qubie?   (kind *ren*)
         one-CL human and one-CL monster have what   distinction

         'What's the distinction between a human and a monster?'

Another reading of *yi-ge ren* in seeming 'subject' position like in (118) is in essence an NumP functioning as an adverbial intensifier, as further illustrated in (119) with an overt subject.

(118)   *pro* [_{AdvP} yi-ge ren] shi zuo bu cheng zhe-jian shi de.

(119)   Ni/Ta   [_{AdvP} yi-ge   ren]   shi zuo bu cheng   zhe-jian shi   de.
         you/(s)he   one-CL person be do not complete this-CL thing DE
         'You/(S)he cannot accomplish this thing alone.'

As a predicate *yi-ge ren* can be construed as kind *ren* type-shifted to indicate a property
of the subject, whereas inclusive generic *ren* cannot undergo such a shift. Kind *ren* in
this use can drop the number+classifier *yi-ge* 'one-CL' or just the number *yi* 'one'
without changing the meaning.

(120)   Ta   shi ((yi-)ge)   ren,   bu shi ((yi-)ge)   gui.   (kind *ren*)
         he/she be ((one-)CL) human, not be ((one-)CL) ghost
         'He/She is a human, not a ghost.'

Another possible reading of *yi-ge ren* in predicate position is as an AdjP, describing the
status of the subject being alone. In this case the number+classifier *yi-ge* or the number
yi cannot be omitted. Otherwise the predicate NP *ren* still receives the transformed
kind-denoting reading, as in (120).

(121)   Ta   shi yi-ge   ren.   (AdjP)
         he/she be one-CL person
         'He/She is alone.'

Compare with (122), in which case the classifier may be absent.

(122)   Ta   shi [yi(-ge) ren]   wancheng   de.   (adverbial intensifier)
         he/she be one-CL person accomplish DE
         'He/She did it alone.'

2.5.5   Some other readings

Another different interpretation and distribution of *ren* is also well exemplified in (123).
Here *ren* is emphasising on normal/positive properties of human beings. It serves as
the predicate, in which position inclusive generic *ren* is unable to reside. Here *ren*
won't occur solely but must be accompanied by number+classifier *yi-ge* or at least the
classifier *ge*.

(123)   Zuo ge ren   ba.
         be   CL person EXCL
         'Be a human.' or
         'You should behave as a normal human being.'

(124) behaves like the definite DP usage in Cantonese, but it is acceptable in spoken Mandarin Chinese only when expressing some negative comment from the speaker.

(124)   (Zhe) Ge ren!
         (this) CL person
         'What a (naughty/disgusting/...) person!'

2.6   Summary

In this chapter I provided a general introduction of *ren*, which is categorised as either a noun or a pronoun; further, a bare noun *ren* may function as a kind noun, an abstract noun, or just a common noun, with singular or plural values in number feature, while a bare pronoun *ren* may be inclusive generic referring to anyone in general but with more or less restrictions, or a third person singular/plural referential pronoun.

I mainly examined the distinction between kind *ren* and inclusive generic *ren* via empirical observation of their distribution and feature analyses, and proposed seven types of test, i.e. whether they can be modified or modifying other elements, their different alternatives *renlei* and *ni*, their distribution in negation, whether they can be focused, predicative noun/pronoun, arguments of certain predicates, and interaction with other arguments in the same domain. The data have supported my claim that kind *ren* and inclusive generic *ren* are distinct in distribution.

I also claim that although inclusive generic *ren* derives from kind *ren* and share the same [human] value in gender feature, they are distinct in person and number features.

I generalise that, for a certain property to be characteristic of the whole set, the proportion of individual members sharing certain property varies in kind *ren* and inclusive generic *ren*. The proportion for a property of kind *ren* to be true ranges from one single individual member to all without exceptions, while the proportion for inclusive generic *ren* is always approaching the total number of the restricted set with exceptions.

Finally I investigated the behaviour of the NumP *yi-ge ren*, which can be a quantity denoting NP, an adnominal intensifier, an adverbial intensifier, etc. *Yi-ge ren* as an

intensifier functions like *ziji* in many cases, but requires its antecedent be singular. *Yi-ge ren* can be an alternative to either kind *ren* or inclusive generic *ren* but under contextual restrictions. For example, *yi-ge ren* cannot go with kind-denoting predicates as such predicates requires a kind-referring DP representing all members in that kind.

Chapter 3

The Source of Genericity

In this chapter, I explore the source of genericity in Mandarin Chinese through the investigation of various distribution and interpretations of *ren* in different contexts, especially in certain ambiguous configurations in Chinese. In turn, I seek to look at the function of a covert generic operator on generic DPs. Finally, I try to generalise the source of the inclusive generic interpretation of *ren* in Chinese. This chapter comprises four sections: section 1 introduces the literature on genericity; section 2 looks at the main structure and functions of the generic operator; section 3 considers various sources of Chinese genericity from different types of contextual information and the interaction or blocking between the generic operator and other quantifiers competing for the same argument; section 4 sums up my observation and analysis of the genericity sources in Chinese.

3.1   Literature on genericity

3.1.1   Sentential generics and generic DPs

Although there are various accounts defining genericity in the literature over the past few decades, genericity mainly involves two types of phenomena: one generalising the regularity of events or attributing a typical property to an individual argument, as what are expressed by sentences (1-2) respectively; and the other referring to a kind, like the subject DP 'The potato' in (3).

(1)   John smokes a cigar after dinner.
        (Carlson & Pelletier, 1995, p. 3)

(2)   John is intelligent.
        (Mari et al., 2013, p. 35)

(3)   a.   The potato was first cultivated in South America.
        b.   The Irish economy became dependent upon the potato.
              (Carlson & Pelletier, 1995, p. 2)

Sentences like (1-2) are termed as 'generic/characterising sentences'[1] generalising a feature of the sentence (cf. Carlson & Pelletier, 1995; Mari et al., 2013), which is therefore termed as 'sentential genericity' (Dobrovie-Sorin & Beyssade, 2012). The sentential generic is realised through individual-level predicates, which in most cases are stative/non-episodic (cf. Carlson & Pelletier, 1995, among others). This kind of predicate describes a seemingly timeless law-like behaviour, like in (4), or remains true at least in a certain period, as illustrated in (1-2). As a generalisation over regularity, norm, habituality, etc., a sentential generic is often found in the present tense.

(4)   A planet is round.

However this kind of generalisation is neither timeless nor just in present tense. It may also occur in other tenses as long as that generalisation remains valid within that period. As Dahl (1975) observes, there is also 'generic past tense' or 'generic future tense' as long as it is valid during a certain period.

(5)   When I was a boy, I wrote with my left hand, but now I write with my right
        hand, although I will probably write with my left hand again when I grow older.
        (Dahl, 1975, p. 103)

A similar observation has been made by Carlson and Pelletier (1995) as in (6), where 'used to' facilitates a generic reading of the sentence.

(6)   John used to smoke a pipe.

---

[1]   According to Carlson and Pelletier (1995), sentences quantified over by adverbs like 'usually', 'typically', 'always', 'often', 'sometimes', 'rarely' or 'never' are characterising sentences.

(i)   John usually/always/often/rarely/never smokes a pipe.
        (Carlson & Pelletier, 1995, p. 7)

Therefore, the more precise description of sentential generics is that they are like characterising sentences with quantifying adverbs 'generally' or 'typically'. For the convenience of statement, I will use characterising sentences for sentential generics only hereafter.

(Carlson & Pelletier, 1995, p. 7)

Nominal phrases like 'The/the potato' in (3) and 'A planet' in (4) are termed as 'kind-referring NPs' or 'generic NPs' (Carlson & Pelletier, 1995, p. 2), which may occur in either subject or object position as shown in (3). I will refer them as generic DPs hereafter.

These two kinds of genericity may co-occur in the same sentence, i.e. a generic argument with regularity/property-denoting predication (cf. Carlson & Pelletier, 1995; Mari et al., 2013; Pelletier, 2009, among others), as shown in (7).

(7)   A bird has wings.

Sentential generics are termed as 'I-generics' as the distinction between a characterising sentence and an episodic statement lies in the syntactic category of IP (replaced in more recent research by TP), and the genericity of DPs as 'D-genericity' (cf. Carlson, 2011; Krifka, 1987; Carlson & Pelletier, 1995, among others).

3.1.2   Predicate-driven genericity

Carlson (1977) points out that generally predicates that go with certain individuals can also go with kinds, while there are only a small number of predicates that only match kinds. These predicates have kind-referring DPs as their preferred arguments, e.g. the subject of 'extinct/widespread/common/rare' and the object of 'invent', as shown in (8a-b), or more precisely, among the possible readings of their arguments, the kind reading is prioritised by such predicates (cf. Carlson & Pelletier, 1995). Such types of predicates are termed as 'kind predicates' or 'kind-level predicates' (cf. Carlson, 1977, 2011; Carlson & Pelletier, 1995, among others).

(8)   a.   Dinosaurs are extinct.
        b.   Baird invented TV.

Genericity driven by a kind predicate represents certain property of a whole group instead of individual members of that group or certain amount/ratio of that group. In (9-10), the predicates 'extinct' and 'widespread' can only go with a species as their subject, not an individual member or some proportion of a species.

(9)   The lion will become extinct soon.

(Carlson & Pelletier, 1995, p. 10)

(10)   Ducks are widespread throughout Europe.
         (Asher & Pelletier, 1995, p. 320)

Further, kind predicates describe such a long-term state or a one-time event that they
cannot be modified by adverbs of quantification, as shown in (11).

(11)   *Dinosaurs are $\left\{\begin{array}{l} \text{always} \\ \text{usually} \\ \text{sometimes} \\ \text{never} \end{array}\right\}$ extinct.

         (Cohen, 2016, p. 286)

It is for these reasons that genericity directly related to the predicate is not considered
the same as generic quantification in a characterising sentence, and so examples like
(10) do not need a generic operator (cf. Cohen, 2001; Liebesman, 2011, among others).

3.2   The Generic Operator

In a generic sentence, the individual-level predicate induces a generic operator Gen,
which, as widely adopted in literature, is a covert binary quantifier binding an event
variable and argument variables.

3.2.1   Tripartite structure

The generic sentence is represented by a tripartite structure at logical form, comprising
the generic operator, the restrictor aka restrictive clause, and the nuclear scope (for
introduction and analysis of the generic operator, cf. e.g. Carlson & Pelletier, 1995;
Mari et al., 2013). For example, (4) has the logical form shown in (12a), which reads
as (12b).

(12)   a.   Gen x [planet(x)] [round(x)]
         b.   For any entity x, if x is a planet, then x is round.

I will mainly refer to relevant analyses in Partee (1995), Chierchia (1995b) and Carlson

(2011) on human indefinites for my analysis of generic pronouns in the following sections and the next chapter.

3.2.1.1   Partee (1995)

Partee (1995) provides a detailed list of elements which may fill in the three parts of the tripartite structure of quantification, as shown in (13).

(13)   Tripartite structures generalized

$$S$$

Operator	Restrictor	Nuclear Scope
$\forall$	'cases'	main clause
must	if-clause	assertion
not	subordinate clauses	focus
almost every	common noun phrase	consequent
always	topic	main predication
mostly	presuppositions	
Generic	domain	
	antecedent	
	context	
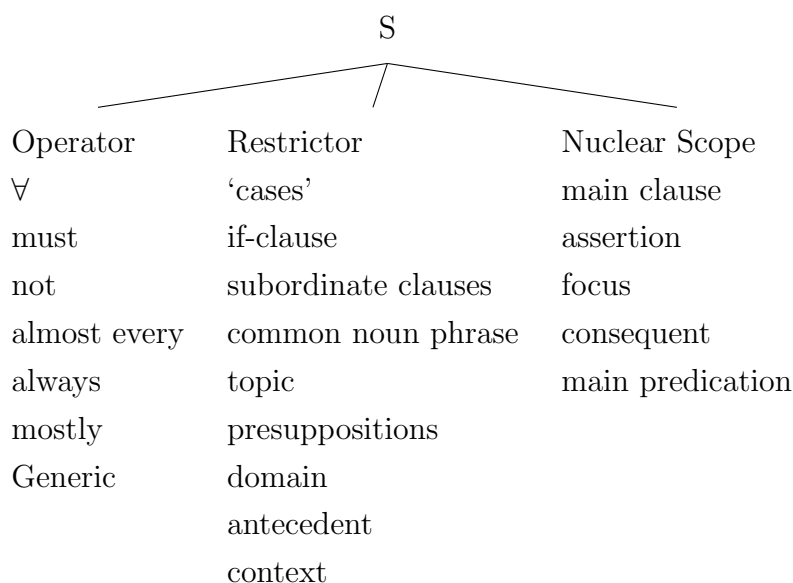
(Partee, 1995, p. 546)

Note that in Partee's structure, the element 'context' occurring in the restrictor not only refers to syntactic context, but also to 'non-linguistic' context which further helps to clear semantic ambiguities. Information and content from both contexts will be represented as different kinds of modifiers to the DP in the restrictor.

3.2.1.2   Chierchia (1995b)

Context is also introduced in Chierchia (1995b), as shown in (14). For the example in (14a), Chierchia proposes the LF in (14b) leading to the tripartite interpretation in (14c), involving a context variable C in the restrictor.

(14)   a.   A man with taste and money drives a Porsche

b.   LF:

```
                              IP
                    ┌─────────┴─────────┐
                   NP                    IP
                    │              ┌──────┴──────┐
        [a manᵢ with taste and money]  Gnᵢ         VP
                                                    │
                                            [tᵢ drives a Porsche]
```
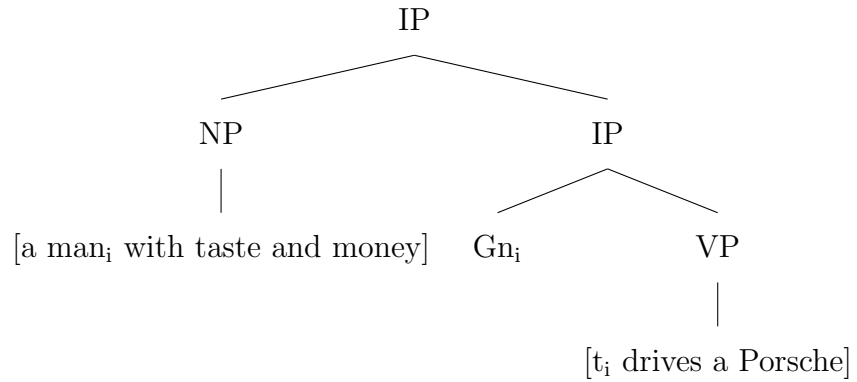
c.   Interpretation:

Gn x, s[man with taste and money (x) ∧ C(x, s)] ∃y[Porsche(y) ∧ drive(s, x, y)]²

(Chierchia, 1995b, p. 116)

In (14), the generic operator C-commands the VP and binds both the variables introduced by the subject and the predicate. Leaving a trace in the scope of the generic binder, the subject moves to a position higher than the generic operator to receive further restriction on its set from the context. Here the context is discourse context, which can be deducible from Chierchia's (1995b) analysis:

> 'Here the quantificational adverb is the phonologically null generic operator...adjoined to a position where it C-commands the VP and is C-commanded by the subject. ...every verb has an extra argument ranging over eventualities/situations. Such an argument typically will be bound by any quantificational adverbs present. ...on top of the structurally identified portion of the restriction (...the subject), the context will typically supply further ways of restricting the range of the quantifier. ...this takes the form of a variable C, whose value depends on the context.' (Chierchia, 1995b, p. 116)

One issue involving context is that, no matter what information is added to the range of reference in the restrictor by syntactic or discourse context, it cannot precisely decide the specific feature values of the referent, e.g. whether it is referential or generic, inclusive or exclusive. This will be discussed in section 3.3.7 and Chapter 4.

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² Chierchia (1995b) assumes that indefinites come with their own existential quantifier, hence there is an ∃y in (14c).

3.2.1.3 Carlson (1999)

The concept of 'universal closure' proposed by Carlson (1999) refers to the domain for a generic statement which is clarified via three steps, as exemplified in the interpretation of (15).

(15)   Pheasants lay speckled eggs.

Firstly via syntactic context, which mainly appears in the restrictor, e.g. in (15), it is 'pheasant'. Secondly via background information, which in Carlson's words is about 'cases where something is giving birth' (p. 18). Or it is the background knowledge belonging to the speaker or the addressee, or shared by both sides, about which/whom the property described in the scope is applied to. The third step takes place in the overlap of the first two, which eliminates any non-canonical cases, for example a pheasant which happens to lay non-speckled eggs. The generic operator is assumed to be a universal operator which applies with exceptions (as in the third step), and can be considered universal closure over the non-shaded space in the diagram repeated here as Figure 3.1.

This analysis clearly shows why generic DPs are also termed as quasi-universals, as well as where the distinction between generics and universals lies and how the distinction is represented.
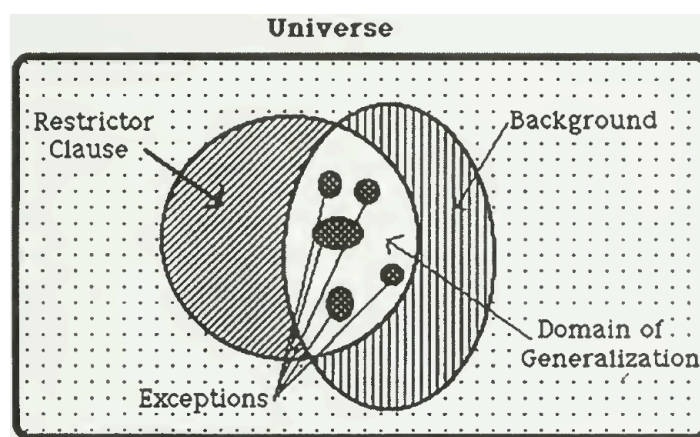
Figure 3.1: Universal closure (Carlson, 1999, p. 19)

3.2.2   Covert and overt generic quantifiers

The generic operator in the relevant literature is described as or like adverbial quantifiers such as 'usually', 'typically', or 'generally'/'in general' (cf. e.g. Carlson & Pelletier,

1995; Liebesman, 2011), which are considered to take sentential scope. Such generic adverbs can be used to identify characterising sentences (cf. Carlson & Pelletier, 1995), the meaning of which remains much the same after the insertion of such adverbs. There's minor deviation in the construal of (16b) from that of (16a), though as (Carlson & Pelletier, 1995) point out, a characterising sentence with the insertion of 'usually' indicates more clearly that there are exceptions than under the generic quantification. The examples (1) and (7) can thus be analysed as (16) and (17) respectively. In (16), there is no variable introduced by the subject John, therefore only the event variable represented as s is bound by the generic operator. In (17), 'A bird' is also bound by the operator, so it has a binary format, binding x and s.

(16) a. It is usually the case that John smokes a cigar after dinner.
      b. GENs [s is every suitable situation][John smokes in s]

(17) a. A bird typically has wings.
      b. GENx, s [x is a bird in s][x has wings in s]

The point of such sentential adverbials serving as a diagnostic tool for generic interpretation lies in that, if we match such adverbials with a predicate claimed to be generic, the meaning of such an expression remains almost the same. So it seems plausible in identifying genericity as an event, situation or a stable property like (1). However, this does not always guarantee a kind-referring argument. The generic interpretation of the subject 'A bird' in (7) is derived not only from the non-episodic tense feature of the predicate, but also from the verb's denotation which generally selects a kind-referring DP as its argument.

In addition to many accounts of the covert generic operator and overt sentential adverbial quantifiers, Adebayo (2018) provides support for the existence of an overt generic operator from the empirical data from Yoruba, as is shown in (18). The imperfective marker 'máa-ń' serves as an overtly realised generic operator that 'modifies an eventuality variable to give it the property of having multiple instances of unspecified number' (Adebayo, 2018, p. 56), which turns the episodic use of predicative adjective 'angry' in the past tense into a generic status in the present tense. However, restricted to this example, this operation just turns it into a habitual sentence, which generalises the event variable, but cannot further introduce a generic operator on argument variables.

(18) a. Ade bínú
          Ade be.angry
          'Ade was angry.'

       b.   Adé máa-ń bínú
              Ade gen be.angry
              'Ade is generically angry.'
     (Adebayo, 2018, p. 62)

3.2.3   Various accounts on generic quantification

While genericity is a widely accepted phenomenon, there are arguments on how genericity is achieved and whether generics involve quantification.[3]

As has been introduced in 3.1.2, a generic DP that is indicated by a kind predicate is a kind DP, which refers to a kind as a whole and therefore does not need a generic operator for a quantificational generalisation on some of its property. The other kind of genericity, presented by characterising sentences, may have a proper noun or an indefinite DP as its subject. The proper noun in such a so-called habitual sentence does not cause much perplexity in interpretation. Arguments mainly arise around characterising sentences with an indefinite DP as their subject.

Although the covert generic operator is in many accounts considered amounting to adverbs like 'generally', 'usually' or 'typically', as Leslie (2008) shows for certain cases, it is 'sometimes' that may be inserted into a characterising sentence without invalidating the truth of that sentence, not 'usually', e.g. 'Mosquitoes carry the West Nile virus' is still true after the insertion of 'sometimes'. Leslie (2008) emphasises cognition in genericity interpretation and acquisition. She disputes the quantificational force of the generic operator by illustrating differing proportion ratios and the invalidity of adverb quantifiers in certain generics, while still accepts it as an operator binding variables.

Cohen (2004) discerns generics from the perspective of adverbial quantification by pointing out the initial status of generics is kind denotation, and only then is represented by tripartite structures, which are directly found in adverbial quantification.

Collins (2018) believes that the construal of a nominal depends on its predicate or modifier, not the generic operator; when this method fails, pragmatic factors come into consideration. Along this line, for hime the generic operator is merely a label signalling genericity. While highlighting the role cognition plays in the construal of genericity, Collins differentiates his stand from Leslie's in that he denies the generic operator, while Leslie accepts the existence of both. He points out that it is not the generic operator involved by individual-level predicates such as 'are pollinators' in (19) that

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[3]   As I'm doing research on genericity in Chinese, a language without agreement and its lexicons without articles or inflection, I mainly focus on relevant literature rather than a comprehensive picture of the studies on genericity.

licenses a generic reading of the subject 'bees'. Instead, different predicates decide the existential or generic reading of (19a-b) respectively.

(19)   a.   Bees are in the garden.
        b.   Bees are pollinators.
        (Collins, 2018, p. 10)

The interpretation of the predicate alone for the interpretation of its subject is sometimes not a trustworthy method. It's agreed by many that 'available' is a stage-level predicate. What (20a) conveys is (20b). An individual-level predicative adjective like 'intelligent' in (20c) cannot be interpreted like that.

(20)   a.   Firemen are available.
              (Diesing, 1992)
        b.   There are firefighters available.
        c.   *There are firefighters intelligent.
              (Carlson & Pelletier, 1995, p. 23)

However, as pointed out by Diesing (1992), a stage-level predicate like 'available' may also be individual-level as well, as shown in (21), meaning that a general property of being a firefighter is being available as needed.

(21)   a.   Firemen are available.
        b. $\exists_x$ x is a fireman $\wedge$ x is available
        c. $\text{Gen}_{x,t}$ [x is a fireman $\wedge$ t is a time] x is available at t
        d. Gen_t [t is a time] $\exists_x$ x is a fireman $\wedge$ x is available at t

So far, no account has given a one-solves-all construal device, and the interpretation of generics needs co-interpretation of multi-elements in discourse.

3.2.4   The generic operator on generic pronouns

In contrast to quite detailed semantic and syntactic accounts of the generic operator on generic nouns, the analyses of a generic operator on generic pronouns still await enrichment. Among some typical semantic/syntactic claims, Moltmann (2006) and Pearson (2013) define the generic operator as a covert obligatory binder of a generic pronoun: this operator occurs in [Spec, CP] and binds the generic pronoun in various forms in

the same sentence.

(22) [CP [SPEC(C) O[+gn]]i [IP most books that onei buys are not about oneselfi]]
      (Moltmann, 2006, p. 262)

Another typical relevant claim is put forward by Phimsawat (2011) and Holmberg and
Phimsawat (2015, 2017) about its function on the behaviour of the inclusive generic
pronoun in Thai. They propose that the inclusive generic pronoun in Thai has an unval-
ued referential feature [uR/uD] which gets valued from its binder, a generic operator in
[Spec, CP]. This unrestricted reference value from the generic operator implies that the
inclusive generic pronoun is phi-featureless, i.e. it is number, person, and gender neutral,
which in turn renders the inclusive generic pronoun covert in Thai in their theory. This
may serve as a sound explanation for the unarticulated Thai inclusive generic pronoun.
However, the (c)overt representations of generic pronouns differ cross-linguistically. For
example, there are overt forms of the inclusive generic pronoun, i.e. *ren* 'person' and *ni*
'you', besides a covert one in Chinese. The variety of generic pronominal expressions
indicates that other elements or features specific to a certain language need to be taken
into consideration within or outside the generic quantification.

(23) shows how the generic operator binds the inclusive generic pronoun in Thai, as
proposed by Holmberg and Phimsawat (2015). They also agree that GEN binds an
event variable as well. According to Holmberg and Phimsawat (2015), elements such
as topic and speaker/addressee feature reside at the highest position of the C-domain.
Therefore, based on (23), we may understand that the generic operator values the
subject DP in an if-clause.

(23) [CP GENi [CP thâa [TP [GEN GENi, N] [mây còb   trii]]]]
                      if   one   NEG finish BA
      '...if one hasn't finished a BA'
      (adapted from Holmberg & Phimsawat, 2015, p. 62)

Similarly, based on the acceptance of the existence of a generic operator high in the
clause on the inclusive generic pronoun, Ackema and Neeleman (2018) propose that
this operator raises out of a complex constituent with the pronoun to take scope.

3.2.5   Adverbs of quantification

As introduced above, the generic operator is widely assumed to be the covert coun-
terpart of some overt adverbs of quantification like 'generally' or 'typically'. However,
there are various accounts on what adverbs of quantification consist of and whether
they are different from frequency adverbs. Here I just list some accounts as follows to
show how inconsistent these accounts are.

Cohen (1999) distinguishes between frequency adverbs, such as 'usually' and 'always',
and other adverbs of quantification, such as 'twice'. Dobrovie-Sorin (2001) differentiates
adverb of quantification such as 'usually' or 'generally' from HAB, which stands for
frequency adverbs. Csirmaz (2009) divides adverbs of quantity into three types:

- Multiplicatives (twice, five times, many times)

- Frequency adverbs

    - relative frequency adverbs (frequently, occasionally, rarely)

    - fixed frequency adverbs (daily, hourly)

- Adverbs of quantification (always, often, sometimes)

By (24) Csirmaz (2009) shows the distinction between an adverb of quantification
'often' and a frequency adverb 'frequently'.

(24)   a.   Germans are often tall.
         b. *Germans are frequently tall.
               (Csirmaz, 2009, p. 68)

I will refer to general accounts on adverbs of quantification, which may include 'always',
'usually', 'often', 'rarely', 'sometimes', 'never', 'invariably', 'universally', 'mostly', 'gen-
erally', 'frequently', 'commonly', 'infrequently', 'seldom', 'occasionally' (cf. e.g. Diesing,
1992; Lewis, 1975; Malamud, 2012).

One typical test for a generic sentence is that, after inserting an adverb of quantification
like 'generally', 'usually' or 'typically', if the meaning of the original sentence doesn't
change, or just changes slightly without distortion, the original sentence is thought to
be generic (cf. e.g. Carlson & Pelletier, 1995, among others).

In example (25), I show an adverb of quantification, but such an adverb can only
identify a generic sentence via the event variable. It is not effective for providing a
clear diagnostic for an inclusive generic pronoun like English 'one'.

The reading for (25), according to Moltmann (2006, p. 260), is 'a human being x often thinks that x should not eat meat or else that human beings often subscribe to general vegetarianism'.

(25)   One often thinks that one should not eat meat.
      (Moltmann, 2006, p. 260)

To be understood with inclusive generic 'one', some further restriction on the domain of 'one' must be imposed by the reader. As it stands, (25) is very unnatural as a totally general statement about human beings, but it can be successfully interpreted if there is some restricting information such as 'when faced with issues of climate change' or 'when faced with issues of sustainability' (see (26c) below). Otherwise the example has a fully habitual interpretation which seems unnatural.

Modifying the statement with modals can also trigger some further contextual information, as illustrated in (26a). (26b) is also acceptable, although the utterance may be counterfactual and not everyone agrees to be vegan. In (26c), the when-clause also provides an effective restriction.

(26)   a.   One may think one should not eat meat.
        b.   One should not eat meat.
        c.   When one sees 1,000 cows in a small field on a farm, one often thinks that one should not eat meat (any more).[4]

The Italian example in (27) also requires similar enrichment. The predicate 'works too hard', if no restrictions are put on it, implies that anyone among you, me and others, is working too hard, which may be false in the real world.

(27)   Si lavora   sempre troppo.   (Italian)
      SI work.3SG always too-much
      'One always works too hard.'
      (Holmberg & Phimsawat, 2015, p. 56)

One possible solution is to add some necessary restriction to the domain restrictor of 'one', as shown in (28).

(28)   a.   It is not advisable/unhealthy if one always works too hard.

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[4]   Thanks to Professor Peter Sells for providing this example.

      b.   If one always works too hard, one's health may be damaged.

      c.   Sometimes one may work too hard.

There are similar examples in Chinese and the interpretations are similar too, as illustrated in (29). One different point from English 'one' is that *ren* has an explicit [human] value in gender feature, so *ren* in the embedded clause can only refer to human beings as a species or it is inclusive generic referring to anyone among people in general including you, me, and others, not including or referring to other sentient beings.

(29)   a.   *Ren   changchang renwei ren   bu yinggai chi rou.
             person often   think person not should eat meat
             'One often thinks that one should not eat meat.'
             'One often thinks that human beings should not eat meat.'
    b.   Ren   bu yinggai chi rou.
             person not should eat meat
             'One should not eat meat.'
             'Human beings should not eat meat.'

The same adverb of quantification *changchang* 'often' and predicate *renwei* 'think' are in (30a), but it may be acceptable, because 'thinking what we cannot possess/obtain is better than what we have' seems a common feeling of anyone among us. It is also possible to take *ren* as an indefinite DP *yi-ge ren* 'a person', quantified by an adverb of quantification *changchang*, and interpreted as 'most people'. (30b) more easily receives the intented generic interpretation because the embedding structure provides a context to support an effective restriction for the inclusive generic pronoun.

(30)   a.   Ren   changchang renwei debudao   de cai   shi zui   hao de.
             person often   think not obtain DE actually be most good DE
             'One often thinks that what one cannot obtain is the best.'
             'Most people think that what they cannot obtain is the best.'
    b.   [Ren   changchang renwei debudao   de cai   shi zui   hao de] shi
             person often   think not obtain DE actually be most good DE be
             dui de ma?
             right DE Q
             'Is it right if one often thinks what one/he/she cannot obtain is the best?'

3.2.6   Segmentation of the generic operator

As shown in (31) below, characterising sentences as such are usually termed as habitual
sentences and are a subkind of characterising sentences. A binary operator which binds
both the argument and event variables is often employed in analysing characterising
sentences, which are normally restricted by conditional or temporal clauses (see Carlson
& Pelletier, 1995). However, when the subject of a habitual sentence is a proper noun,
it is only the situations involving the noun which are generalised, and the event variable
is bound by the generic operator or an overt adverb of quantification (cf. Chierchia,
1995a). If the subject is a quantified DP, then only the event variable is bound by the
generic operator. Among variables introduced by NPs (now DPs), Chierchia (1995a)
insists that only variables introduced by an indefinite or kind-referring definite can be
bound by adverbs of quantification or a generic operator, in which case the binder is
binary.

(31)   John smokes when he comes home.
         (Carlson & Pelletier, 1995, p. 25)

Let's look at a sentence with 'one' as its subject.

(32)   Sometimes one gets lucky. (Miyagawa, 2017, p. xv)

The impersonal pronoun 'one' in (32) can be replaced by an indefinite DP 'a person'.
When quantified by an adverb of quantification, i.e. Q-adverb, 'sometimes', (32) may
get construed as 'Some people get lucky'. This kind of transformation is a typical
practice with adverbs of quantification on indefinites, e.g. (33).

(33)   a.   In those days, one/you always/usually/rarely/sometimes lived to be 60.
         b.   Some people in those days lived to be 60.
         (Malamud, 2012, p. 14)

However, 'one' in (32) is a kind of dedicated impersonal pronoun[5] bound by a covert
generic operator, which is widely presumed to amount to 'generally'. Therefore the
more plausible reading is as shown in (34c), in which case the generic operator scopes
over another adverb of quantification which is 'sometimes' here, and binds the indefi-

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[5] Apart from being a numeral or a common pronoun with an antecedent, 'one' is categorised by
     Ackema and Neeleman (2018) as a dedicated impersonal pronoun, in examples like 'One should
     never drive on the wrong side of the road' (Ackema & Neeleman, 2018, p. 105).

nite subject; the event variable is bound by the adverb of quantification 'sometimes'.
Therefore, (34c) is also true in that for any person, there are chances that he/she gets
lucky.

(34)   a.   *Generally sometimes one gets lucky.

          b.   *Generally one sometimes gets lucky.

          c.   It is a general case that [one sometimes gets lucky].

A parallel expression to (32) can be found in Chinese, whereas unlike the dedicated
impersonal pronoun 'one' which is obviously bound by a generic operator, *ren* can
also be a third person referential pronoun same in lexical form with the generic *ren*.
In either case, only an adverb of quantification binding the event variable would be
involved in this example. However, the modal in (35) suggests the salient reading of
ren is inclusive generic.

(35)   Ren   youshi/ouer   hui zouyun.

          person sometimes/occasionally will get lucky

          'Sometimes/Occasionally one gets lucky.'

A multiplicative *liang-ci* 'twice' is also applicable in a generic sentence. It is generally
true for anyone that he/she cannot step more than once into the same river. In this
example it is the negation combined with our real-world knowledge that suggests the
salient inclusive generic reading rather than a third person referential reading.

(36)   Ren   buneng liang-ci ta   jin tong yi-tiao heliu.

          person cannot twice   step in same one-CL river

          'One cannot step into the same river twice.' (Heraclitus)

Sentences like (32-36) show that a covert generic operator, though paraphrased as close
to an overt Q-adverb 'generally', differs from the latter in that it can accommodate
another Q-adverb, e.g. 'sometimes' or 'twice' here, in its scope, as roughly shown in
(37b).

(37)   a.   *[$_{IP}$ Overt Q-adverb$_1$ [$_{VP}$ Q-adverb$_2$]]

          b.   [$_{IP}$ GEN [$_{VP}$ Q-adverb]]

The subsumed adverb of quantification in (37b) may function as both a quantifier and

a frequency adverb in this context, binding a time variable, as suggested by Dobrovie-Sorin and Beyssade (2012), through the following example (38) which resembles (32-35) but has an overt generic quantifier 'in general'. To solve the incompatibility between the two operators, a comma is inserted between 'in general' at sentence-initial position and the main sentence, which highlights the sentential scope that 'in general' takes.

(38)   a.   In general, a student rarely reads novels.
        b.   GENx (student(x)) [FEWt (reads novels (x, t))]
              (Dobrovie-Sorin & Beyssade, 2012, p. 199)

To generalise phenomena like in (38), Dobrovie-Sorin (2001) and Dobrovie-Sorin and Beyssade (2012) propose two operators in a generic statement like in (39), GEN and HAB respectively. In accordance with widely-accepted description of the generic operator GEN, which binds both an individual variable and an event variable simultaneously, Dobrovie-Sorin (2001) and Dobrovie-Sorin and Beyssade (2012) basically have a GEN operator binding the variable introduced by the indefinite argument, and the HAB is a kind of 'frequency adverb' according to them, which only binds the 'time variables' and renders the predicates habitual.

(39)   GENx (bird (x)) [HABt [fly (x, t)]]
        (Dobrovie-Sorin & Beyssade, 2012, p. 198)

The dual operator model proposed by Dobrovie-Sorin (2001) is inspiring in analysing generic pronouns, especially when investigating the blocking between a generic and existential/universal operator, and the distinction between kind DPs and inclusive generic pronouns. The unsolved problem lies in how to identify the domain and scope of the operator on the predicate and arguments respectively.

Let's look at (40-43), as Chierchia (1995a) generalises, adverbs of quantification can bind variables introduced by indefinites or kind-denoting definites, as shown in (40) and (41)[6] respectively. As for a sentence containing a quantified DP, or some other DP that does not introduce variables, the adverbs of quantification only bind the event variable.

(40)   a.   An Italian is usually short.
        b.   Most x [Italian(x)] [short(x)]
              (Chierchia, 1995a, p. 189)

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[6]   Here d refers to a specific kind whose denotation can be found in context. The formula 'x $\leq$ d' indicates that 'x is an instance of d' (Chierchia, 1995a, p. 191).

(41)   a.   Dogs are usually easy to train.

        b.   Most x[x ≤ d] [easy-to-train(x)]

        (Chierchia, 1995a, p. 191)

When the subject does not introduce variables, for example the proper name Fred in (42), the adverb of quantification for example 'always' only binds the event variable.

(42)   a.   Fred always smokes.

        b.   ∀s [C(f,s)] [smoke(f, s)]

        (Chierchia, 1995a, p. 189)

The same goes for a DP already quantified by a universal quantifier 'every', which does not have any variable for the adverb of quantification 'usually' to bind, and leaves 'usually' to bind only situations.

(43)   Every man usually smokes.

        a.   ∀x[man(x)] [most s[C(x,s)](smoke(x,s))]

              (= every man smokes on most occasions)

        b.   Most s[C(s)][∀x[man(x)] [smoke(x,s)]]

              (= on most occasions, every man smokes)

        (Chierchia, 1995a, p. 191)

I will borrow the analysis in (43a) for my analysis of generic pronouns. The event or situation variable, as shown in (43) and proposed by Corblin (2013), is bound either by existential closure, or universal closure. Note that what Corblin proposes as existential closure or universal closure is different from the notion of universal closure introduced by Carlson (1999). The former is mainly talking about genericity involving event variables, while the latter on the domain restriction of generic quantification. Now I suggest that it may also be bound by a kind of generic closure triggered by an individual-level predicate, a modal verb, etc., which is quasi-universal as long as there are no overt adverbs of quantification in the sentence. Characterising predicates may not only be habitual, but also stative, in the literature of genericity (cf. Carlson & Pelletier, 1995, among others), which makes HAB an ambiguous term for quantification on characterising predicates. I will term it as G_p (generic operator on predicates), which competes for the same variable with adverbs of existential/universal quantification or quantification of other types.

I propose there is a covert unary generic operator binding the indefinite, giving it an

unselective reading paralleling to 'any' but allowing exceptions, i.e. a kind of quasi-universal denotation. I will label it as G_a (generic operator for arguments). The basic logical form may be illustrated as in (44) and the tree structure of the system is presented in (45).

(44) $G_a x$ [person (x)] $G_p s$ [V (x, s)]

(45)
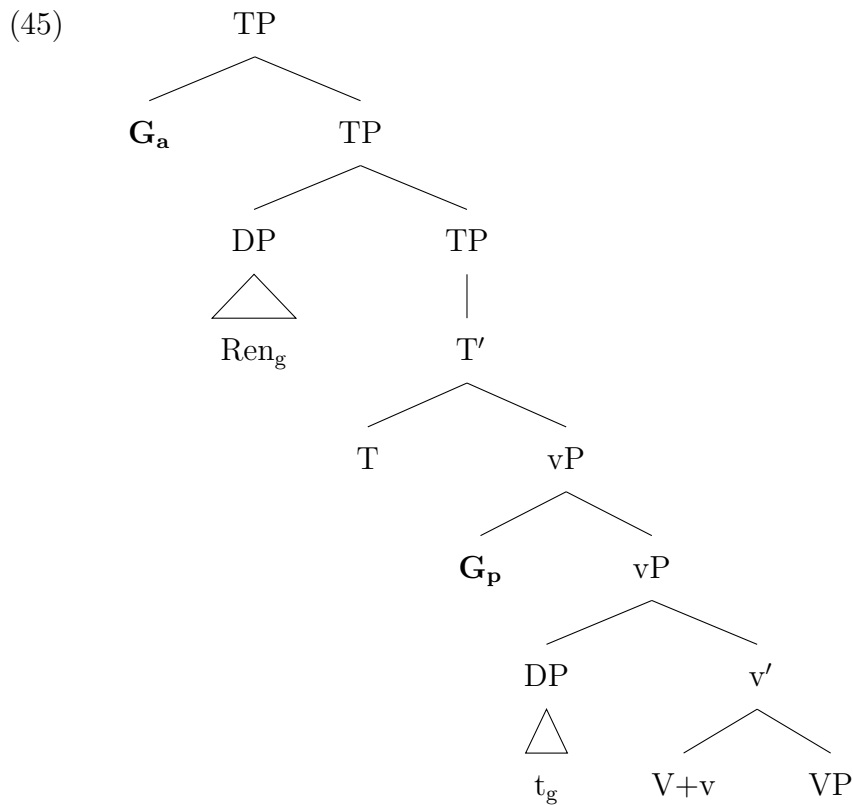
The example (32) can therefore be construed as follows.

(46)   a.   Sometimes one gets lucky.
        b. $G_a x$ [person (x)] $\exists s$ [get lucky (x, s)]

Taking in consideration certain contextual elements, e.g. sentential locative/temporal adverbs or conditionals, that go into the restrictor to restrict the domain of genericity on the DP, as has been introduced in 3.2.1, the structure may be extended as in (47).

(47) $G_a x\ G_p s$ [person (x) $\wedge$ C(x, s)] [V (x, s)]

I will use this dual operator system to look at the Chinese inclusive generic pronoun *ren* with adverbs of quantification. One different point from Dobrovie-Sorin's (2001) and

Dobrovie-Sorin and Beyssade's (2012) proposal is that I propose two generic operators, as shown above.

The inclusive generic pronominal reading and kind reading of *ren* in Chinese as shown in (48) and (49) illustrate my proposal. In (48), firstly the event variable is bound by the universal adverb *zongshi* 'always' and in turn receives a universal reading. Then it is generally true that any individual will have his/her own plan in any situation. This is what the traditional generic operator tells us. Nevertheless, when uttering this statement, the speaker is not depicting some taxonomic property of any individual member of the species humans in comparison with other species. The speaker is just generalising something that may happen to anyone like him/her or anyone else. So to show the nuance in interpretation, I use 'person' instead of 'human' in the restrictor. With this reading, the statement does not indicate that most people have their own plan, but more like for anyone like you and me, thinking of one's own interest seems to be his/her habitual behaviour.

(48)   a.   Ren   zongshi you ziji de dasuan.   (inclusive generic)
             person always have self DE plan
             'One always has his/her own plan.'
        b. $G_a x$ (person(x)) $\forall s$ [has one's own plan (x, s)]

Then let's look at (49). When talking about the relation between humans and nature, or even between humans and aliens, the subject is understood as the kind *renlei* 'humans'.

(Context: When talking about humans' utilisation of natural resources)

(49)   a.   Ren   zongshi you ziji de dasuan.
             human always have self DE plan
             'Humans always have their own plan.'
        b. $G_a x$ (human(x)) $\forall s$ [has one's own plan (x, s)]

However there is no difference to be observed in surface structure between (48) and (49), especially as the tree structure shows in (50).

(50)

```
                          TP
                        /    \
                      G_a     TP
                            /    \
                          DP      TP
                          /\      |
                         /__\     T'
                        Ren_g   /    \
                               T      vP
                                    /    \
                                 AdvP     vP
                                 /\      /    \
                                /__\   DP      v'
                              zongshi  /\     /   \
                                      /__\ you+v   VP
                                      t_g        /    \
                                                V      DP
                                               /\     /  \
                                              /__\   /____\
                                            <you>  ziji_g de dasuan
```
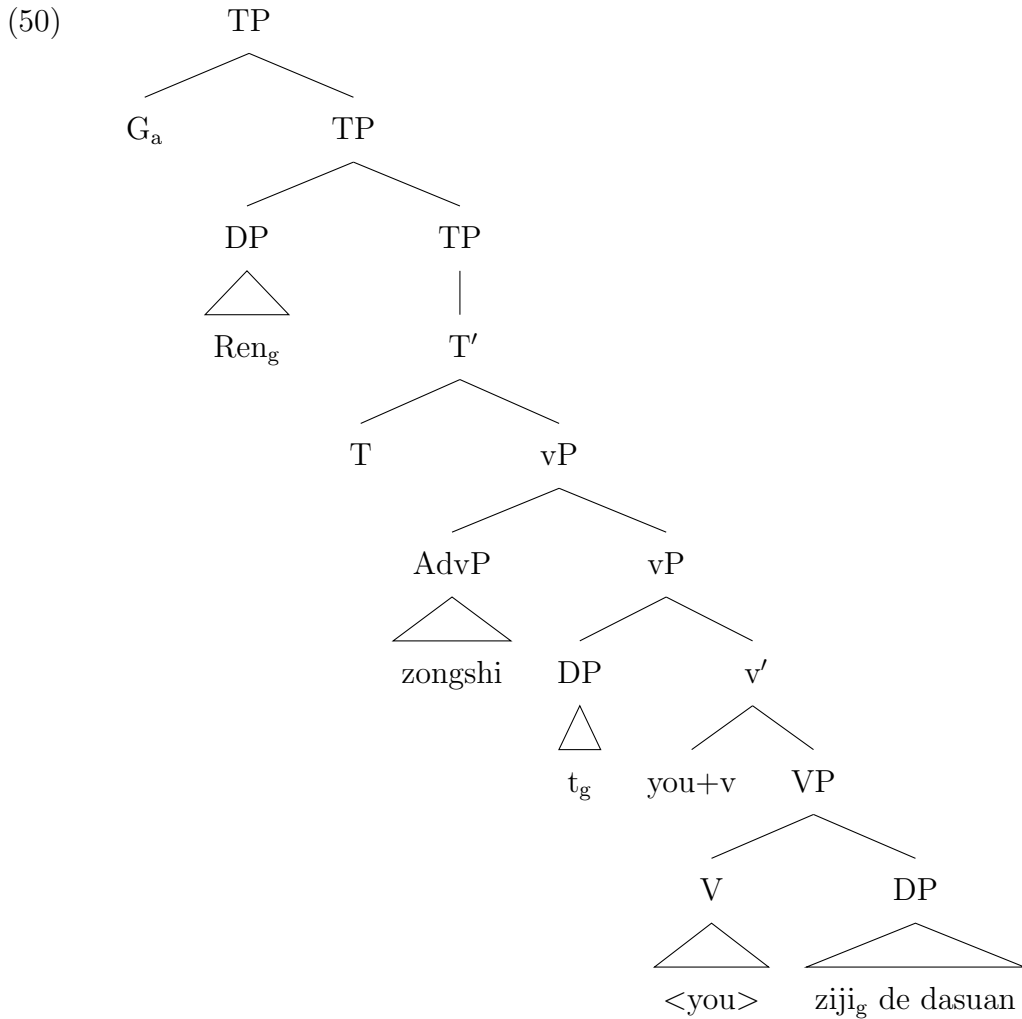
It is the contextual information that gives the clue to the generic generalisation on humans, not the individual-level predicate or the universal quantifier. Therefore I use 'human' in the restrictor in (49) to indicate that the domain of quantification is that of humans.

The difference between (48) and (49) lies in the restrictor, one referring to the set of people in general including the speaker, the addressee(s), and others, the other referring to the set of humans with the implication that this statement is based on the comparison with other species. The particular reading of either example depends on contextual information.

3.3 Sources of genericity in Chinese

As Chinese is a radical *pro*-drop language without rich observable features on DPs or explicit tense values on VPs, various elements affect the generic reading of an argument.

In Chinese, roughly speaking, the formation of the argument, the features of other arguments, the lexical meaning of the verb, as well as information from discourse context, licence or identify the generic quantification over an argument variable; the aspectual participles, modal verbs, adverbial quantifiers, etc., highlight the generic quantification binding event variables. Detailed analyses are developed in the following sections.

3.3.1 Predicate-driven kind generics

Inclusive generics cannot be expressed out of the blue without necessary restriction, nor can them appear in a taxonomic judgement or something similar, as in (51) and (52).

(51)   a.   A human is intelligent. (true, though not every human is smart)
         b.   *One is intelligent.

A referential reading is also available for *ren*, depending on utterance context.

(52)   a.   Ren   shi chongming de.   (kind)
              human be intelligent DE
              'Humans are intelligent.'
         b.   Ren   shi chongming de.   (referential)
              person be intelligent DE
              'He/She is intelligent.'
         c.   *Ren shi chongming de.   (inclusive generic)
              person be intelligent DE
              'One is intelligent.'

Dayal (2004) makes similar types of generalisation about generic statements. Examples like the following can only refer to kinds.

(53)   Gou hen jiling
         dog very smart
         'The dogs/Dogs are intelligent.'
         (Dayal, 2004, p. 402)

Different predicates require different features of their arguments, e.g. 'gather' indicates

its subject must be plural, 'think' implies a human subject, and 'give birth' applies to a female agent only, at least in our current world. As presented in section 2.3.6 '*Ren* as arguments of certain predicates', 'extinct', or its Chinese equivalent *meijue*, selects a kind-referring DP as its subject, which makes a perfect example of predicate-driven genericity. As I have distinguished between kind *ren* 'human beings' and inclusive generic *ren* 'one' in 2.3.6, the subject *ren* of *meijue* must be kind *ren*.

In addition to kind-referring predicates mentioned above like 'extinct', *jinhua* 'evolve' in (54) is also a good example of a kind-referring predicate. However, *bian* 'change' in (55) can freely combine with various types of arguments, and therefore needs contextual information for the interpretation of the argument it combines with.

(54) Ren   shi hui jinhua de.   (kind *ren*)
     person BE will evolve DE
     'Humans will evolve.'

(55) Ren   shi hui bian   de.
     person BE will change DE
     'One will change.'   (inclusive generic *ren*)
     'He/She may change.'   (referential)

The predicate in (56) usually requires the subject to be a subkind of the predicative kind DP, which in turn decides a kind-referring interpretation of *ren* here.

(56) Ren   shi zui fuza   de dongwu.
     human be most complicated DE animal
     'Humans are the most complicated animals.'
     (Fu, 1984, p. 308; translated by me)

The example (57) is an idiom which involves the definite influence of environment on any individual person, rather than human beings as a species. The predicate 'walk along the river bank', although being used metaphorically, will only choose inclusive generic *ren* as its subject instead of kind *ren*.

(57) Ren   zai he   bian zou, na   neng bu shi xie.
     person at river side walk, how can not wet shoe
     'It is inevitable for one to get one's shoes wet when one is walking along the
     river bank.'

'One is inevitably influenced by the environment.'

3.3.2 Relationship with certain adverbial quantifiers

The following examples in (58-60) generalise the fact that, an overt adverb of quantification only binds the event variable, and fails in distinguishing between different possible readings of *ren*. To achieve the goal of precisely construing an argument *ren*, discourse contextual information is needed in distinguishing a generic reading from other readings.

Here I mainly explore the behaviour of the inclusive generic pronoun *ren* in the subject position of Chinese generic sentences with an overt adverb of quantification, and leave *ren* in other positions and more complex situations for future discussion. *Ren* in a bare form can be a noun or a pronoun, whose features are mostly and usually implicit. The ambiguous interpretation and behaviour of *ren* need to be clarified through the investigation of the specific context in which it occurs. Compare (58), (59) and (60). With the same form of the subject *ren* 'human being; person' and the same tense on the predicates, and quantified by the same adverbial *zongshi* 'always', it is difficult to distinguish the two *ren*s. The interpretation relies on the denotation of the other argument in the object position. In contrast to 'nature', *ren* in (58) is probably a noun and refers to human beings as a kind, while in contrast to 'plan', the subject *ren* in (59) can be identified as a generic pronoun meaning 'anyone', whose emphasis is not on *ren* as a kind of species, but on any individual among us. The same utterance in (60) may take place when talking about another person/people apart from the the speaker and hearer, so *ren* in (60) refers to a specific person or specific people known to the speaker and the addressee. It is not a noun used referentially, because it lacks necessary modifiers for definite reference, e.g. *na-ge* 'that-CL' before an NP.

(58)   Ren   zongshi xiwang zhengfu ziran.   (noun: kind)
        person always hope   conquer nature
        'Mankind always hopes to conquer nature.'

(59)   Ren   zongshi you ziji de dasuan.   (pronoun: generic)
        person always have self DE plan
        'One always has his/her own plan.'

(60)   Ren   zongshi you ziji de dasuan.   (pronoun: referential)
        person always have self DE plan
        'That person always has his/her own plan.'

3.3.3   Tense

A generic statement is usually in the present tense, though with many exceptions, which has been introduced in Chapter 1 and will be further covered in Chapter 4. Here I mainly show the ambiguity in aspect particles in Chinese. Compare the following two sentences which seem to be both in the past tense. While the tense in (61) is absolutely a past tense, and existentially binds the object *yi-ge ren*, *le* in (62) simply implies present perfect and renders the sentence generic, showing this type of transformation always happens. Therefore, tense is not a valid tool in identifying a generic argument, or even a generic event.

(61)   Tamen zhaodao le   yi-ge   ren.
       they   find   ASP one-CL person
       'They found a person.'

(62)   Jianku de huanjing suzao le yi-ge ren.
       tough environment mould ASP one-CL person
       'Tough environment moulds a person./One is moulded by tough environment.'

3.3.4   Other arguments

As Heim (1982, p. 81) claims, 'What appears to be the quantificational force of an indefinite is always contributed by either a different expression in the indefinite's linguistic environment, or by an interpretive principle that is not tied to the lexical meaning of any particular expression at all.'

The interpretation of *ren* depends on features of other arguments in the same sentence, as well as possibly information from the predicate and context. This kind of referential dependency is illustrated in (63-66), where *ren* may refer to 'humans', 'one', 'others' or 'someone else/some other people'. One fact to help distinguish readings of *ren* is that if in a sentence there is a *ren* with an inclusive generic reading, in many cases the subjects and objects apart from the argument *ren* have to be non-human or refer to others or someone himself/herself. *Meihao de hiwu* 'beautiful things' in (64) can be yearned for by everyone though with exceptions, which indicates that *ren* in (64) refers to anyone in general, and thus is an inclusive generic pronoun. Nevertheless in (65), *ta* 'she' is excluded from the people who admire *ta de* 'her' beauty, hence *ren* can only refer to others except *ta* here. The reference to the subject *ta* won't be included in the reference of *ren* here. Firstly, by pragmatic reasoning, one will like, be proud of, or be satisfied with, etc. some property that he/she himself/herself possesses, but will

less possibly admire himself/herself. Secondly, even if 'one admires one's own beauty' is semantically acceptable, the Chinese counterpart of 'oneself' is *ziji*, not another *ren*. Similarly, in (66), the boss asks one or a few of his employees or others to do something, thus excluding himself from *ren* in this sentence. A statement 'The boss asked himself/herself to inquire about this matter' is not an appropriate interpretation pragmatically. Another verb like 'remind' instead of 'ask' may be more acceptable. Note that the existential closure signalled by the past tense restricts the argument it binds in a specific domain, while the restriction domain for the inclusive generic pronoun is timeless or little restricted in most cases.

(63)   Ren   yao   bu liangli.   (kind)
         human monster not coexist
         'Humans and monsters won't coexist.'

(64)   Meihao   de shiwu ling   ren   xiangwang.   (generic)
         beautiful DE things cause person yearn for
         'One/People will yearn for beautiful things.'

(65)   Ta$_i$ de meimao ling   ren$_j$ xianmu.   (other people)
         she DE beauty   cause person admire
         'Others admires her beauty.'

(66)   Laoban$_i$ rang ren$_j$ [PRO$_j$ dating   guo zhe-jian shi]. (other people)
         boss   ask person   inquire about ASP this-CL thing
         'The boss asked someone to inquire about this matter.'

One typical object of reference is *ziji* 'self', which may function as an intensifier to other personal pronouns or an anaphor to the real occupier in subject, object or possessor position. Contrasting with anaphoric *ziji*, *ren* as a pronoun must not be bound by that the antecedent of *ziji* and often means 'another person/other people' apart from the person represented by *ziji* (cf. Chao, 1968; Lü, 1999). The two *ziji*s in an imperative expression like (67) implicate 'your own' and 'on your own' respectively, and *ren* must not be bound by the covert subject *ni* 'you', which in turn assigns *ren* a disjoint interpretation, i.e. 'others' apart from 'you'. If we replace *buyao* with *bu yinggai*, the sentence is not an imperative but can more possibly apply to anyone, yielding an inclusive generic reading. In (68), the reflexive *ziji* is an anaphor of its antecedent *ren*, both denoting the same entity, which is consistent with the inclusive generic reading of *ren* here.

(67) (Ni$_i$) [$_{TOP}$ ziji$_i$ de shiqing] ziji$_i$ zuo t, pro_i buyao gei ren$_j$ tian mafan.
(you) self DE things self do, do not give person add trouble
'Deal with your own business on your own, and don't trouble others.'

(68) Ren$_i$ yingdang dui ziji$_i$ hao yixie.
person should to self nice a little
'One should be kind to oneself.'

3.3.5 The generic operator vs. a universal quantifier marked by *dou*

The generic operator competes with an existential quantifier for binding the subject in a non-episodic sentence. Compare (69) with (70). *Ren* in an existential configuration like (69) can only receive an indefinite 3SG/PL reading, while the null subject in (70) may receive an inclusive generic reading if it is bound by the generic operator on the argument variable, e.g. when the speaker is generalising that surviving from any crisis is the most important despite injuries or financial loss, or referring to a definite person/definite people that can be inferred from discourse, e.g. when the speaker is trying to console a survivor/survivors from an air crash. *Ren* in (70) is an abstract noun meaning 'body', which belongs to the inclusive generic *pro*. The meaning the speaker conveys is no matter what one has lost, it's fine as long as one is still alive. Hence *pro* here gets an inclusive generic reading. The adverbial quantifier *dou* 'all' in (71) gives the subject *ren* an all-inclusive reading and makes *ren* more like 'everyone' rather than an inclusive generic 'one'. The subject *renren* in (72) is a set phrase meaning everyone, thus a universal quantifier.

(69) [[You ren] zai] jiu hao. (existential)
exist person be then fine
'It's fine as long as there is someone/are some people (here).'

(70) Op$_g$ [pro_g ren zai] jiu hao. (abstract noun)
body alive then fine
'It's fine as long as one is still alive.'

(71) Ren dou xiangsiersheng. (universal)
person all live towards death
'People are all living in a process towards death.'

(72)   Renren dou you   quedian.   (universal)
        person all   have shortcoming
        'All men have shortcomings.'
        (Fu, 1984, p. 308; translated by me)

The generic operator is viewed as a quasi-universal quantifier, differing from a universal quantifier in that the generic operator allows exceptions (cf. Carlson & Pelletier, 1995; Diesing, 1992; Mari et al., 2013, among others). The generic operator on the argument variable contrasts with an existential quantifier or a universal quantifier when binding the same argument(s) in a sentence. This competition distinguishes the interpretation of the argument(s) these operators bind.

3.3.5.1 *Dou* as the marker of universal quantification

There are various arguments on the function and distribution of *dou*. L. L.-S. Cheng (1995) proposes *dou* functions as both a distributor and a universal binder. However, L. L.-S. Cheng (2009) adjusts her claim to be that *dou* itself is not a distributive operator in examples like *Zheng-zuo qiao dou daoxia lai le* 'The whole bridge collapsed', as it was the bridge as a whole, not pieces, that fell down. H.-T. Cheng (2013) argues that *dou* is a maximaliser rather than a universal quantifier. J.-W. Lin (1998) defines *dou* as an overt distributive operator which distributes the property of the predicate to every part of the argument. Therefore, *dou* signifies a requirement of plurality on the argument it binds.

Despite controversies around the functions of *dou*, one common observation is that DPs bound by *dou* need to be plural and definite. Mass nouns bound by *dou* may be atomised so as to present a plural reading. The consensus shared by various accounts on *dou* is that *dou* quantifies on plurals/definites, and marks universals or universally quantifies leftward.

When there are identical arguments in the same sentence with *dou*, it is focus or contextual information that indicates which item is universally quantified. (73) is a good example to show variant interpretations of arguments on the left of *dou*. The subject *wo* 'I' cannot be atomised and only the topic *Zhe/Zhexie* is universally closed. When the subject is plural *women* 'we', either *women* or *Zhe/Zhexie* can be universally closed, and thus renders either of the interpretations in (73b) and (73c) true. Note that in (73d), *dou* does not marks the universal reading of some argument on it left, but forms a focus construction in combination with *lian*.

(73)   a.   Zhe/Zhexie wo dou zhidao.
              this/these I   all   know
              'I know all about this/these.'
        b.   Zhe/Zhexie women dou zhidao.
              this/these   we   all   know
              'We know all about this/these.'
        c.   Zhe/Zhexie women dou zhidao.
              this/these   we   all   know
              'All of us know about this/these.'
        d.   Zhe/Zhexie (lian) wo dou zhidao. (Ni jingran   bu zhidao?)
              this/these   (even) I   all   know. (you unexpectedly not know?)
              'Even I know about this/these. (How come you don't know?)'

Dou is different from *yiqi*, in that the former may have a distributive force, while the latter only means 'together'.

(74)   a.   Women yiqi/*dou   lai   wancheng zhe-ge renwu.
              we   together/*all come complete this   task
              'We come to complete this task together.'
        b.   Women dou jiehun le.
              we   all   marry ASP
              'We all got married.' (Each of us married someone.)

The following examples show that *dou* marks the universal quantification on mass nouns. In (75) and (76), it is the body, not the person, that is highlighted to be invisible. Such expressions imply that even the body could not be seen, not to say talking to that person, etc.

(75)   Tamen ren   dou bu jian le.   (body)
        they   body all   not see ASP
        'They have all disappeared.'

(76)   Ren   dou mei ying   le.   (body)
        body all   no   shadow ASP
        'They all disappeared.'

Although *ren* 'personality' in (77) is not a plural entity, it is the topic *tamen* 'they' that is plural, and the property that each person possesses is an instance of the property,

thus supporting a plural reading for the subject *ren*.

(77)   Tamen ren   dou bucuo.   (personality of plural DP)
        they   personality all   not bad
        'They are all nice.'

In (78a), there are two arguments in front of *dou*, either of which can be universally
quantified, depending on where the accent falls on. Whereas in (78b), the only possible
reading is that all of the subject like money, not every coins of money are liked by
people. Therefore no matter whether *ren* in this sentence is a referential pronoun or a
kind-denoting noun, it is universally quantified.

(78)   a.   Qian   ren   dou bu yao le.   (referential pronoun)
               money person all   not want ASP
               'They all discarded the money.'
               'They discarded all the money.'
        b.   Qian   ren   dou xihuan.   (plural noun/referential pronoun)
               money person all   like
               'Everyone likes money.'
               'They all like money.'

The universally quantified NP to the left of *dou* can be a plural noun/pronoun, e.g. the
plural DP *zhe-xie shu* 'these books' in (79), or a mass noun, like *shui* 'water' in (81).

Based on the observation that universal quantifiers like *suoyou* 'all', *mei yi-ge* 'every'
and *renhe* 'any' can co-occur with *dou*, as shown in (79-81), I tend to adopt Huang,
Li, and Li's (2009) definition of *dou* as 'a licenser and scope marker for a universal
quantifier to its left' (p. 357), and take *dou* in the relevant examples here as the marker
of (c)overt universal quantification, although *dou* is literally interpreted as 'all'.

(79)   Suoyou zhe-xie shu   dou shi guanyu yuyanxue de.
        all   these   book all   be about   linguistics DE
        'All these books are on linguistics.'

(80)   Zheli mei/renhe yi-ben shu   dou shi guanyu yuyanxue de.
        here every/any one-CL book all   be about   linguistics DE
        'Every/Any book here is on linguistics.'

(81)   Shui dou sa   le.
         water all   splatter ASP
         'The water has all splattered.'

Unlike a universal quantifier which usually occurs before the NP it quantifies, the universal quantification marker *dou* does not reside in a determiner position. Instead, *dou* appears closely after the subject, topic or other elements whose universal quantification it marks, while before the predicate, which has been shown in the above examples. The only exception are Wh-words with a [Q] feature, which stay in-situ after *dou* (cf. L. L.-S. Cheng, 2009, 1995; Lü, 1999), as illustrated in (82-83).

(82)   Dou shui lai   le?
         all   who come ASP
         'Who (all) has come?'

(83)   Ni dou mai le   shenme?
         you all   buy ASP what
         'What (altogether) did you buy?'

3.3.5.2 *Ren* under generic or universal quantification

Ren obtains different interpretations in environments with or without *dou*. Bare *ren* in (84) could be simply a plural DP, or referential, as I have shown in Chapter 2, but cannot be an indefinite, as a bare indefinite in Chinese cannot appear in subject position alone without the existential closure marker *you*. The other alternative reading of *ren* in (84) is an inclusive generic pronoun and this may be the most plausible reading of it with a non-episodic predicate. Nonetheless, *dou* in (85) signals a universal quantification on the DP before it, indicating in this situation the universally quantified count DP must have a plural value in its feature of number. The obligatory co-occurrence of *dou* with overt universal expressions in (86-88), *suoyou de ren* 'all people', *mei yi-ge ren* 'every person' and a reduplicative NP *renren* 'every person' respectively, further manifests this kind of universal reading. These universal quantifiers can be covert, as shown in (85), leaving only a bare DP *ren* in subject position with a preverbal *dou* signalling the universal quantification over it.

(84)   Ren   zongshi you ziji de dasuan.   (inclusive generic)
         person always have self DE plan
         'One always has his/her own plan.'

(85)   Ren   dou zongshi you ziji de dasuan.   (covert universal)
        person all   always have self DE plan
        'People all always have their own plans.'

(86)   Suoyou de ren   dou zongshi you ziji de dasuan.   (overt universal)
        all   DE person all   always have self DE plan
        'All the people always have their own plans.'

(87)   [Mei yi-ge   ren]   dou zongshi you ziji de dasuan.   (overt universal)
        every one-CL person all   always have self DE plan
        'Everyone always has his/her own plan.'

(88)   [Ren   ren]   dou zongshi you ziji de dasuan.   (overt universal)
        Person person all   always have self DE plan
        'People all always have their own plans.'

(84-85) also show that a generic operator and a universal quantifier marked by *dou*
cannot bind the same variable simultaneously. The same predication in (84-85) quanti-
fied by the adverbial quantifier *zongshi* 'always' is an individual-level predicate which
may express habitualness and genericity. However, the generic interpretation on the
predicate does not in turn introduce a generic argument (cf. Carlson & Pelletier, 1995;
Leslie, 2008, among others on the relation between the generic operator Gen and ad-
verbials of quantification), but can roughly be read as follows, where Q temporarily
stands for a certain quantifier, be it universal, existential or generic, which is unclear
from the surface:

(89) $Qx(\text{ren}(x)\ \forall s\ [\text{you ziji}(x)\ \text{de dasuan}(x)]$

In the absence of an overt quantifier, the subject *ren* 'person' in (84) is most likely a
generic expression, except in certain specific contexts that may result in other readings.
Therefore, the inclusive generic *ren* in subject position is assumed to be bound by a
silent generic operator, as shown in (90) and (91) respectively.

(90) $G_a x\ (\text{ren}(x))\ \forall s\ [\text{you ziji}(x)\ \text{de dasuan}\ (x, s)]$
        'One always has his/her own plan.'

(91)

```
                    TP
                  /    \
                Gₐ      TP
                      /    \
                    DP      T′
                    /\      / \
                  Reng    T   vP
                           /     \
                         AdvP     vP
                          /\     /   \
                      zongshi  DP     v′
                               /\    /  \
                             tg   you+v  VP
                                         /  \
                                        V    DP
                                       /\    /\
                                  <you>  zijig de dasuan
```
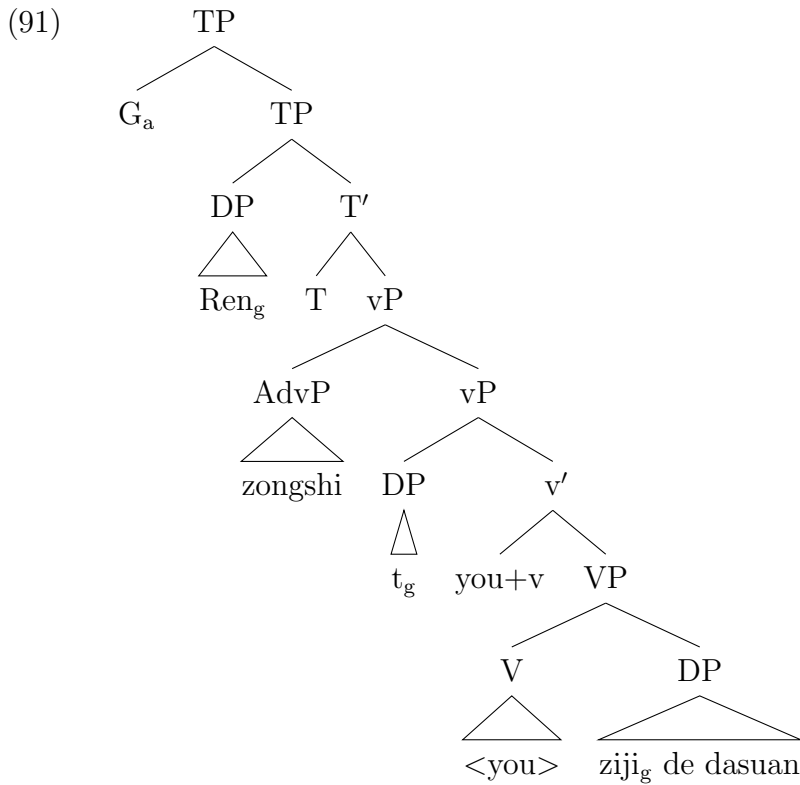
Nevertheless, the subject *ren* in (85) cannot have a generic reading because it has been quantified by a lower universal quantifier, though covert but signalled by *dou*, and can only be read as in (92). The example (85) has two elements which launch or which are quantifiers, *dou* and *zongshi*. As *dou* signals universal quantification over what is to its left, it implies the the subject is universally quantifies, rather than quantified by a covert generic operator on the argument, and therefore the subject cannot have an inclusive generic interpretation.

(92) $\forall x\ (ren(x))\ \forall s\ [you\ ziji(x)\ de\ dasuan\ (x,\ s)]$
        'Everyone always has his/her own plans.'

(93)

TP
├─ G̶a̶
└─ TP
   ├─ DP
   │ └─ △ Ren_i
   └─ T′
      ├─ T
      └─ DouP
         ├─ DP
         │ └─ △ t_i
         └─ Dou′
            ├─ Dou
            │ └─ △ **dou**
            └─ vP
               ├─ AdvP
               │ └─ △ zongshi
               └─ vP
                  ├─ DP
                  │ └─ △ t_i
                  └─ v′
                     ├─ you+v
                     └─ VP
                        ├─ V
                        │ └─ △ <you>
                        └─ DP
                           └─ △ ziji_g de dasuan
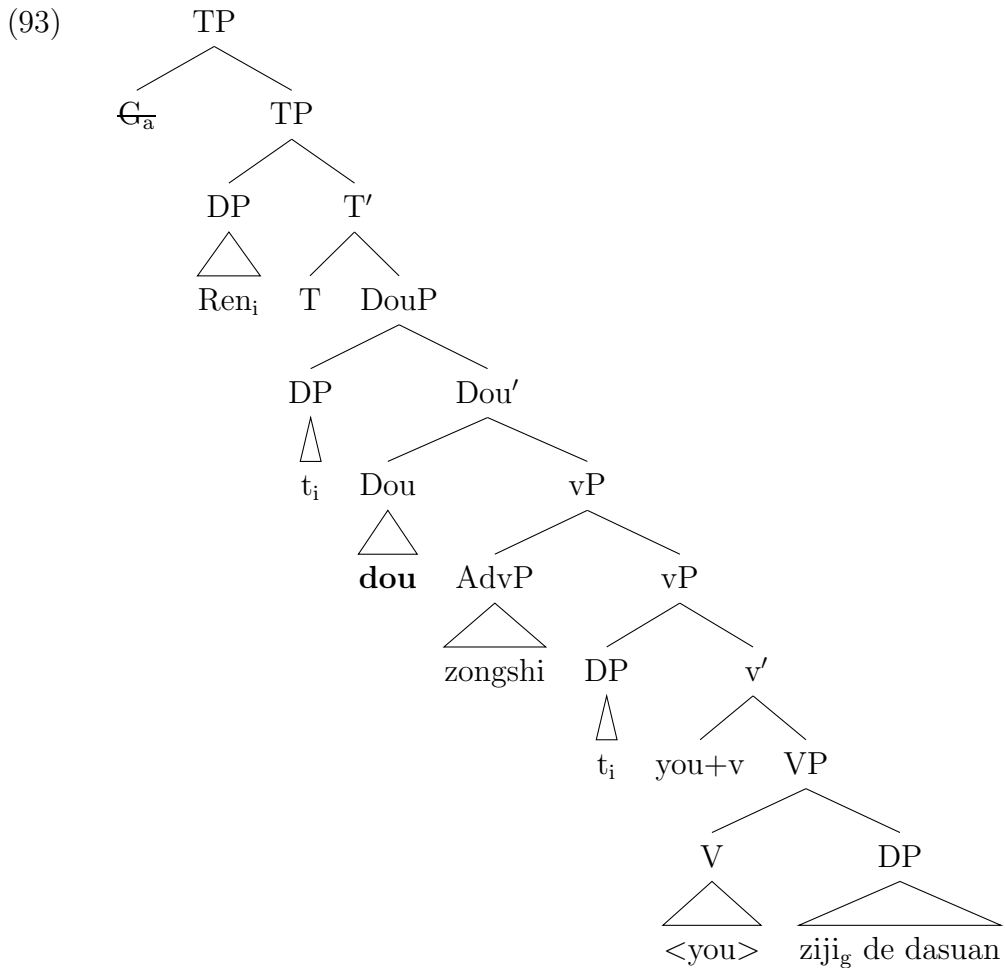
3.3.5.3   Ambiguity of *ren* in environments with *dou*

In this section I look at some more ambiguity that may arise in interpreting *ren* in an environment with *dou*. Note that *dou* has various meanings apart from the meaning 'all', e.g. 'even' in (94-95), and 'already' in (97). The interpretation of the arguments *ren* in such sentences relies on the construction in which each argument occurs and context. For example, (*lian...*) *dou* 'even' in (94) emphasises that the focused object *ren* is not present and it is impossible to discuss with the person/people absent. In this case *ren* has a definite reading and refers to a certain person known to both the speaker and the addressee. (95) is an existential construction, where it is a NumP *yi-ge ren* 'a single person' that is emphasised, in which case this NumP cannot be reduced to *ren*. (96-97) demonstrate that the interpretation of a sentence may vary according to different contexts. Without discourse context, the sentence '*Ren dou zou le*' may possibly just mean 'people have all left' in (96), while with the information in context as shown in (97), *dou* may more possibly mean 'already'.

(94) (Lian) Ren dou mei jian zhao, hai   zenme shangliang.
      (even) body also not see Asp, let alone how   discuss
      '[The speaker, the addresser, etc.] has/have not even seen [a certain person/
      certain people], not to say discuss with him/her/them.'

(95) (Lian) Yi-ge ren   dou mei you.
      (even) one-CL person also not exist
      'There is not even a single person at all.'

(96) Ren   dou zou le.
      person all   leave ASP
      'People have all left.'

(97) Ni lai wan le. Ren   dou   zou le.
      you come late ASP person already left ASP
      'You are late. He/She/They [the person/people mentioned in context] has/have
      already left.'

Recall (55) repeated here as (98). The interpretation of the subject *ren* in the following
five similar examples are different due to different environments. Notice that in (102),
ren quantified by *zheng-ge* 'whole' cannot refer to any individual, but a certain entity
that possessed by an individual, e.g. body, personality, characteristic, etc.

(98) Ren   shi hui bian   de.   (inclusive generic *ren*)
      person BE will change DE
      'One will change.'

(99) Ren   dou shi hui bian   de.   (universal *ren*)
      person all   BE will change DE
      'People all will change.'

(100) Ren   dou bian   le.   (universal *ren*)
       person all   change LE
       'People have all changed.'

(101) (Lian) *pro* Ren   dou bian   le.   (*ren*: personality)
       (even)   personality also change ASP
       'Even his personality has changed.'

(102)   *pro* Zheng-ge ren   dou bian   le.   (body)
        whole-CL body all   change ASP
        'He/She has totally changed.'

Ren in object position is obviously out of the scope of *dou*, like in (103), and most possibly has an inclusive generic reading, with an alternative *yi-ge ren* more prosodically ideal in sentence final position. It cannot have a 3rd person referential reading, as pointed out by Lü (1999) that, although *ren* can be used interchangeably with *renjia* referring to other person/people, *ren* with this reading cannot occur in sentence final position. Kind-referring denotation is also possible if no explicit contextual information is provided.

(103)   Renhe kunnan   dou ya   bu kua   (yi-ge) ren.
        any   hardship all   crush not down a   person
        'No hardship can crush a person.'

If the object is in topic position, as in (104), then both the object and the subject reside to the left of *dou*, i.e. both are potentially in the scope of *dou*. This kind of phenomenon may cause an ambiguity in the interpretations of the two arguments. When there is more than one plural argument in the scope of *dou*, *dou* can choose either of the candidates to bind (cf. J.-W. Lin, 1998, on this kind of phenomenon, though our analyses differ).

(104)   Naxie shu   women dou kan-guo   le
        those book we   all   read-Asp Asp
        a.   'We have read all of those books.'
        b.   'All of us have read those books.'
        (J.-W. Lin, 1998, p. 209)

As I have shown before, bare *ren* may be singular or plural, which is not shown in surface. If *dou* binds the subject *ren*, then *ren* must be plural in number, thus yielding the first reading (105a), literally 'All people will experience these things'. The alternative candidate bound by *dou* is the object *zhe-xie shi* 'these things', now in topic position, which leaves the unfettered subject *ren* as an indefinite introducing a variable bound by a covert generic operator, indicating any individual will experience all these things.

(105) Zhe-xie shi ren   dou hui jingli.
       these thing person all will experience
       a. 'All people will experiences these things.'
       b. 'One will experience all these things.'

Another fact worth mentioning is that when *dou* works on the object or an adverbial, this doesn't exclude a generic reading of the subject *ren*. In (106) *dou* quantifies over the object Wh-word *shenme* on its right, which usually stays in situ but is still scoped over by *dou*. The preposition *dui* 'for' introduces the object *renhe shiqing* 'anything' in (107), so *dou* after this PP marks a universal DP as the object. *Dou* binds an adverbial prepositional phrase in (108), emphasising 'at any situation'. In all three constructions, *dou* signalling the universal quantification over the object or an adverbial does not block the subject *ren* being bound by the sentential generic operator.

(106) G_a [pro_g yudao   kunnan shi], ren_g dou yinggai zuo shenme?
                confront hardship when person all   should do   what
       'What all should one do when confronting hardship?'

(107) G_a [$_{PP}$ dui [$_{DP}$ renhe shiqing]$_i$] ren_g dou bu ying   tai zhaiyi t_i.
                 for   any   thing   person all   not should too care for
       'One shouldn't care too much for anything at all.'

(108) G_a ren_g [$_{PP}$ zai renhe shihou] dou yinggai baochi lengjing.
             person   at any   time   all should keep   calm
       'One should keep calm at all times.'

According to Lee (1986), the different readings between (108) and (109) are due to the Crossover Constraint, which prohibits *dou* from binding across 'a logical operator (wh-word or Q-NP)'. In (108) *renhe shihou* 'any time' is a kind of quantifiers which hinders *dou* from binding the subject *ren*. However, in (109), *zhe-ge shihou/huanjing* 'this-CL moment/circumstance' is definite and singular, which cannot be bound by *dou*, and in turn does prevent *dou* from binding the subject *ren*.

(109) Ren_i [zai zhe-ge shihou/huanjing$_j$]   dou hen nan   baochi
       person under this-CL moment/circumstance all   very difficult keep
       benxin.
       original mind
       'It's difficult for all people to be themselves under such circumstance.'

(110) and (111) show that ambiguity in the reading of *ren* may arise in a focus construction marked by *lian…dou*. In this kind of construction, *dou* only assists in forming a focus environment.

(110)   *pro* (lian) Ren   dou bu shi.
                (even) human also not be
          '*pro* is/are even not human.'

(111)   *pro*_i (lian) Ren_j   dou bu ru.
                (even) person also not as good as
          '*pro* is not as good as a human.'

Note that *lian* in this construction can be covert, as shown above. Therefore potential ambiguity may appear between (111) and (112) which resemble each other in surface. (112) is not a focus construction and the topic *pro* is originally the base-generated object, the interpretation of which can be recovered from context. Here *dou* marks the universal reading of the subject *ren*.

(112)   [_{TOP} *pro*_i] Ren_j   dou bu ru   *t*_i.
                person all   not as good as
          'All other people are not as good as him/her.'

3.3.6   The generic quantification vs. existential quantification

3.3.6.1   *You*

The verb *you* has a meaning like 'some' apart from 'have' in sentences like (113), or 'exist' in sentences like (114) (cf. Dictionary Compilation Department, Institute of Language Research, CASS, 2016). *You* with this 'some' interpretation can be taken as an existential marker (cf. C.-T. J. Huang et al., 2009), quantifying on a DP following it and assigning [indefinite] value to the definiteness feature of the DP it quantifies. Note that this existential *you* is different from 'some' in that 'some' takes an NP while existential *you* takes a DP after it. To avoid ambiguity in interpretation, I will gloss the existential marker *you* with 'exist', although the three *you*s occur in different constructions, as shown in (115).

(113)   Wo you yi-ben shu.   (have/possess/own)
         I   have one-CL book
         'I have a book.'

(114)   Jiazi shang you yi-ben shu.   (exist)
         shelf on   exist one-CL book
         'There is a book on the shelf.'

(115)   a.   S + V (*you* 'have') + O
         b.   Locative PP + V (*you* 'exist') + DP
         c.   [*You* 'exist' DP] + V + O

Based on Huang, Li, and Li's (2009) account of indefinites in existential situations, a
bare indefinite can be viewed as introducing a variable bound by some operator, e.g.
existential closure, and receives its indefinite interpretation within the domain of such
a binder. The aspectual particle *le* in (116) signals existential closure (cf. Diesing, 1992;
Heim, 1982; T.-H. J. Lin, 2004, among others for existential closure and relevant claims
concerning Chinese). As the binding relationship is basically related to the syntactic
position of both elements, *ren* in the subject position in (117), which resides outside of
the existential closure, can only be definite or specific, referring to some person known
to the speaker or to both the speaker and addressee. To maintain an indefinite reading,
an existential marker *you* is adopted, as is shown in (118). In this case, the indefinite
reading arises.

(116)   Ta   qing le   ren   bangmang.
         he/she ask   ASP person help
         'He/She asked someone/some people to help him/her.'

(117)   Ren   bei qing le   lai   bangmang.
         person PASS ask   ASP come help
         'That person was/Those people were asked to help.'

(118)   [You ren]   bei   qing le   lai   bangmang.
         exist person PASS ask   ASP come help
         'Someone was/Some people were asked to help.'

As the agent of an episodic predicate, i.e. a specific event, *ren* in (117-119) cannot have
a generic interpretation, but is interpreted as a referential pronoun or as an indefinite.
For the second possible reading, *ren* in subject position must be present in combination

with *you*, as shown in (120), to provide the existential force.

(119)   Ren   lai   le.
          person come ASP
          'He/She has come.'

(120)   You ren   lai   le.
          exist person come ASP
          'Someone has come.'

### 3.3.6.2   Ren under generic or existential quantification

When there is no implicit feature of tense, and it is hard to judge whether the predicate
is stage-level or individual-level, the existential marker *you* helps to distinguish between
an inclusive generic *ren* in (121) and an indefinite *ren* in (122). The structures of the
two are roughly presented in (123-124) respectively.

(121)   Ren   (zongshi) zhuiqiu meihao   de   shiwu.
          person (always) seek   beautiful DE things
          'One (always) seeks beautiful things.'

(122)   [You ren]   zhuiqiu meihao   de   shiwu.
          exist person seek   beautiful DE things
          'Some person seeks/Some people seek beautiful things.'

(123)

```
                    TP
                  /    \
              G_a       TP
                      /    \
                   DP       T'
                  /\       /  \
                 /  \     /    \
              Ren_g    T     vP
                           /    \
                        DP       v'
                       /\       /  \
                      /  \     /    \
                    t_g   zhuiqiu+v   VP
                                     /\
                                    /  \
                              zhuiqiu meihao de shiwu
```

(124)

```
                    TP
                  /    \
               G̶a̶      TP
                      /    \
                   DP        T′
                  /  \      /  \
              You renᵢ   T      vP
                               /  \
                             DP     v′
                             △     /  \
                             tᵢ  zhuiqiu+v   VP
                                          /    \
                                  zhuiqiu meihao de shiwu
```
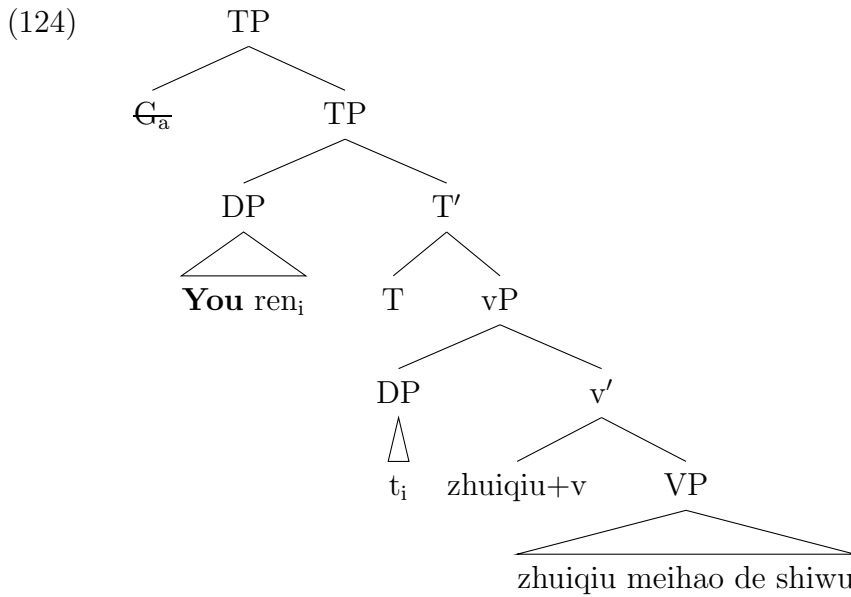
(125) shows a conflict between the existential marker *you* and the universal marker *dou*. To sum up, the existential quantifier conflicts with either the generic operator or the universal quantifier when each is competing to bind the same argument.

(125)   (*You) ren   dou mai le zhe-ben shu.
        (*exist) person all   buy LE this-CL book
        'People all bought this book.'

(126) is acceptable with *dou* either before or after *you ren* 'someone/some people', just because here *dou* is not a universal marker but actually means 'even'. When *dou* is used with this denotation, (125) can roughly be understood as (127).

(126)   a. Hailang tai da, you ren   dou tu   le.
            wave   too big, exist person even vomit ASP
            'The waves were so big that someone/some people even vomited.'
        b. Hailang tai da, dou you ren   tu   le.
            wave   too big, even exist person vomit ASP
            'The wave were so big that there were someone/some people who vom-
            ited.'

(127)   You ren   dou mai le zhe-ben shu (, er bu shi jie   yi-ben).
        exist person even buy LE this-CL book (but not be borrow one-CL)
        'Someone even bought this book rather than borrow one.'

3.3.7 Contexts

'Context' may be a general or flexible term for environments where an entity resides in. The direct syntactic context may allow an argument to find its antecedent, and a predicate to select a certain singular/plural argument. Some syntactic contextual information may contribute to the restrictor of a quantification, while other information goes to the scope. Discourse may provide more information for argument-predicate matching, or support a certain interpretation of the sentence.

In previous chapters, much has been mentioned about syntactic context, for example, the environment formed by individual/stage-level predicates, kind-referring predicates, Q-adverbials, relevant arguments, etc.

According to Ackema and Neeleman (2018), conditionals are always a prerequisite for generics, be they real or subjunctive. Such conditions go to the restrictor. This provides a kind of diagnostic for differentiating inclusive generics from kind generics. However it cannot show the inclusion of the subject.

If *ren* has an antecedent in context, or if an antecedent is assumed, then *ren* is referential 3rd SG/PL; if, by any hint that *ren* is in contrast with any definite human argument in the same sentence, then *ren* is referring to general 'others'.

As shown in sections 2.3.6 and 3.1.2, genericity may be licensed by predicates, which also facilitates the distinction between kind *ren* and inclusive generic *ren.* Nevertheless, ambiguity may still exist with certain predicates. Information from the discourse context will play a role in helping with interpretation. If (128) is about anyone only praying for some illusionary sacred healing instead of receiving standard medical treatment, (128a) is an appropriate reading. If the speaker is concerned about global warming and radical climate change, then (128b) is preferred to (128a) in best implying the speaker's thought.

(128)   Ren   hui wei ziji de yumei fuchu daijia.
       person will for self DE fatuity pay   price
       a.   'One will pay a price for one's fatuity.'
       b.   'Human beings will pay a price for their fatuity.'

3.4 Summary

In this chapter I investigated the generic quantification on the inclusive generic pronoun *ren* in Chinese, mainly involving *ren* in the subject position. It is shown that *ren* as

an inclusive generic pronoun is not easy to identify, as a bare NP in Chinese may have a definite, indefinite, kind or generic meaning respectively, depending on its syntactic and discourse context.

Through the exploration of canonical theories of the generic operator on generic nouns and impersonal pronouns, as well as my analysis of empirical data of *ren*s in Chinese, I argue that overt adverbial quantifiers may not serve as an effective diagnostic tool for generic pronouns in Chinese; as has been shown in the segmentation of the generic operator, adverbs of quantification are actually quantifiers on event variables. They cannot distinguish between an inclusive generic pronoun, a referential pronoun and a kind noun effectively. I further argue that the traditional binary generic operator is of limited help to demonstrate logically the relationship between elements in a sentence, especially when trying to identify different interpretations of bare *ren*s in Chinese.

Inspired by Dobrovie-Sorin and Beyssade's (2012) proposal of two operators in a generic sentence, GEN and HAB, and based on Chierchia's (1995b) claim that an already quantified DP does not introduce variables for the adverb of quantification to bind, I propose a dual-operator system in analysing generic *ren*s in Chinese. This dual-operator system consists of unary G_a and unary G_p, binding the argument variable and event variable respectively. The basic logical form for these two generic operators are as follows.

$$G_a x \ [\text{person} \ (x)] \ G_p s \ [V \ (x, s)]$$

Some other operators, such as universal and existential quantification marked by *dou* and *you* respectively in Chinese, compete with G_a in binding the same argument variable, which may help to distinguish among the various readings of a noun or pronoun otherwise identical in form.

By illustrating various constructions containing *dou* or *you*, I also generalise that inclusive generic *ren* can occur in topic position but cannot be focused.

Chapter 4

Quasi-inclusive and Exclusive Genericity

4.1 Introduction

According to Holmberg and Phimsawat (2015, p. 55), 'the quasi-inclusive pronoun refers to people in general including the speaker but not the addressee, and the exclusive pronoun refers to people in general, in some domain, excluding the speaker and the addressee'.

Recall (3-5) from Chapter 1 and which I repeat here as follows. Different from the inclusive generic pronoun 'One/You' in (1), 'We' in (2) here refers to people in general in a restricted locative and temporal region, including the speaker and his/her associates, but not the addressee, and hence is termed as a quasi-inclusive generic pronoun. In (3) 'they' refers to people in general in a restricted locative and temporal region, including neither the speaker or the addressee, nor his/her associates, hence is categorised as an exclusive generic pronoun.

(1)   One/You should always have dreams.   (inclusive generic pronouns)

(2)   We like smoked fish in Finland.   (quasi-inclusive generic pronouns)
        (Holmberg & Phimsawat, 2017, p. 13)

(3)   In the south they feed on rice.   (exclusive generic pronoun)

In this chapter, I will follow Holmberg and Phimsawat's (2015) definition of the quasi-inclusive and exclusive generic pronouns, and look at the behaviour of such two types

of genericity in Chinese. In this chapter, section 2 analyses the quasi-inclusive generic pronoun in Chinese; section 3 explores the exclusive generic pronoun in Chinese and distinguishes it from an arbitrary pronoun based on the distinct definition from Holmberg and Phimsawat (2015) and other accounts; section 4 investigates the roles that adverbs play in quasi-inclusive and exclusive genericity; section 5 looks again at the inclusive genericity in particular environments; finally section 6 summarises the whole chapter.

4.2 Quasi-inclusive genericity in Chinese

Women in Chinese parallels 'we' in English in connotation and inclusivity. Both pronouns can act as a referential pronoun or a quasi-inclusive generic pronoun. The difference between referential *we* and quasi-inclusive *we* lies in their different inclusion and the size and restriction of their inclusion.

4.2.1 Referential *women* 'we'

As a referential pronoun, *women* has several types of referent. Here I borrow symbols from Ackema and Neeleman (2018) to represent the referents of *we*, i.e. i for speaker, u for addressee, and o for others. According to Ackema and Neeleman's (2018) theory, 'others' is further divided into three types, a_i for others associated with the speaker, a_u for others associated with the addressee, and o is preserved for those of absolutely no relevance to the speaker or the addressee.

Referential 'we' is generally an associative plural 'we' (cf. Ackema & Neeleman, 2018), as it is not the repeated addition of the same first person singular 'I', but the combination of 'I' and other people associated with 'I'. The person feature of this definite plural 'we' has the value [1st, 3rd] rather than [1st, 1st, ...1st]. If 'we' also include the addressee, then the value of its person feature is [1st, 2nd, 3rd]. The main types of the denotation of referential *we* are illustrated as follows.

Referring to the speaker and the associates of the speaker ($i + a_i$)

This is the exclusive use of the first person plural pronoun *women*, i.e. without reference including the addressee. The participant feature of *women* with this use is $[i + a_i]$, including the speaker and his/her associates. Note that the term 'exclusive' used for referential 'we' is different from that for the exclusive generic pronoun. The exclusive referential 'we' means the exclusion of the addressee, while the exclusive generic pronoun indicates the exclusion of the speaker, the addressee and their associates.

There is also ambiguity between exclusive referential 'we' and quasi-inclusive generic 'we', as the values of their person feature seem the same, [1st].

However, as pointed out by Holmberg and Phimsawat (2015), a difference between referential 'we' and quasi-inclusive generic 'we' lies in whether their reference allows exceptions. Unlike quasi-inclusive generic 'women', referential *women* does not allow exceptions. Anyone among *women* in (4) who is not a member of the drama club will invalidate the statement, as the pronoun is used referentially.

(Context: The speaker of a drama club is introducing themselves to a new student.)

(4)   Women shi huajushe   de.
       we   be drama club DE
       'We are from the drama club.'

Referring to the speaker and the addressee (i + u)

(Context: The speaker of a drama club is inviting the new student(s).)

(5)   Women keyi yiqi   yan yi-bu   huaju.
       we   can together play one-CL modern drama
       'We can play a modern drama together.'

Referring to the speaker, the addressee, the associates of both sides, and restricted others (i + a$_i$ + u + a$_u$ + o)

The participant features of *women* with this reference are $[i + a_i + u + a_u + o]$.

(Context: The speaker is telling the addressee that as students of this school they all need to attend an extracurricular club.)

(6)   Women dou yao   canjia yi-ge   kewai   shetuan.
       we   all   should attend one-CL extracurricular club
       'We all need to attend an extracurricular club.'

Obviously here 'others' refers only to other students in this school. The reference of the inclusive first person plural pronoun differs in the various inclusivity of *o*'s. Contrast (6) with (7), where *o* extends to all others on the earth.

(7)   Women dou shi diqiu ren.   (universal)
       we   all be earth person
       'We are all residents on the earth.'

Based on context and the background knowledge of both sides, the speaker can switch among different referents using the same lexical *women* freely as follows, and the addressee can perceive these distinct denotations of *women* without much difficulty.

Speaker: Women dou yao canjia yi-ge kewai shetuan. Women shi huajushe de. Women
keyi yiqi yan yi-bu huaju: Women Dou Shi Diqiu Ren.
'We all need to attend an extracurricular club. We are from the drama club.
We can play a modern drama together: "We Are All Residents on the Earth."'

To sum up, the elements and size of the inclusivity of *women* is sensitive to context.

4.2.2 How inclusive is the quasi-inclusive pronoun?

Just like 'we', *women* can be used as quasi-inclusive generic pronoun, referring to any individual among the group of people including the speaker and the speaker's associates, but it allows exceptions. *Women* with this denotation is often restricted by a locative/temporal adverb/adverbial, which will be discussed in 4.4.

When a person is introducing some practice in their region, people, etc. to a stranger, he uses *women* as a quasi-inclusive generic pronoun, not including the hearer, and perhaps even he himself is not doing so now, as would follow in the natural interpretation of (8).

(8)   Jiushi   women zhuyao chi culiang.   (quasi-inclusive generic)
      old times we   mainly eat coarse grain
      'In old times we mainly ate coarse grain.'

When there is no other phrase in the sentence that restricts the domain of quantification, and the predicate is not episodic, *women* may have an inclusive generic reading, like in (9).

(9)   Youde shihou women zhineng jianchi ziji de xuanze.   (inclusive generic)
      some   time   we   can but stick to self DE choice
      'Sometimes we can only stick to our own choice.'

In (9) *women* is so loosely restricted that it can perhaps be categorised as an inclusive generic pronoun. The distinction between (6) and (8) lies in that in (6), with a universal quantification marker *dou*, *women* is quantified by a covert universal quantifier and refers to everyone on the earth without any exception: no one lives outside the earth

and no one is alien. Whereas in (8) *women* is quantified by a covert generic operator and refers to anyone human, but allowing exceptions: it is a general practice for any one of us, but there can always be someone or some people who do not do that.

Therefore, the inclusivity of *women* in the examples of 4.2.1 and 4.2.2 is sorted as follows by the size of referent group.

(10)   universal *women* (7) > inclusive generic *women* (9) > quasi-inclusive generic *women* (8) > all inclusive referential *women* (6) > inclusive referential *women* (5) > exclusive referential *women* (4) [1]

4.2.3   Variants of *women*

In colloquial Chinese an alternative *zanmen* is used to imply the same or opposite meanings of referential *women*. That is, *zanmen* sometimes means just like *women* including the addressee, or sometimes *zanmen* includes the addressee while *women* doesn't, and sometimes *zanmen* means only *nimen* 'you (2PL)'. In addition, in some regions in the northeast provinces in China, when the speaker says *zanmen*, he/she is actually referring to himself/herself and their associates, not including the addressee. The distinction varies regionally. Another variant *anmen* is used in some northern provinces in China, which mainly refers to the speaker with his/her associates, not including the hearer. No empirical data have shown that *zanmen* can be used to express inclusive or quasi-inclusive genericity like in the examples with *women*. However, the following expressions are much the same in reference as quasi-inclusive generic *women*.

(11)   a.   zanmen Dongbei ren
              we   northeast person
              'we Northeasterner'
         b.   anmen Shandong ren
              we   Shandong person
              'we Shandonger'

Wang (1984) thinks that *ren* in (16) in Chapter 1 amounts approximately to *zanmen* as it includes both the speaker and hearer. However he also points out that generally it is *women* that is used as a generic.

---

[1]   Here the amount of associates is not taken into consideration, as it is infinitely complicated. If the *women* which only refers to the addressee is also included, then this is the least inclusive.

4.3 Exclusive Genericity

Here I further refer to Ackema and Neeleman's (2018) theory for the analysis of exclusive generics. They signal the third person pronoun with the feature [DIST] which has the effect that the pronoun refers solely to o's. Adding in the generic feature, [GNR + DIST] stands for quasi-universals, which parallels quasi-inclusive generics here, while [ARB + DIST] is used to derive the quasi-existential interpretation for a pronoun.

4.3.1 *Tamen* 'they'

Tamen in Chinese is the counterpart of 'they' in English, which is not only a regular third person plural referential pronoun, but also an exclusive generic pronoun. Like the quasi-inclusive generic pronoun, it also needs locative or temporal restriction, for example *zai nanfang* in (12).

(12)   [Zai nanfang] tamen chi mi.
        in   south   they   eat rice
        'In the south they feed on rice.'

4.3.2 Arbitrary pronouns

Another use related to the exclusive generic pronoun is the arbitrary pronoun (cf. Ackema & Neeleman, 2018; Cinque, 1988; Holmberg et al., 2009; Malamud, 2012, 2013; Sigurðsson & Egerland, 2009, among others). According to Holmberg et al. (2009), 'By arbitrary we mean a pronoun which is best translated into English as *they*, as in *They speak many different languages in India*, the semantic defining characteristic being that it denotes people in general (in some domain), but excluding the speaker and the addressee.' (pp. 63-64)

As claimed by Malamud (2012, p. 2), 'Scholars have described as arbitrary the interpretations of pronouns and null syntactic elements (PRO, pro) that do not involve antecedents or bound-variable interpretations (Jaeggli 1986; Lebeaux 1984; Cabredo-Hofherr 2002; inter alia).' The typical form of an arbitrary pronoun is said to be 'they', as shown in (13).

(13)   They speak English in America.
        (Malamud, 2013, p. 1)

As what has been shown above as the exclusive generic pronoun, I argue that 'they' in (13) is not arbitrary but a kind of generic restricted regionally or temporarily and exclusive of the hearer.

By 'arbitrary' Ackema and Neeleman (2018) actually refer to 'they' in sentences like the following. In expressions like this, 'they' refers to some specific people whom the speaker doesn't exactly identify.

(14)   They called for you, but they refused to leave their name.
        (Ackema & Neeleman, 2018, p. 106)

This example has an existential reading of the specific indefinite, much like *you ren* in subject position in Chinese, as in (15), though *you ren* does not show clearly any number feature. The indefinite *ren* in this expression may refer to a single person or plural people, whom the speaker does not identify.

(15)   You ren   zhao   ni, dan jujue toulu   mingzi.
        exist person ask for you, but refuse expose name
        'Someone/Some people asked to see you, but refused to tell his/her/their name(s).'

4.4   Adverbs in quasi-inclusive and exclusive generics

One similarity shared by quasi-inclusive and exclusive generic pronouns is that they are both usually restricted by a locative/temporal adverb/adverbial which provides restrictions on the event variable (cf. e.g. Kratzer, 1995). Even if there are no overt locative/temporal adverbs present, the hearer may pick up some information from context.

4.4.1   Adverbials or subjects?

C. N. Li and Thompson (1981) propose that time and locative phrases are in fact topics as they present known information and in principle can be separated from the rest of the sentence by a comma.

(16)　Na　nian ta　　　hen　jinzhang.
　　　that year he/she very anxious
　　　'That year he/she was very anxious.'

Guo (2002) points out that in Chinese some locatives and temporal phrases can function as adverbials, but it's hard to distinguish between those phrases being adverbials and being subjects. Although there are accounts in the literature claiming that locative and temporal phrases can sometimes function as subject, I argue that at least in quasi-inclusive and exclusive generic constructions that is not the case. Instead, the subject is a covert *pro*. The potential ambiguity arises with non-prepositional phrases, as shown in (17a). If we change the adverbial in (17a) into a prepositional phrase as in (17b), the ambiguity will disappear, and the subject can be expressed overtly.

(17)　a.　Nanfang *pro* chi mi,　beifang *pro* chi mian.
　　　　　south　　*pro* eat rice, north　*pro* eat wheaten food
　　　　　'South (people) eats rice, north (people) eats wheaten food.' (literally)
　　　　　'People in the south eat rice, while people in the north eat wheaten food.'
　　　b.　[$_{pp}$ Zai nanfang] renmen/*pro* chi mi;　[$_{pp}$ zai beifang] renmen/*pro* chi
　　　　　　at　south　　people　　　eat rice,　　at　north　　people　　　　eat
　　　　　mian.
　　　　　wheaten food
　　　　　'In the south people eat rice, while in the north people eat wheaten food.'

Or structures like in 4.2.3 could be employed.

(18)　Tamen nanfang ren　　chi mi.
　　　they　south　person eat rice
　　　'People in the south eat rice.'

4.4.2　Do adverbs function differently on quasi-inclusive and exclusive generics?

As mentioned above, both quasi-inclusive and exclusive genericity need restriction by a locative/temporal adverb. However, the restriction differs between the two generic expressions. Recall 'in old times' in (8), and look at 'for at least 40000 years' in (19), the quasi-inclusive generic pronoun seems not to include the speaker or at least not all the time, as the speaker is living in current times.

(19)   We have lived in Europe for at least 40000 years.
          (Sigurðsson, 2014, p. 86)

According to (Sigurðsson, 2014), this kind of expression is 'not about the speaker but about abstract sets of humans (perceivers/thinkers or EGOs) with whom the speaker identifies himself or herself' (p. 86). In contrast, exclusive genericity does not have such extension as the speaker is always excluded.

Therefore, for the exclusive generic pronoun, I propose that the locative/temporal adverb/adverbial could be understood as a kind of modifier/relative on the exclusive generic DP logically, which restricts the domain of generic quantification. This may serve like adnominal modifier PP as shown in (20), which is adapted from my proposal about features in Chapter 2. The part o the left shows that the 'others' associated with the speaker amy have their reference restricted by the PP.

(20)
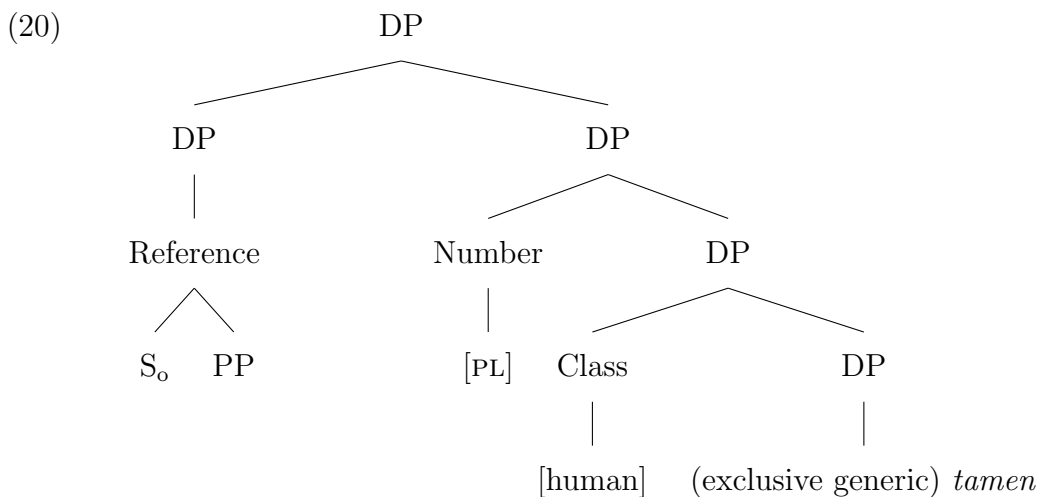
4.4.3   Sentential adverbials vs. adverbial adjuncts to VP

According to Holmberg and Phimsawat (2015), both the quasi-inclusive and the exclusive generic pronouns may be quantified by the generic operator which they locate in CP.

I propose further that a sentential temporal/locative adverbial restricts the domain. Such a sentential adverbial restrictor usually resides at sentential initial position, as shown in (21).

(Context: A person is introducing regional differences in agriculture. *Tamen* is an exclusive generic pronoun, while *women* is a quasi-inclusive generic pronoun.)

(21)   [Zai nanfang] tamen zhong daozi, [zai beifang] women zhong xiaomai.
         at   south   they plant rice, at   north   we   plant wheat
         'In the south they plant rice, while in the north we plant wheat.'

An adverbial adjunct to VP may be interpreted as part of the scope of quantification. It usually follows the subject, i.e. is between the subject and the predicate, as exemplified in (23).

(Context: The speaker is introducing a planting project. *Tamen/Women* are referential pronouns.)

(22)   Tamen/Women [zai nanfang] zhong daozi, [zai beifang] zhong xiaomai.
         they/we   at   south   plant rice, at   north   plant wheat
         'They/We plant rice in the south, and wheat in the north.'

In the next example (23), from Holmberg and Phimsawat (2015), 'in October' is also interpreted in the scope, not in the restrictor. It does not distinguish the quasi-inclusive generic pronoun temporally from an exclusive referential 'we', nor does it definitely exclude the addressee. What licenses the quasi-inclusive reading of 'we' is an implicit locative adverbial, specifically 'in Thailand', which can be recovered from context. It is for this reason that I suggest, to test whether a locative or temporal adverbial validates a quasi-inclusive reading, such adverbials should be interpreted in the restrictor and from there, restrict the domain.

(23)   a.   Raw kin   cee   nay dɯan   tùlaakhɔm.
              we   have vegetarian food in   month October
              'We have vegetarian food in October.'
              (Holmberg & Phimsawat, 2015, p. 63)
         b.   We (people in Thailand) have vegetarian food in October.

Carlson (1999) throws light on the significance of domain restriction on genericity, based on his observation that '[i]n many cases a domain adverb can be syntactically converted into a noun-modifying phrase, though the result is synonymous with the original (p. 18). This can be seen by comparing (24a) and (24b).

(24)   a.   In the upper Midwest, people still wear polyester leisure suits (but not in
              California) (Carlson, 1999, p. 14)
         b.   People in the upper Midwest still wear polyester leisure suits. (Carlson,
              1999, p. 18)

Nevertheless, the structure in (25) clearly shows that although we could integrate a sentential locative or temporal adverbial into the restrictor, that by itself cannot distinguish between the quasi-inclusive generic pronoun and the exclusive generic pronoun. What (25) describes is roughly a regionally restricted inclusive generic, which does not clearly show whether it includes the speaker but not the addressee (quasi-inclusive generic), or excludes both (exclusive generic). On the other hand, *women* or *tamen* on their own are common referential pronouns. To express quasi-inclusive genericity and exclusive genericity, the combination of referential pronoun and 'people + PP' is needed.

(25)   a.   Gx[person in the south/north (x)][plant rice/wheat (x)]

       b.

                                  TP

         G   Restrictor   Scope

      person in the south/north (x)   plant rice/wheat (x)
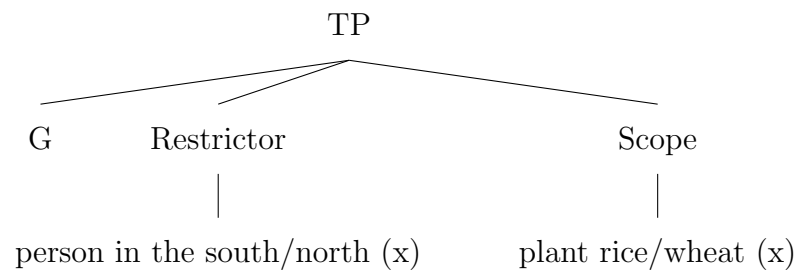
A different way to construe (21) is as follows.

(26)   Tamen [nanfang ren]   zhong daozi, women [beifang ren]   zhong xiaomai.
      they   south   person plant rice,   we   north   person plant   wheat
      'They, the southerners, plant rice. We, the northerners, plant wheat.'

Within certain contexts which are rich enough, when the reference/inclusivity is clearly expressed and understood by the speaker and addressee, the locative adverbs or the pronouns may be omitted.

(27)   a.   Tamen zhong daozi, women zhong xiaomai.
          they   plant rice,   we   plant wheat
          'They plant rice, while we plant wheat.'
       b.   (Tamen) Nanfang ren   zhong daozi, (women) beifang ren   zhong
          (they)   south   person plant rice,   (we)   north   person plant
   xiaomai.
          wheat
          '(They as) the southern people plant rice, while (we as) the north ern people plant wheat.'

4.4.4 The generic operator revisited

According to Chierchia (1995b), the main clause may provide information for both restriction and scope, usually with the subject going into the restriction and the predicate going into the scope, as shown in (28), which appeared as (14) in Chapter 3.

(28) a. A man with taste and money drives a Porsche

   b. LF:
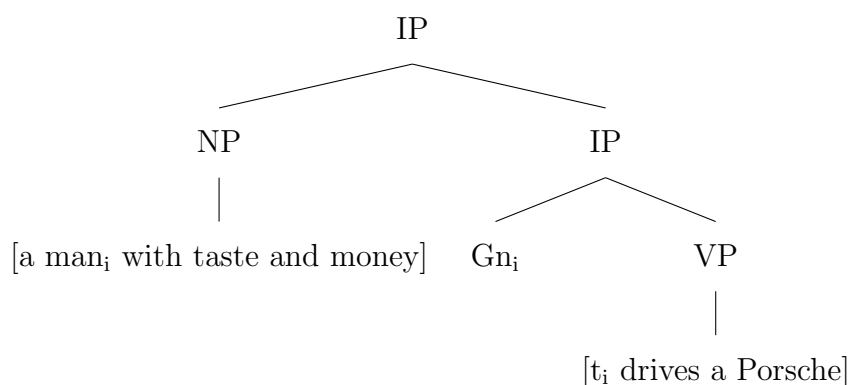
   c. Interpretation:

   Gn x, s[man with taste and money (x) ∧ C(x, s)] ∃y[Porsche(y) ∧ drive(s, x, y)]

   (Chierchia, 1995b, p. 116)

Chierchia (1995b) claims that apart from the subject, the information for the restriction may also come from context. Based on the data and my analysis of exclusive genericity in Chinese, I have argued that the locative/temporal adverbial may also contribute to the restriction. As 'we' could be understood as 'we people' with the NP 'people' deleted (cf. Holmberg & Phimsawat, 2015, among others), this could be codified in the syntax by treating all pronouns as 'pronoun+person+PP' in the structure. This would give [human] as the basic denotation of all the generic pronouns, with the PP restricting the domain and the pronoun determining the particular range of individuals. Therefore, (3) in this chapter, repeated here as (29a) for convenience, could map to LF as in (29b) and further extended to (29c). This analysis also gives inspiration to analysis of *ren* in section 4.5.

(29) a. In the south they feed on rice.
   b. G_a x [people in the south (x)] G_p s [eat rice(x, s)]
   c. G_a x G_p s [people in the south (x) ∧ C(x, s)] [eat rice(x, s)]

Note that here 'in the south' as a sentential locative adverbial does not occur overtly after the subject, as has been explained above, but functions as a modifier of the

restriction at logical form.

4.5   Inclusive generic *ren* in restricted domains

As introduced in many accounts on the inclusive generic pronoun, the situation for inclusive generic statements may be real or hypothetical. One important element in support of the validity of inclusive generic generalisation is the speaker's self involvement in such situations. In Moltmann's (2006) words, '... generic *one* involves generic quantification in which the predicate is applied to a given entity "as if" to the relevant agent himself' (p. 257).

When we are talking about *ren* as a quasi-universal expression, we make statements about some property of any individual based on our own knowledge and judgement, although the domain of individuals may be restricted temporarily, regionally, etc. For example, when discussing how one can enter in politics, an ancient Chinese person may say:

(30)   Ren   xiang dangguan   jiu   dei   tongguo keju.
        person want be an official then must pass   the imperial examination
        'One must pass the imperial examination if one wants be an official.'

In (30), *keju* is the imperial examination for selecting talents mainly among the literati. This system lasted over several dynasties and ended by the end of the Qing Dynasty. When an ancient speaker makes this statement, the subject *ren* is an inclusive generic pronoun, though this 'anyone' may have many exceptions, e.g. females, merchants, etc.

When people in modern times talk retrospectively about the imperial examination system in ancient times, they may add a temporal adverbial:

(31)   Zai gudai/qingdai,   ren   xiang dangguan   jiu   dei
        in   ancient times/the Qing Dynasty, person want be an official then must
        tongguo keju.
        pass   the imperial examination
        'In the old times/the Qing dynasty, one must pass the imperial examination if one wants be an official.'

In this case, *ren* in (31) is ambiguous in denotation, and its reading depends on the speaker's self-positioning. If the speaker is comparing the difference between people's

behaviours in different periods, *ren* in (31) might be considered as an exclusive generic pronoun, with the speaker excluding himself/herself and the addressee from that referent domain. When the speaker places himself/herself in such situation, imagine that he/she himself/herself also needs to do so in those periods, *ren* is taken as an inclusive generic pronoun.

The second reading resembles that of 'one' or other inclusive generic pronouns cross-linguistically, as elaborated in (32) and (33a), while the first reading of (31) is akin to (33b).

(32)   Damals wurde man normalerweise/selten 60 Jahre alt.   (German)
         Then   was   man usually/rarely   60 years old
         'In those days, one usually/rarely lived till 60.'
         (Malamud, 2012, p. 36)

(33)   a.   In Italy, one eats spaghetti.
         b.   In Italy, they eat spaghetti.
              (Ackema & Neeleman, 2018, p. 127)

When people in modern times in China make a similar statement to (30), as shown in (34), the speaker is much more possibly included and the subject *ren* receives an inclusive generic reading much more easily, though this genericity does not apply globally, i.e. there are still regional exceptions. This is an interesting example which shows that for an inclusive generic pronoun, some of the exceptions may be definite and the amount may be large.

(34)   Ren   xiang jin zhengfu   gongzuo jiu   dei   tongguo guojia
         person want in government work   then must pass   national
         gongwuyuan kaoshi.
         civil servant examination
         'One must pass the national civil servant examination if one wants to work in the government.'

4.6   Summary

In this chapter, I looked at the quasi-inclusive generic pronoun *women* and exclusive generic pronoun *tamen* in Chinese. The interpretation and distribution of the two

pronouns are much similar to their counterparts 'we' and 'they' in English. Like the counterpart 'we' in English, *women* can also function as an inclusive generic pronoun.

I explored the functions of locative and temporal adverbials in quasi-inclusive and exclusive generic sentences. I argued that in some constructions where a sentential locative or temporal adverbial seems to be the subject, the genuine subject is quasi-inclusive generic or exclusive generic *pro*. I confirm that the sentential locative or temporal adverbials in quasi-inclusive and exclusive genericity in Chinese also function as modifiers on the generic subject and contribute to the restriction.

When functioning as an inclusive generic pronoun, the exceptions that *ren* allows may vary regionally and temporarily in amount. As for similar constructions accommodating either an inclusive generic pronoun *ren* or an exclusive generic pronoun *tamen*, or accommodating either quasi-inclusive generic *women* or kind-referring *ren*, the key point in distinguishing them lies in the speaker's self-positioning, as well as the value of their number features implied through their semantic feature match with the predicate.

By different interpretations of *ren* in different contexts, I propose that *ren* may also be used as an exclusive generic pronoun, on condition that there is clear contextual information that excludes the speaker and the addressee in the reference.

Chapter 5

(C)overt inclusive generic pronouns in Chinese

The generic pronouns in Chinese, a radical *pro*-drop language, may appear in overt or covert forms. As the (c)overtness of the quasi-inclusive and exclusive generic pronouns in Chinese have been investigated in Chapter 4, here in this chapter I mainly look at the distribution of (c)overt inclusive generic pronouns in finite or non-finite constructions. The finiteness of the clause is relevant to whether a null pronoun is possible, and whether it is *pro* or PRO.

The layout of this chapter is as follows: section 1 provides a general profile of finiteness/non-finiteness in Chinese; section 2 looks at the behaviours of inclusive generic pronouns in finite sentences; section 3 looks at generic PRO in non-finite constructions; sections 4 explores the properties and category of *ziji*; section 5 sums up my analysis.

5.1 Finiteness vs. non-finiteness in Chinese

5.1.1 Finiteness

Finiteness, viewed from morphology, may refer to the property of a verb expressing tense and agreement in certain languages like English, and is mainly represented through verbal inflection or via the assistance of auxiliaries. Verbal finiteness may in turn signify another important concept concerning finiteness, i.e. clausal finiteness, which denotes certain clausal properties such as independence of utterance and time reference (cf. Sells, 2007). However, tense and agreement cannot serve as sufficient or accurate markers of clausal finiteness, e.g. there are arguably tensed infinitives in

Latin, and there are languages where tense and agreement are inadequately expressed or absent, e.g. Japanese or Chinese. Cross-linguistic evidence has shown that abstract clausal finiteness could be fulfilled through various semantic and syntactic elements or operations, e.g. in Dravidian finiteness is expressed through mood rather than tense (cf. Adger, 2007; C.-T. J. Huang, 1989; Y.-H. A. Li, 1990; T.-H. J. Lin, 2015; McFadden & Sundaresan, 2014; Nikolaeva, 2007; Sells, 2007; Sybesma, 2017; Todorović & Wurmbrand, 2016, among others for more data and discussion). A plausible and comprehensive description of clausal finiteness may involve such properties of a clause as 'its tense, aspect, mood, agreement, the referential properties and case-marking of its subject and, more generally, the way in which the clause is anchored to a higher one or to the utterance context' (McFadden & Sundaresan, 2014, p. 1). All in all, there is no consensus on the existence of finiteness universally, and criteria to recognise finiteness arguably vary from language to language.

5.1.2   Literature of (Non-)finiteness in Chinese

Debates over clausal finiteness in Chinese mainly focus on two questions: Is there a finiteness/non-finiteness distinction in Chinese? If there is, what factors verify the contrast?

C.-T. J. Huang (1984, 1989) claims that in Chinese, an aspect marker or a modal (1989) in a clause may demonstrate the finiteness of the clause. Y.-H. A. Li (1990) proposes that it is finite clauses that allow overt NPs in their subject positions, and also provide positions for negative polarity constructions, aspect markers, etc. Tang (2000) analyses the issues of control and raising verbs, small clauses, *pro*/PRO, etc. in Chinese, and suggests distinguishing the finite and non-finite clauses by A-not-A questions and the possibility of *pro*/PRO in subject position.

However, Xu (1985-1986) and Y. Huang (1994) argue that the ungrammaticality or unacceptability of certain modals or aspect markers in the complement clauses of control verbs is due to semantic mismatch between these AUX items and the control verbs. Further, such modals and aspect markers may also exist in non-finite clauses. Hu, Pan, and Xu (2001) therefore deny the finiteness/non-finiteness distinction in Chinese in that there is no valid syntactic analysis but only semantic generalisation on such a division, which can lead to exceptions or counterexamples in the syntax. Grano (2012, 2013) suggests a new distinction between vP and CP according to clause size, also abandoning the finiteness/non-finiteness distinction in Chinese clauses.

Various refinements and improvements have been contributed to the criteria distinguishing between finite and non-finite Chinese clauses. C.-T. J. Huang (1989) and Tang

(2000) define various verb types with different clausal complements. Ussery, Ding, and Liu (2016) support the finiteness contrast in Chinese clauses through new evidence involving *ziji*. Advocating the finiteness/non-finiteness distinction in Chinese, Zhang (1997, 2017) further argues that it is sentence final aspect particle *le*, rather than verbal suffix *-le*, that can serve as a finiteness marker in Chinese, as the former can only occur in finite clauses, while the latter can appear in either finite or non-finite clauses. Epistemic modals are in the same class. They can indicate clausal finiteness as they only exist in finite clauses, alone or in combination with other modals or aspect markers (T.-H. J. Lin, 2011, 2012; Tang, 2000; Zhang, 1997, 2017).

5.1.3 Types of finite constructions in Chinese

The debates on finite/non-finiteness in Chinese are lasting and the arguments, either sound or deficient, cannot be exhaustively illustrated here. This issue is here to investigate and generalise the representation and distribution of the inclusive generic pronouns in Chinese.

A tentative conclusion about finite constructions in Chinese is as follows: A simplex sentence is finite in most cases. An overt embedded subject (Ussery et al., 2016; Zhang, 2016, 2017) in a sentential subject, relative clausal modifier, or clausal complement may be an indicator of finiteness. A clausal complement to certain verbs like *shuo* 'say', *renwei* 'think', *cai* 'guess', *zhidao* 'know', etc. is taken as finite. A clausal complement containing epistemic modal verbs like *keneng* 'be likely', *yinggai* 'should', etc. is considered to be finite.

5.2 Chinese inclusive generic pronouns in finite constructions

5.2.1 Representations of Chinese inclusive generic pronouns in finite clauses

Rich subject-verb agreement is thought to be the primary factor that allows a subject to be null in inflecting languages. According to the ever-updated cross-linguistic literature, the types of agreement have been expanded to verb-object agreement and even C-agreement (cf. Chou, 2013, as a good example). Holmberg and Phimsawat (2015) argue that contrary to the traditional concept that *pro* obtains its features assigned from agreement, *pro* has its own inherent features, which value the agreement and are

reflected on T. Depending on how complete these features are when checked by T, the argument turns out to be null, or an alternative morpheme like the inclusive generic pronoun *si* in Italian, or an overt pronoun. In Chinese, which is widely acknowledged as a language without subject-verb agreement, as there is no agreement to be valued, a free choice between overt and covert subject argument seems unrestricted (cf. Cole, 2009). Nonetheless, this is not sufficient for the choice between overt and covert subjects in Chinese. It is the recoverability of the denotation and phi-features that allows an argument to be null. Such recoverability may be accomplished from agreement, an antecedent within local domain or in discourse context, or even the reader's/hearer's own pragmatic knowledge (cf. Chou, 2013; Kinn, 2016; Miyagawa, 2010, 2017; Zhang, 2016, among others).

Based on the description of the features of Chinese personal pronouns and the observation of empirical data, as illustrated in (1-3), I assume that the representations of the Chinese inclusive generic pronouns in finite constructions mainly consist of *ren* 'one', *ni* 'you' and *pro*. These forms can be used interchangeably in finite constructions without much restriction. One point to emphasise is that in most cases (c)overtness is not obligatory in finite clauses.

(1)   Ren zong   yao   you mengxiang.
        one always should have dream
        'One should always have dreams.'

(2)   [Ruguo *pro*$_i$ yudao   kunnan,] ni$_i$ zhineng nuli PRO$_i$ kefu.
        if   encounter difficulty you can but try   overcome
        'You can do nothing but try to overcome the difficulty you have encountered.'

(3)   [*pro*$_i$ ziji$_i$ bu nuli],   *pro*$_i$ jiu   buyao guai   bieren.
            self not work hard,   then do not blame others
        'One/You should not blame others since one oneself/you yourself didn't go all out.'

In Chinese, where there is no explicit subject-verb agreement, the generic interpretation of a null subject is mainly deduced from discourse context, the dependency between the null element and other arguments within and outside the local domain or even the predicate, and the speaker's/addressee's pragmatic/prosodic judgement, the last of which will only be the last resort to explain overt/covert generic pronouns in my thesis.

To start with, here I will show possible variants of the examples (1-3) to investigate

the choice between overt and covert inclusive generic pronouns in finite constructions. The generic subject *ren* in (1) can also be *ni* or null. In this case, topicalization of the object *mengxiang* 'dream' is preferable, as shown in (4), if this statement is uttered out of the blue. The emphsis of the object facilitates a generic reading rather than a referential reading of the subject *ni*, which is more ambiguous in its interpretation than the other two forms of generic subject.

(4)   [$_{TOP}$ Mengxiang$_i$] [$_{TP}$ ren/ni/*pro* zongshi yao   you t_i de].
          dream   person   always should have   De
        'One/You should always have dreams.'

In (2), the conditional clause *Ruguo pro yudao kunnan* means 'if encountering hardship', which can also be *ruguo ni yudao kunnan* 'if you encounter hardship', as shown in (5), but the duplication of *ni* sounds redundant. The covert subject *pro* in the conditional clause of (2) is very natural as it is supposed to be co-indexed with the overt subject *ni* in the subsequent clause. The subject *ni* may receive two readings: the speaker may indicate that this applies to anyone, including the speaker, the hearer, and anyone else (i.e. inclusive generic), or the speaker is just exhorting the hearer to face difficulties, in which case *ni* is 2nd person singular referential pronoun. *Ni* can be covert in either singular.

(5)   Ruguo ni   yudao   kunnan, ni   zhineng nuli kefu.
        if   you encounter difficulty you can but try overcome
        'You can do nothing but try to overcome the difficulty you encounter.'

The example (6) corresponds to (3). *Ren* or *ni* can be inserted before *ziji*, to be the overt embedded subject, which affirms that *ziji* in this sentence is an intensifier emphasising the subject in the antecedent clause, rather than a true embedded subject in substitution for *ren* or *ni*. An overt matrix subject would sound redundant in this sentence, and thus is always unpronounced. *Ren* sounds unnatural in the matrix subject position in (6), therefore *ni* may be the only choice here if an overt form is employed. One possible interpretation is that in (6), the consequent clause is an imperative, in which case *ni* seems to be the appropriate choice for the matrix subject. If the subjects in both the conditional adjunct and the subsequent sentence are co-indexed, the subject in the adjunct can be covert and the latter is topicalised in sentence-initial position, as shown in (7).

(6)   [Ruguo ni$_i$/ren$_i$ ziji bu nuli],   ni$_i$/*pro*/*ren$_i$ jiu   buyao guai
       if   you/person self not work hard, ni/*pro*/*person then do not blame
       bieren.
       others
       'One/You should not blame others since one oneself/you yourself didn't go all
       out.'

(7)   [Ni$_i$/Ren$_i$ [ruguo *pro* ziji bu nuli]],   *pro*$_i$ jiu   buyao guai   bieren].
       you/person if   *pro* self not work hard, *pro* then do not blame others
       'One/You should not blame others since one oneself/you yourself didn't go all
       out.'

The behaviour of *ren* is different from its English counterpart, the impersonal 'one', in
this case. In (8), 'one' can occur in both the antecedent and subsequent clauses. The
two 'one's co-vary and are bound by a generic operator (cf. Chierchia, 2000; Malamud,
2012). The same is true for the co-occurrence of inclusive generic *ni* and *pro*, as shown in
(9a), but not for *ren*, in (9b). *Ren* usually appears only once, with the other co-varying
argument as *pro* in (7) or anaphoric *ta* 'he/she' in (9b). (9c-d) are grammatically
correct, but sound redundant or unnatural.

(8)   a.   If you're smart, you're rarely/usually proud.
       b.   If one is smart, one is usually proud.
       (Malamud, 2012, p. 40)

(9)   a.   Ruguo you/pro hen congming, you/pro tongchang hen jiaoao.
            if person very smart, he/she usually very proud
            'If one is smart, he/she is usually proud.'
       b.   Ruguo ren   hen congming, ta   tongchang hen jiaoao.
            if   person very smart,   he/she usually   very proud
            'If one is smart, he/she is usually proud.'
       c.   ?Ruguo ren   hen congming, ren   tongchang hen jiaoao.
            if   person very smart,   person usually   very proud
            'If one is smart, one is usually proud.'
       d.   ?Ruguo pro hen congming, ren   tongchang hen jiaoao.
            if   *pro* very smart,   person usually   very proud
            'If one is smart, one is usually proud.'

5.2.2   Matrix subject/object and the embedded subject/object

When there's no relevant contextual information indicating the situation applies to anyone generally, and the matrix subject is *wo* 'I', *ni* 'you' in embedded subject position, as shown in (10), is referential, just like *ta* in the same position. *Ni* here is less possibly generic but refers to the specific addressee. As an inclusive generic pronoun needs the participation of both *wo* and *ni*, *ren/pro* in (11) is a perfect replacement whose reference covers both sides of the discourse.

(10)   Wo$_i$ juede [[ni$_j$/ta$_k$]   yao   dui ziji$_{j/k}$ you xinxin].
       I   think you/he/she should to   self   have confidence
       'I think you/he/she should have confidence in yourself/himself/herself.'

(11)   Wo$_i$ juede [ren$_g$/*pro*$_g$ yao   dui ziji$_g$ you xinxin].
       I   think one/*pro*   should to   self have confidence
       'I think one should have confidence in oneself.'

Compare the following two examples, with the matrix subject changed to 3rd referential pronoun *ta*, which may have a logophor *ziji* in the embedded clause, as shown in (13). To sum up, the inclusive generic *ren* in the embedded subject position blocks a logophoric reading of *ziji* to the matrix subject, while in the same position, when the matrix subject is human, the embedded subject *you* can only be 2nd singular referential, and *pro* is ambiguous.

(12)   Ta$_i$ juede [ren$_g$/*pro*$_g$/ni$_j$/*ni$_g$ yao   dui ziji$_{g/j}$ you xinxin].
       he/she think one   should to   self   have confidence
       'He/She thinks that one/*pro*/you should have confidence in oneself.'

(13)   Ta$_i$ juede [bieren$_j$/*pro*$_i$ yao   dui ziji$_i$ you xinxin].
       he/she think others/*pro*   should to   self have confidence
       'He/She thinks that others should have confidence in him/her.'

As to the possibility of a generic subject in the same construction, like in (14), none of the generic forms is acceptable, as the verb *juede* expresses a specific attitude of the subject, and requires a definite subject if no other conditions are satisfied.

(14)   *Ren$_g$/You$_g$/*pro*$_g$ juede [ren$_g$/you$_g$/*pro*$_g$ yao   dui ziji$_g$ you xinxin].
        person/you/*pro* think one/you/*pro*   should to   self have confidence

'One thinks that one should have confidence in oneself.'

If a necessary element for inclusive generic pronouns, e.g. a conditional, a modal verb, etc. is added, the statement may imply that this is true of anyone in such situation, and is thus acceptable as a generic. Note that inclusive generic *ren* cannot antecedent itself, and therefore *pro* is employed.

(15)   Ren$_g$/You$_g$ keneng hui juede *pro*$_g$/you$_g$ yao   dui ziji$_g$ you xinxin].
         person/you possible may think *pro*/you   should to   self have confidence
         'One might think that one should have confidence in oneself.'

5.3   Inclusive generic PRO in non-finite constructions

5.3.1   Control constructions in Chinese

Control verbs

Verbs in Mandarin Chinese like *shefa* 'try', *bi* 'force', *quan* 'persuade', *zhunbei* 'prepare', *dasuan* 'plan', *qing* 'invite', etc. are considered to be obligatory control verbs (C.-T. J. Huang, 1989; Y.-H. A. Li, 1990; Tang, 2000; Zhang, 2016; Sybesma, 2017), which take non-finite clauses as their complements. The embedded subject must be PRO (in Chinese and many other languages), which is bound by an argument of the control verb. The control verbs are divided into subject control verbs and object control verbs: *shefa* 'try', *zhunbei* 'prepare, plan', *dasuan* 'plan', etc. are subject control verbs, as illustrated in (16), whereas *bi* 'force', *quan* 'persuade', *qing* 'invite', etc. are object control verbs, as shown in (17).

(16)   a.   subject control verbs: *shefa* 'try', *zhunbei* 'prepare, plan', *dasuan* 'plan', etc.
         b.   Wo$_i$ dasuan [PRO$_i$ qu kan   dianying].
              I   plan   go watch movie
              'I try/plan to go to the movie.'

(17)   a.   object control verbs: *bi* 'force', *quan* 'persuade', *qing* 'invite', *jiao* 'ask', etc.
         b.   Zhangsan$_i$ bi   Lisi$_j$ [PRO$_j$ yonggong].
              Zhangsan force Lisi   work hard

> 'Zhangsan forced Lisi to work hard.'
> (C.-T. J. Huang, 1989, p. 197)

Modal verbs as control verbs

Certain Chinese root modals, such as *gan* 'dare', *neng* 'be able to', *ken/yuanyi* 'be willing to', *hui* 'be able to' and *yao* 'want to' can act as control verbs which take a non-finite clausal complement (cf. C.-T. J. Huang et al., 2009; J. W. Lin & Tang, 1995; Zhang, 2016, among others), as illustrated in (18-19).

(18)　Wo$_i$ gan/ken/neng/hui/yao　　　　　[PRO$_i$ chang yi-shou xiaoqu].
　　　 I　dare/be willing to/be able to/want to　　sing　one-CL ditty
　　　 'I dare/am willing to/am able to sing a ditty.'
　　　 (adapted from C.-T. J. Huang et al., 2009, p. 110)

(19)　Ren$_i$ neng　　　[PRO$_i$ yuzhi　weilai]　　ma?
　　　 One　be able to　　foresee the future Q
　　　 'Is one able to foresee the future?'

These modal control verbs mainly constitute subject control configurations, with one exception *yao* 'want to' which seems to be able to lead an object control construction too. However, in an object control construction like (20), *yao* is not a modal verb but a common control verb meaning 'ask'. *Yao* can also reduce into a part of a verbal complex like *dasuan yao* 'plan' or *xiang yao* 'want to', as shown in (21).

(20)　Laoshi　yao women$_i$ [PRO$_i$ jiao　zuoye].
　　　 Teacher ask we　　　　 hand in　homework
　　　 'Our teacher asked us to hand in our homework.'

(21)　Ni$_i$　dasuan yao/xiang yao [PRO$_i$ gan shenme]?
　　　 you plan/want　　　　　　 do　what
　　　 'What do you plan/want to do?'
　　　 (Lü, 1999, p. 592; adapted and translated by me)

5.3.2　Ambiguous configurations

There are certain configurations leading to equivocal interpretations, which are briefly illustrated here.

Certain verbs which can take both finite and non-finite clauses

As Sybesma (2017) and Ussery et al. (2016) point out, certain Chinese verbs may take both finite and non-finite clausal complements. As there is no overt tense marking in Chinese, other factors might be taken into consideration, e.g. aspect particle and modal verbs/adverbs. Therefore, the embedded subject might be *pro* or PRO.

Clausal complements containing modal verbs

C.-T. J. Huang (1989) claim that AUX is prohibited in the clausal complement to a control verb. Despite different definitions of certain Chinese modals, it is suggested by C.-T. J. Huang (1989) that modal verbs won't appear in such non-finite clauses. However, this generalisation is challenged by other researchers afterwards. Unlike epistemic modals, some deontic modals can occur in the embedded non-finite clauses (cf. Tsai, 2015, for definitions of Chinese modal verbs), e.g. *yiding* 'must' in (22) and *buyao* 'do not' in (23).

(22)   Ta$_i$ bi   wo$_j$ [PRO$_j$ yiding yao zai liang tian zhinei wancheng].
         he   force I   must   will at two   days within finish
         'He forced me to finish it within two days.'
         (Hu et al., 2001, p. 1123)

(23)   Qing ta$_i$ [PRO$_i$ buyao duoguanxianshi].
         Ask   he/she   do not meddle
         'Ask him/her not to meddle in others' affairs.'
         (Lü, 1999, p. 592; translated by me)

Topicalised object

A topicalised object in the complement clauses of control verbs may create a structure which appears to be syntactically ambiguous. The expression *shenme ren* in (24) looks like an overt controllee in the embedded subject position, but in fact it is the topicalised object of the embedded predicate *qing* 'invite'.

(24)   Wo$_i$ dasuan [[shenme ren]$_j$ PRO$_i$ dou bu qing t_j].
         I   plan   any   person   all not invite
         'I plan to invite no one.'
         (adapted from Hu et al., 2001, p. 1142)

A tentative conclusion is that, in Chinese, although there are overt lexical forms be-

tween the matrix control verb/controller and the embedded predicate, these lexical forms are more likely to be emphatic DPs/NumPs functioning as adverbials rather than genuine overt controllee subjects.

5.3.3   Inclusive generic PRO

In non-finite clauses, I focus on the inclusive generic pronoun occurring in subject position, as shown in (25-26), which is PRO and obligatorily null. This restriction does not hinder an overt generic possessor co-indexed with PRO, e.g. in (25).

As Pearson (2013, p. 194) observes, 'Where a particular expression type does not have phi-features of its own, any given token of it bears the same phi-features as its binder.' This just describes one property of PRO in this section. When there is no legitimate binder in the sentence, we need to look at the context. When there is no such concrete binder even in discourse context, or the speaker, the addressee, or both, intend(s) or realise(s) that this statement applies to anyone generally, the covert generic operator on arguments is the binder of PRO.

(25)   [PRO$_g$ zaoqi [PRO$_g$ duanlian]] youyi (ren$_g$ de/ni$_i$ de) jiankang.
        getting up   early   exercise   benefit person De/you De health
        'Getting up early to exercise is beneficial to (one's/your) health.'

(26)   Ren$_g$ zong   yao   shefa   [PRO$_g$ ziji$_g$ miandui kunnan].
        one   always should manage   self face   difficulty
        'One should always manage to face difficulties/hardship on one's own.'

The referential dependency mentioned in the previous section also applies in non-finite constructions. The inclusive generic pronoun refers to anyone among people in general. Though this kind of genericity allows exceptions, any exception is random. In (27), the matrix subject *ta* 'he/she' is always excluded from the reference of the matrix object *ren*, which makes *ren* unable to receive an inclusive generic reading, and it must have a disjoint interpretation 'others' from that of the matrix subject *ta* 'he/she'. For *ren* to be inclusive generic, the matrix subject in such control configuration should be inanimate, so that the full domain of humans is available for *ren*, when other conditionals remain the same.

(27)   Ta$_i$ shichang quan   ren$_j$ [PRO$_j$ yao   shanliang].
        he/she often   exhort person   should kind

'He/She often exhorts people/others to be kind.'

(28) Zihui   shi   ren$_g$ ziran'erran de xingwu.
      wisdom make person natural   DE realise the truth
      'Wisdom makes one realise the truth automatically.'
      (Fu, 1984, p. 220; translated by me)

Recall (11) repeated here as (29) with some modification. In (29), the binding of G_a on the embedded subject *ren* will not be blocked by the human matrix subject, as long as the matrix verbs are such like *juede, xiwang*, etc. In other words the embedded clause should be a finite one.

(29) G_a [Wo$_i$ juede [(ren$_g$) yao   dui ziji$_j$ you xinxin]].
           I   think person should to   self have confidence
      'I think one should be confident to oneself.'

5.4   The inclusive generic *ren* in topic position

There are two types of topics in Chinese, one is pure topic, the other is topicalised object/subject/other elements in the sentence (cf. C.-T. J. Huang et al., 2009). One distinction between the types lies in that a pure topic is not integrated as an argument in the sentence, while the topicalised item, as the name indicates, leave a trace in argument position after being moved to the sentence initial position.

Based on empirical data, the only form of an inclusive generic pronoun in topic position is *ren*. As has been generalised by literature on Chinese, only definites and generics can reside in topic position.

(30) [$_{TOP}$ Ren]   [$_{TP}$ [$_{DP}$ *pro*] [$_{vP}$ ge   you zhi]].   (plural noun)
           person   *pro*   each have aspiration
      'Everyone has his/her own aspiration.'

(31) [$_{TOP}$ Ren]   [$_{TP}$ [$_{DP}$ shui] [$_{NEG}$ bu [$_{vP}$ si]].   (kind)
           human   who   not   die
      'Who among humans won't die.'

In 'Zhe...na/a' configuration

Na in (32) and *a* in (33) are exclamations signalling a pause after the topicalised argument, i.e. the subjects *ren* in (32) and *laobaixing* in (34), as well as the object *shu* in (33). Therefore, if *na/a* is omitted, there cannot be a pause between the topicalised argument and the rest of the sentence, as shown in (35), although there is no difference in what they express.

(32)   Zhe ren   na,   jiu dei   duo kan shu. (inclusive generic)
             this person EXCLAMATION, just should much read book
             'One should read a lot.'

(33)   Zhe shu a,   jiu dei   duo kan.
             this shu EXCLAMATION, just should much read
             'Books should be read a lot/quite often.'

(34)   Zhe laobaixing   a,   jiu tu   anwen   guo
             this common people EXCLAMATION, only pursue smooth and steady live
             rizi.
             life
             'The common people only pursue a smooth and steady life.'

(35)   a.   Zhe ren   jiu dei   duo kan shu.
                 this person just should much read book
                 'One should read a lot.'
        b.   Zhe shu jiu dei   duo kan.
                 this shu just should much read
                 'Books should be read a lot/quite often.'
        c.   Zhe laobaixing   jiu tu   anwen   guo rizi.
                 this common people only pursue smooth and steady live life
                 'The common people only pursue a smooth and steady life.'

Zhe is a demonstrative pronoun in Chinese, equal to 'this/these' in English, whereas in Chinese there is often a classifier between *zhe* and the noun it modifies. However, unlike *zhe* in '*zhe*+CL+single noun' and '*zhexie*+plural noun' leading to a definite reading, *zhe* in '*Zhe...na*' can only be considered as a topicalisation marker without any actual meaning itself, suggesting the following is what the speaker wants to emphasise. The emphasised argument can be a pronoun (like the inclusive generic pronoun *ren* in (32)), a 'bare' noun with a generic meaning (like *shu* in (33)) or a noun phrase with a

collective meaning (like *laobaixing* in (34)), etc.

Two possible ways to distinguish the two functions of *zhe* are: a classifier can be inserted after the demonstrative pronoun *zhe*, like *ge* (a classifier before certain single countable nouns) in (36) and *bang* 'a group of' in (37); a personal pronoun/proper noun can take the subject position, combining with the following DP '*zhe* (*ge*/*bang*/etc.)...' to form a complex constituent (sometimes the classifiers can be omitted), as shown in (36-37) respectively and intensifying the definite interpretations of the DPs *Ta* and *Tamen* respectively in these two sentences.

(36)   (Ta)   zhe(-ge) ren   jiu   shi   lan.
           he/she this-CL   person just   be   lazy
           'He/She is really a lazy person.'

(37)   (Tamen) zhe(-bang) laobaixing jiu   xiang xiu   yi-zuo   qiao.
           they   this-CL   folk   just want   build one-CL bridge
           'These folks just want to build a bridge.'

5.5   Is *Ziji* an inclusive generic pronoun?

5.5.1   *Ziji* as a reflexive

Ziji 'self' is essentially a reflexive in Chinese and behaves much like its counterpart in English. The difference lies in that *ziji* seems to be able to appear alone. Based on the occurrences of bare *ziji* in seeming subject or object position, as exemplified in (38a) and (39) respectively, some literature claim that *ziji* can function alone as a subject or object (Lü, 1999, among others). Further, Ding et al. (1999) point out that *ziji* in some cases has a generic reading, e.g. the object *ziji* in (39).

(38)   a.   Ziji$_i$ [[ba ziji$_i$] wudao] le.
              self   BA   self   mislead ASP
              'One misled oneself.'
       b.   *pro*$_g$ Ziji$_g$ [[ba ziji$_g$] wudao] le.

(39)   Gaizao ziji zong   bi   jinzhi bieren lai   de nan.
           reform   self always compare forbid others come DE difficult
           'It is always more difficult to reform oneself than to forbid others.'
           (Lu Xun, recited from Ding et al. (1999, p. 146))

However, *ziji* itself has no independent reference, but can only be anaphoric to a certain antecedent. In **??**, according to the specific context, the antecedent of *ziji* can refer to the discourse speaker/addressee, or any other person the discourse involves. We can always add the antecedent noun or pronoun before *ziji* to make the reference clearer, as illustrated in (40).

(40) Xiaoming/Ta/Tamen ziji ba ziji wudao le.
      Xiaoming/he/she/they self BA self mislead ASP
      'Xiaoming/He/She/They misled himself/herself/themselves.'

Therefore, in (38a) which is claimed to have a generic reading, it is the subject *pro* that has a generic reading, and has the reflexive *ziji* immediately after it as an intensifier, aka an emphasis marker (C.-T. J. Huang, 1991), and the second occurrence of *ziji* can be construed as an anaphoric reflexive bound by the subject *pro*, as shown in (38b) .

5.5.2   A Test for *ziji* in finite constructions

A testing device is the focus configuration *shi...de. Ziji* as an adverbial intensifier in (41a) can be set in a pseudo-cleft configuration *shi...de* without distorting the original meaning of the sentence, whereas the intensifier *ziji* cannot, i.e. (41b).

(41)   a. Wo ziji wancheng le   zuoye.
           I   self complete ASP homework
           'I finished my homework by myself.'
       b. Wo shi ziji wancheng zuoye   de.
           I   be self complete homework DE
           'I finished my homework on my own.'
           (Pollard & Xue, 1998, p. 314)
       c. *Wo ziji shi wancheng le zuoye de.
           I self be complete homework DE
           '[As to me] I finished my homework [not knowing if others have finished their homework].'

5.5.3   *Ziji* and other seemingly overt controllees

Like the covert subject in an English non-finite clause, the subject of a Chinese non-finite clause is supposed to be null (C.-T. J. Huang, 1989; Y.-H. A. Li, 1990). Syntactic

accounts of control configurations define the controllee as a null pronoun in the embedded subject position, i.e. PRO, as it gets no Case or a so-called null Case from non-finite T (cf. Adger, 2003; Chomsky, 1981; Haegeman, 1994; C.-T. J. Huang, 1989, among others).

However, there have been constant arguments that this may not always be the case in Chinese. Apart from phonetically unrealised PRO, there appear to be some overt lexical forms in the seemingly embedded subject position, among which *ziji* 'self' is a good example.

Ziji is basically a reflexive meaning 'oneself'. In addition, *ziji* can be an adverb or part of an adverbial phrase meaning 'on one's own', or a reflexive intensifier to a noun or pronoun, highlighting that noun or pronoun as the agent of the predicate (cf. Hole, 1996). The distribution and interpretation of *ziji* depend on the positions and the clauses where *ziji* resides.

Some researchers argue that the occurrences of *ziji* in (42a) and (43a) are evidence of overt PRO. However, according to the main categories and functions of *ziji* I have just introduced above, *ziji* in either of the following examples actually acts as an adverbial intensifier modifying the predicates *wancheng* and *zuo* respectively.

(42)   a. Ta_i shefa [$ziji_i$ liang tian nei wancheng zhe-jian gongzuo].
       b. Ta_i shefa [PRO_i ziji liang tian nei   wancheng zhe-jian gongzuo].
            he try   self two day within complete this-CL work
            'He/She tried to complete the work on his/her own within two days.'
            (adapted from Xu, 2003, p. 90)

(43)   a. $Xiaoxi_i$ quan $Xiaoming_j$ [$ziji_j$ zuo zuoye].
       b. $Xiaoxi_i$ quan $Xiaoming_j$ [PRO_j $ziji_j$ zuo zuoye].
            Xiaoxi persuade Xiaoming   self do   homework
            'Xiaoxi persuaded Xiaoming to do his homework on his own.'

Hu et al. (2001) propose that certain adverbials occurring between a control verb and the verb in its complement clause, e.g. *mingtian xiawu* 'tomorrow afternoon' in (44) and *jinnian xiatian* 'this summer' in (45), license an overt embedded subject *wo yi ge ren* in (44) and *laopo, ziji he erzi* in (45). However, it seems that more data are needed to show whether such an expression like *laopo, ziji he erzi* in (45) is acceptable.

(44)   Wo zhunbei [mingtian xiawu   tian hei yihou [wo yi ge ren] lai]
       I   prepare tomorrow afternoon sky dark after I   one CL man come

'I plan to come alone tomorrow afternoon after it gets dark.'
(Hu et al., 2001, p. 1131)

(45) Zhangsan dasuan [jin nian xiatian [laopo, ziji he erzi] dou qu Qingdao
      Zhangsan plan   this year summer wife   self and son all go Qingdao
      dujia]
      spend vacation
      'Zhangsan planned to go to spend his holidays in Qingdao together with his
      wife and son this summer.'
      (Hu et al., 2001, p. 1132)

Constructions like *wo yi ge ren* are termed as a kind of *cpro* in Zhang (2016). *Cpro*
refers to 'complemented pronoun', e.g. *women yuyanxuejia* 'we linguists' and *women
san-ge (ren)* 'we three' (Zhang, 2016, p. 279). The second example of *cpro* consists
of two parts: pronoun + numeral (CL) (the classifier may be omitted after certain
numerals like *liang* 'two' and *san* 'three', i.e., *liang(-ge) ren/san(-ge) ren*). As Zhang
(2016) claims, *cpro* is a kind of 'minimal pronoun', a class includes controlled PRO,
reflexives, bound lexical pronouns, resumptive pronouns, *pro* elements identified by
local agreement, and relative pronouns (cf. Kratzer, 2009; Landau, 2015, 2018; Zhang,
2016, among others).

Zhang (2016) proposes that a *cpro* like *ta yi-ge ren* in (46) is an overt controllee. It
can be replaced by *ziji*.

(46) Lili$_i$ shefa [jintian PRO$_i$ [ta$_i$ yi-ge ren]/ziji chi fan].
      Lili try today [he one-CL person]/self eat meal
      'Lili tried to eat alone today.'
      (adapted from Zhang, 2016)

As for the expression *ziji yi-ge ren* in (47), it does not belong to *cpro* described above,
due to the reason that *ziji* and *yi-ge ren* can be separate, not like an inseparable *cpro*
unit. It cannot be analysed as a reflexive pronoun followed by an appositive either,
as appositives should usually be definite, unlike the indefinite NumP *yi-ge ren* 'one
person' (cf. C.-T. J. Huang et al., 2009). The NumP *yi-ge ren* alone can also function
as an emphatic adverbial, meaning 'by oneself', which is similar to *ziji* when it is an
adverbial. Therefore, the superposition of the two adverbials is better understood as
an emphatic adverbial complex. Zhang (2016) also takes the expression *ziji yi-ge ren*
as an adverbial, while arguing that the expression *ta ziji* in (48) behaves similarly to
ziji alone to be an overt controllee.

(47) Ta_i hui [PRO_i [ziji yi-ge ren]/ziji/[yi-ge ren]   lai   zher].
    he   will   [self+[one-CL person]]/self/[one-CL person] come here
    'He/She will come here by himself/herself.'
    (adapted from C.-T. J. Huang et al., 2009, p. 305)

(48) A-Lin_i dasuan jintian [PRO_i [ta_i ziji] qu   duchang.
    A-Lin plan   today he   self go   casino
    'A-Lin planned to go to a casino alone today.'
    (dapted from Zhang, 2016, p. 287)

5.5.4   A tentative test for an overt subject in non-finite clauses

As I propose the form of an inclusive generic pronoun in non-finite clauses is PRO, it is necessary to test whether there are overt inclusive generic subjects in non-finite clauses.

A tentative diagnostic method to judge *ziji* and other seemingly overt controllees is to negate the clausal complement to control verbs to see whether its meaning remains except negation. The negation should be located below the embedded subject and its intensifier, while above adverbial intensifiers modifying the embedded predicate. For instance, *ziji* as an intensifier to nouns/pronouns follows them immediately without even a comma, and is always above negation, while *ziji* as an adverb intensifier for verbs is prescribed to be just in front of the verb and below negation, which can be simply shown as in (49). This process can easily verify *ziji* in (50) as an adverb and *yi-ge ren* in (51) as an adverbial adjunct to the *v*P, both with the same reading 'alone'.

(49)   [subject + ziji] + negation + [ziji + verb]

(50)   a.   Wo dasuan ziji qu kan   dianying.
             I   plan   self go watch movie
             'I plan to go to the movie alone.'
        b.   *Wo dasuan ziji bu qu kan   dianying.
             I   plan   self not go watch movie
             'I plan not to go to the movie.'
        c.   Wo dasuan bu ziji qu kan   dianying.
             I   plan   not self go watch movie
             'I plan not to go to the movie alone.'

(51)   a.   Lili shefa   [[yi-ge ren]   chi fan].

Lili manage one-CL person eat meal

'Lili managed to have a meal alone.'

    b. *Lili shefa   [[yi-ge ren]   bu chi fan].

Lili manage one-CL person not eat meal

'Lili managed not to have a meal when he was alone.'

    c.   Lili$_i$ shefa   bu [yi-ge ren]   chi   fan].

Lili manage   not   one-CL person eat   meal

'Lili managed not to have a meal alone.'

So far, on the issue whether there is an overt inclusive generic controllee, the answer is negative.

5.5.5   Generic *ren* cannot antecede itself but *ziji*

Generic *ren* cannot act as the antecedent of itself. Instead it takes the reflexive *ziji* as its anaphor. In the English counterpart to (52), 'one's' is construed as a special genitive form of reflexive to subject 'one'. Nevertheless, in Chinese, as long as there is an argument with the [+human] value in gender/class, another *ren* in the same sentence can never have an inclusive generic interpretation: it cannot be a reflexive or a variable bound by that [+human] argument, but it is interpreted as a pronoun that must be free in the local domain, i.e. it must refer to someone else or other people excluding that argument, and thus loses the inclusive generic reading. Therefore, if the subject in (52) is a generic *ren*, the second *ren* is ungrammatical on the intended interpretation because it cannot be bound by the first *ren*, and must refer to other people. The reflexive anaphor *ziji* 'self' is syntactically, semantically and pragmatically acceptable in the same position, bound by the antecedent *ren*.

(52)   Ren$_i$ yao   dui ziji$_i$ de/*ren$_i$ de xingwei   fuze.

one   should for self DE/one   DE behaviour responsible

'One should be responsible for one's own behaviours.'

However, (53a) is grammatical and can receive a generic interpretation. As we have analysed above, the real subject in (53) is *pro*, and the complete construction is presented in (53b).

(53)   a.   Ziji$_i$ de shiqing ziji$_i$ zuo.

    b.   [$_{\text{TOP}}$ *pro*$_i$ ziji   de shiqing] [$_{\text{TP}}$ [$_{\text{DP}}$ *pro*$_i$ ziji]   zuo]

            oneself DE thing   oneself do

    'One (should) finish one's own task.'

5.5.6   Generic *ren* blocks logophoric control of *ziji*

In (54), as seen above, verbs like *juezhe* 'think' will not exclude the speaker from the set of referents of the embedded subject *ren*. However, the embedded *ziji* can only be anaphoric to the embedded subject *ren*, not the matrix subject *Ta*.

(Context: The matrix subject believes that one should be true to oneself.)

(54)   Ta$_i$ juezhe ren$_g$ yinggai zuo ziji$_g$ xihuan de shiqing.   (generic *ren*)

        he/she think person should do oneself like   DE thing

        'He/She thinks that one should do what one likes.'

Compare (55), *ziji* can be anaphoric to either the embedded subject *renmen* 'people' referring to some people the matrix subject knows, or the matrix subject *Ta* 'he/she', meaning e.g. he/she is a spoiled child and thinks that people around him/her should follow his/her words. A common noun won't block the matrix subject from anteceding the embedded *ziji*.

(55)   Ta$_i$ juezhe renmen$_j$ yinggai zuo ziji$_{j/i}$ xihuan de shiqing.

        he/she think person should do oneself like   DE thing

        'He/She thinks that people should do what they like.'

        'He/She thinks that people should do what he/she likes.'

Of course, under certain contextual assumptions, 'people' can be considered a type of inclusive generic expression, in which case only the first reading in (55) is acceptable.

5.6   The features of the inclusive generic pronouns reconsidered

An important issue about inclusive generic pronouns is whether they may include non-humans as well as humans in their reference. As Holmberg and Phimsawat (2015) propose, inclusive generic pronouns may not just refer to human beings; instead, in certain circumstances they may also include non-human entities, as shown in (77)

in Chapter 2 and repeated here as (56). Holmberg and Phimsawat (2015) creatively suggest finding evidence by selecting the suitable predicates for both humans and non-humans, e.g. 'grow' in (56) and its Chinese counterpart *zhang*. Further, they tentatively generalise that the cross-linguistic variation falls into two groups: the inclusive generic pronoun in some languages with agreement allows only humans in its reference, while in languages without agreement this generic pronoun can have both humans and non-humans in its reference. Chinese has an inclusive generic pronoun of the latter group, i.e. *pro* in (57). It is not easy to find a suitable overt inclusive generic pronoun with such comprehensive reference to both human beings and non-human entities in any language. At least in Chinese according to our current understanding, an inclusive generic pronoun with such comprehensive reference must be null. In (57), the covert inclusive generic pronoun may refer to humans, non-humans, or both, with the precise reading identified in context.

(56)   thâa Ø dâayráb khwaamrák khwaamʔawcaysày Ø kôo cá   too   rew. [Thai]
       if   get   love   care   then FUT grow fast
       'If ones (animals, plants included) get love and care, ones will grow up faster.'
       (Holmberg & Phimsawat, 2015, p. 60)

(57)   [Ruguo *pro*$_i$ neng huode gengduode yingyang], name *pro*$_i$ hui zhang de
       if   can   get   more   nutrition, then   will grow DE-ASP
       geng kuai.
       more fast
       'If ones (animal, plants included) get more nutrition, ones will grow up faster.'
       (adapted from Holmberg & Phimsawat, 2015, pp. 60-61)

5.7   Prosodic requirement on arguments

There is a requirement that the arguments should form a harmonious combination phonologically. For example, it is not acceptable to have two independent *ren*s linearly adjacent to one another. In (58), *ta* 'he/she' is the subject, *ren* 'personality' together with adjective predicate *laoshi* 'honest' forms the predicate.

(58)   [$_{TOP}$ Ta]   [$_{DP}$ ren   [$_{VP}$ laoshi]].
            He/She   personality   honest
       'As for him/her, his/her personality is honesty.'

However, in (59), *ren* with a generic reading in place of *ta* will cause unnatural superimposition together with *ren* 'personality'. Therefore, the inclusive generic pronoun *ren* 'one' has to be covert to avoid the unnatural superimposition of two *ren*s. A silent *pro* in (60), or other nouns like *xindi* 'heart' in (61), won't sound so unnatural, and thus can be acceptable.

(59) *[_TOP_ Ren] [_DP_ ren   laoshi] zui zhongyao.
           person   personality honest most important
       'Being honest is the most important thing.'/
       'The most important thing is one should be honest.'

(60) [_TOP_ *pro*] [_DP_ Ren   laoshi] zui zhongyao.
           he/she   personality honest most important
       'The most important thing is that he/she should be honest.'

(61) [_TOP_ *Ren*] [_DP_ xindi shanliang] zui zhongyao.
           person   heart kind   most important
       'The most important thing is to have a kind heart.'

5.8 Summary

This chapter mainly investigates conditions for the (c)overt forms of inclusive generic pronouns in Chinese, especially generic *ren*. Several conclusions are suggested:

The Chinese inclusive generic pronouns in finite constructions can be overt *ren* (or *ni*) or covert *pro* without much restriction, while in non-finite embedded subject position it has to be obligatorily null, PRO. The inclusive generic pronouns may also be null according to prosodic or structural requirements.

The interpretation of generic pronouns in Chinese always depends on their feature match with other arguments and the predicate in the structures the generic pronouns reside in, otherwise the outer-discourse contextual information will be employed to identify the salient interpretation.

The seeming inclusive generic pronoun *ziji* is in essence a reflexive anophoric to a real inclusive generic pronoun *ren/ni/pro*, an adnominal intensifier to a noun/pronoun, or an adverbial intensifier modifying a predicate. Inclusive generic *ren* does not antecede itself but antecede *ziji* instead.

Based on Holmberg and Phimsawat (2015), the definition of the inclusive generic pronoun in Chinese may not be 'inclusive' enough. The inclusive generic pronoun in Chinese has to be null to have a more inclusive generic interpretation including both humans and non-humans. *Ren* and *ni* are restricted to human-only reference.

Chapter 6

Conclusion

I look at empirical data about various possibilities of behaviour and interpretations of *ren* in Mandarin Chinese, and generalise that there are mainly two types of *ren*, noun and pronoun, and in turn approximately five types of subcategories of *ren*, i.e. kind-referring noun, common noun, abstract noun referring to certain properties of a person, 3rd person singular/plural referential pronoun, and inclusive generic pronoun.

I propose that as a kind of generic expression, *ren* is mainly categorised into two types, i.e. kind-referring *ren* (noun) and inclusive generic *ren* (pronoun). These two types of generic expression have their distinct distributions and interpretations, though in some cases the situations described by sentences involving them may be almost identical.

To distinguish these two types, I suggest seven diagnostic tests, investigating whether the relevant forms can be modified or can modify other elements, their interchangeability with alternatives *renlei* or *ni*, whether they can be negated or focused, their distribution and interpretation in predicate position, their availability to be arguments of certain predicates, as well as their interaction with other arguments in the same domain.

Based on my observations of *ren* with different readings and behaviours, as well as the plausible tests, I generalise the distinct phi-features and validity proportions of kind-referring *ren* and inclusive generic *ren*. I claim that kind *ren* and inclusive generic *ren* share the same [human] value in the root gender feature, but differ from each other in the number feature and the person feature. For a generic statement to be true, the proportion of valid individual members of kind *ren* varies from 1 to the total number of human beings, while the proportion of inclusive generic *ren* always approximates to the total number of a certain restricted group.

These distinctions can be further analysed through the generic operator and other

elements that contribute to the generic readings of *ren*. Based on the widely accepted theory of the generic operator and arguments on the construction and function of the generic operator, together with relevant empirical data of *ren* in Chinese, I argue that the traditional generic operator, as well its overt counterparts, certain adverbial quantifiers, cannot fully identify a generic argument, or account for the distinction between a kind noun and an inclusive generic pronoun.

Inspired by Dobrovie-Sorin and Beyssade's (2012) proposal of two operators in a generic sentence, GEN and HAB, and Chierchia's (1995b) claim that adverbs of quantification cannot bind variables which are already bound, I propose a dual-operator system in analysing generic *ren* in Chinese, which consists of unary G_a binding the variables introduced by an argument, and unary G_p binding the event variable. The basic logical form for these two generic operators on inclusive genericity is as follows.

$$G_a x \text{ [person (x)] } G_p s \text{ [V (x, s)]}$$

I claim that the generic operator on argument variables still cannot, or at least not sufficiently, identify or distinguish between the different particular interpretations of *ren*s in identical constructions, and thereby investigate factors in a multi-level interpretation of *ren* based on contextual information.

As for the quasi-inclusive and exclusive generic pronouns *women* 'we' and *tamen* 'they', I propose that sentential temporal and locative adverbials provide crucial information which goes into the restrictor of the structure of generic quantification. The quasi-inclusive and exclusive generic pronouns are not 'arbitrary' interpretations but are generics restricted in certain temporal and locative domains. The generic operator also applies in the cases of quasi-inclusive and exclusive genericity in Chinese. I suggest that the speaker's self-positioning is an important factor in the interpretation of generic *ren* in the past tense, in which the speaker sets himself/herself inside or outside of the domain of individual described.

I explore the covert or overt status of inclusive generic pronouns in finite and non-finite constructions, suggesting that there are also two null forms of the inclusive generic pronoun, *pro* and PRO respectively, apart from the overt forms *ren* and *ni*. To include non-human entities in the domain of inclusive genericity, the inclusive generic pronoun has to be null. I argue that the reflexive *ziji* does not independently serve as an inclusive generic pronoun, but is actually anaphoric to an inclusive generic antecedent, or functions as an adnominal or adverbial quantifier.

For future studies of generic ren, some issues await further exploration. In the dual-operator system that I have suggested here for analysing generic *ren* in Chinese, the generic operator on argument variables still cannot completely distinguish between kind

ren and inclusive generic *ren*. The roles that syntactic and discourse contexts play need further investigation. Further, pragmatic contextual information, e.g. the background knowledge of both interlocutors, the intention of the speaker and the perception of the addressee, should be considered in more depth. A greater focus on semantic and pragmatic properties will be helpful in exploring Chinese genericity.

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