Chapter 6
Independence of binding and intensification
in Mandarin Chinese

6.1 Introduction

In this chapter we discuss to what extent the analysis based on the independence of
intensification and binding presented in chapters 2-5 can be applied to reflexives and
intensifiers in Mandarin Chinese. Applied to Chinese this approach gives rise to the
hypotheses in (1).

(1) a. Chinese zi ji 自己 ‘self-self’\(^1\) is always an intensifier, never a reflexive.
   b. Chinese has Ø-reflexives which can be adnominally intensified by adjunction
      of zi ji. What appears to be reflexive uses of zi ji are really adnominally
      intensified Ø-reflexives, e.g. Zhang san hen Ø zi ji ‘Zhangsan hates Ø
      himself’.

As will be shown below, the two hypotheses in (1) yields a radically new approach to the
analysis of reflexives and intensifiers in Mandarin Chinese.

6.2 Setting the stage: evidence supporting the proposals that zi ji is always an
intensifier and that Chinese has Ø-reflexives

In this section the main properties of the element zi ji will be introduced in order to set the
stage for the following sections. The main focus will be on showing that there is a large body
of data supporting the proposals in (1). The Chinese intensifier element zi ji has a great deal in
common with the intensifier element himself in Modern English and it will be shown that these
similarities can be used to argue that the Ø-reflexive analysis of Modern English proposed in
chapter 5 can be extended to Chinese. First, like the English adnominal intensifier himself, the
Chinese adnominal intensifier zi ji also appears to be able to function as a reflexive anaphor,
see (2)-(3).

\(^1\) In the linguistic literature on Chinese 自己 zi ji is usually glossed as ‘self’. In section 6.3.1 we argue that ‘self-
self’ is a better gloss since it is a bi-morphemic word composed of the morphemes 自 zi and 己 ji which both mean
‘self’.
(2) 皇帝自己來了。
   Huang-di ziji lai-le.
   ‘The emperor himself came.’
   (ziji = adnominal intensifier)

(3) 皇帝恨自己。
   Huang-di hen ziji.
   ‘The emperor hates himself.’
   (ziji = reflexive)

From the beginning of modern formal syntax in the sixties and seventies till today, binding-theoretical accounts of *himself* and *ziji* have tended (With a few exceptions, e.g. Moyne (1974), among others) to treat these elements purely as reflexive anaphora (3) without taking into consideration the fact that they can also be used as intensifiers as illustrated in (2). We argue that this approach is too narrow in scope and that any viable theoretical account of these elements has to take their use as intensifiers into account. Indeed, in many cases the behavior of *ziji* and *himself* in what seems to be reflexive uses, e.g. (3), follow from the fact that they are first and foremost adnominal intensifiers. One of the peculiarities of intensifier-based reflexives like Chinese *ziji* and English *himself* is that they do not have any of the non-reflexive uses\(^2\) (e.g. reciprocal, middle/unaccusative verbs, medio-passives, deponent verbs, etc.) displayed by simple reflexive elements\(^3\) in many other languages (e.g. Danish *sig*, and *–s*, German *sich*, French *se*, etc.), see (4).

\(^2\) Needless to say, the logophoric uses of *ziji* and *himself* (also referred to as “locally free reflexives” or LFRs, cf. Baker (1995)) are also in a strict sense non-reflexive. However, they are still in argument position, i.e. thematic. As was argued in Chapter 5 such non-locally bound instances of *himself* are best analyzed as reduced forms of underlying intensified pronouns *himself < him himself* (cf. Siemund 2002:81). In section 6.2.2 a similar approach of logophoric uses of *ziji* and *ta ziji* will be discussed.

\(^3\) The term “reflexive element” is used here to refer to different forms of reflexive morphology ranging from affixes (e.g. Dan. *–s*, Rus. *–sja*), clitics (e.g. Fr. *se*), syntactically free but phonologically dependent clitics (e.g. Dan. *sig*), syntactically and phonologically free (i.e. independently stressable) forms (e.g. Fr. *soi*, Ger. *sich*, Rus. *sebja*). See also chapter 4, section 4.5 for more discussion of the different uses of reflexive elements in Danish.

\(^4\) The passive suffix *–s* is derived from an encliticized reflexive pronoun in older stages of the language, see chapter 4 sections 4.5.2, 4.5.4 and 4.5.5 for more discussion of this suffix.
Typological survey of reflexive and non-reflexive uses of reflexive elements:

(a) Chinese  (ii) English  (iii) French  (iv) German  (v) Danish

<table>
<thead>
<tr>
<th></th>
<th>(i) Chinese</th>
<th>(ii) English</th>
<th>(iii) French</th>
<th>(iv) German</th>
<th>(v) Danish</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. reflexive</td>
<td>ziji</td>
<td>himself/se/soi</td>
<td>sich</td>
<td>sig</td>
<td></td>
</tr>
<tr>
<td>b. reciprocal</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-s</td>
</tr>
<tr>
<td>c. middle</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>d. passive</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-s</td>
</tr>
<tr>
<td>e. deponent verbs</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-s/sig</td>
</tr>
<tr>
<td>f. intensifier</td>
<td>ziji</td>
<td>himself</td>
<td>(lui-)mème</td>
<td>selbst</td>
<td>selv</td>
</tr>
</tbody>
</table>

Notice that neither English nor Chinese have any non-reflexive uses of their so-called reflexives, viz. *himself* and *ziji*, see (4b-e). While French *se*, Danish *sig* and German *sich* all classify as true reflexives, *himself* does not since it is not featureless. Chinese *ziji*, however, is (like the Danish intensifier *selv*) unmarked for person, number, and gender, and could thus be a featureless “true” reflexive. In spite of this, it still behaves just like English *himself* in that it cannot be used in any of the non-reflexive constructions in (4). Furthermore, both English *himself* and Chinese *ziji* can function as intensifiers, something the reflexives in Danish, French, and German are unable to do, see (4f). So except for the reflexive uses, Chinese *ziji* ‘self-self’ and English *himself* are basically in complementary distribution with the Danish reflexive *sig* (as well as with Ger. *sich*, Fr. *se*, etc.). On the other hand, as discussed in Chapter 2, Chinese *ziji* and English *himself* display most of the main uses of the Danish intensifier *selv*, see (5).

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5 The table in (4) is from chapter 4, section 4.5 where example sentences illustrating the different use of reflexive elements in non-reflexive constructions (e.g. reciprocal, middle, passive, etc.) can be found.

6 The term “true reflexive” is from Burzio (1991), see also chapter 3.
Typological survey of different uses of adnominal intensifiers:

<table>
<thead>
<tr>
<th></th>
<th>Chinese</th>
<th>English</th>
<th>French</th>
<th>Danish</th>
</tr>
</thead>
</table>
| a. Adnominal intensifier | guo-wang ziji | the king *himself* | le roi (lui-)m
time | kongen selv |
| b. Complex reflexive | Ø ziji | Ø *himself* | soi-m
time/lui-m
time | sig selv |
| c. Doppelgänger-marker | Ø ziji | Ø *himself* | soi-m
time | sig selv |
| d. Intensified pronoun | [ta] ziji / ta ziji | [him] *himself* | [lui] lui-m
time | ham selv |
| e. Exclusive adv. inten. | ziji | *himself* | lui-m
time | selv |
| f. Deverbal compound | *ziji/zi/-ji | *himself/self* | *m
time-/auto-/sui/-etc.. | selv |

We take the complementary distribution of ziji and *himself* vs. sig in (4-5) as strong support of the assumption that both ziji and *himself* are intensifiers rather than reflexive anaphors. The apparent reflexive uses of ziji and *himself* in (3) and (4a) can thus be explained if we assume that Chinese and English both have Ø-reflexives which can be intensified by the adnominal intensifiers ziji and *himself* respectively, e.g. Ø *himself* and Ø ziji in (5b) and (6a). Combined, (4) and (5) thus draw a picture of Chinese and Modern English in which ziji and *himself* are consistently analyzed as intensifiers which may adnominally intensify different types of nominal expressions, i.e. Ø-reflexives, pronouns, and DPs. In other words, the absence of non-thematic uses of ziji and *himself* (4b-e) plus their consistent behavior as intensifiers (5a-e) provide strong support for the analysis of intensified and unintensified nominal expressions in Chinese outlined in (6) where ziji is consistently analyzed as an intensifier (like selv in Danish and *himself* in English) while Ø-reflexives correspond to the simple reflexive sig in Danish.

(6) Systems of intensified and unintensified nominal expressions in Chinese, Danish and English.

<table>
<thead>
<tr>
<th></th>
<th>Simple/unintensified</th>
<th>Complex/intensified</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Reflexives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Chinese</td>
<td>Ø</td>
<td>Ø ziji</td>
</tr>
<tr>
<td>(ii) Danish</td>
<td>sig</td>
<td>sig selv</td>
</tr>
<tr>
<td>(iii) English</td>
<td>Ø</td>
<td>Ø <em>himself</em></td>
</tr>
<tr>
<td>(i) Chinese</td>
<td>ta</td>
<td>(ta) ziji</td>
</tr>
<tr>
<td>(ii) Danish</td>
<td>ham</td>
<td>ham selv</td>
</tr>
<tr>
<td>(iii) English</td>
<td>him</td>
<td>[him]³⁹ <em>himself</em></td>
</tr>
</tbody>
</table>

³⁷ The table in (4) is repeated from chapter 2 where example sentences illustrating the different uses of intensifiers can be found.

³⁸ See chapter 5 for more discussion of Ø-reflexives in English.

³⁹ The material enclosed in square brackets is assumed to have been rendered phonologically zero by a morphological rule, see discussion of similar rule in English in chapter 5.
Most Pica-style LF movement approaches to LD-anaphora tend assume that Chinese *ziji* and Danish *sig* share some properties since they can both be LD-bound. Most importantly they are both assumed to be heads since only heads are able to undergo the successive cyclic movement which is necessary in order to be LD-bindable. Usually the comparison of properties of *sig* and *ziji* ends there. It is, however, important not to overlook that, as shown above, *sig* and *ziji* are different in almost all other respects and that *ziji* has far more properties in common with the English intensifier *himself* (and Danish *selv* ‘self’) than with the simple reflexive *sig* in Danish. *Himself* and *ziji* shares at least five properties which Danish *sig* does not have, see (7).

(7) **Common properties of *ziji* and *himself*.** Both *ziji* and *himself* can:

(i) be focused (e.g. in answers to questions, as associates of focus particles, etc.)
(ii) receive both sloppy and strict interpretations in sentences with verb ellipsis
(iii) receive both near-reflexive vs. pure-reflexive readings
(iv) be used as adnominal intensifier of DPs
(v) be used as exclusive adverbial intensifier.

Note that the simple reflexive *sig* in Danish has none of the properties in (7). In contrast, the intensified reflexive *sig selv* ‘REFL self’ has (7i-iii) and the adnominal *selv* ‘self’ on its own has the properties (7iv-v). In other words, both *ziji* and *himself* behave more like intensified reflexives and intensifiers than as unintensified reflexives. As the sentences in (8-12) show, assuming the existence of Ø-reflexives (which may or may not be intensified) makes it possible to consistently analyze *himself* and *ziji* as adnominal intensifiers on a par with Danish *selv* ‘self.’ The sentences in (8-12) illustrate the properties in (7i-v).
Absence of focused unintensified Ø-reflexives in Chinese (7i):
Q: 張三推薦了你的弟弟嗎
Zhangsan tui-jian le ni-de di-di ma
Zhangsan recommend PERF your brother?
‘Has Zhangsan recommended your brother?’

A: 沒有，他只推薦了自己。
Mei-you, ta zhi tui-jian-le Øi ziji*Øi
not-have he only recommended PERF self-self
‘No, he only recommended Øi himself/*Øi.’

Ziji can have both sloppy and strict readings in elliptical constructions (7ii):
張三比李四為自己辯護的好。
Zhangsan bi Lisi wei ziji bianhu de hao.
Zhangsan than Lisi for self-self defend DE good
(i) ‘Zhangsan defended himself better than Lisi defended himself.’ (=sloppy)
(ii) ‘Zhangsan defended himself better than Lisi defended him.’ (=strict)

Ziji have both <statue> and <real> (i.e. both pure- and near-reflexive) readings (7iii):
毛澤東把自己槍斃了。
Mao Ze-dongi ba ziji qiang-bi le
Mao Ze-dong BA self-self shoot PERF
(i) ‘Mao Ze-dong<real> shot himself<statue>.’ (=Mao vandalized his statue)
(ii) ‘Mao Ze-dong<real> shot himself<real>.’ (=Mao committed suicide)

Ziji can function as adnominal intensifier (7iv):
皇帝自己來了。
Huang-di ziji lai-le.
yellow-emperor self-self come-PERF
‘The emperor himself came.’ (ziji = adnominal intensifier)

Ziji as exclusive adverbial intensifier (7v):
張三不自己作功課。
Zhangsan bu ziji zhuo gong-ke
Zhangsan not self-self do homework
‘Zhangsan doesn’t do the homework himself.’ (i.e. somebody else helps him)

The Danish examples in (13-17) illustrate that in all these respects ziji has more in common with the Danish intensified reflexive sig selv (see (13-15)) and the adnominal

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10 This example is adapted from Lidz (2001a:239, (25)).

11 This example is adapted from Lidz (2001a:239, (24)).
and adverbial intensifiers selv ‘self’, see (16) and (17), than with the unintensified reflexive sig.

(13) Sig selv can be focused, sig cannot (7i):
    Q: Did Peter wash your brother?
    A: Nej, han vaskede *sig / sig selv.
       ‘No, he washed himself.’

(14) Sig selv has both sloppy and strict readings, sig only has sloppy readings (7ii):
    a. Peter forsvarede sig. Og det gjorde Hans også.
       Peter defended REFL and it did Hans too
       ‘Peter defended himself and so did Hans.’
          (i) Hansøf defended himselføf.  (sloppy)
          *(ii) Hansøf defended himøf.  (strict)
    b. Peter forsvarede sig selv. Og det gjorde Hans også.
       Peter defended REFL self and it did Hans too
       ‘Peter defended himself and so did Hans.’
          (i) Hansøf defended himselføf.  (sloppy)
          (ii) Hansøf defended himøf.  (strict)

(15) Sig selv has both near- and pure-reflexive readings, sig only has pure-reflexive readings (7iii):
    a. Peter barberede sig.
       Peter shaved REFL
       ‘Peter shaved Ø.’
          (i) ‘Peter<real> shaved Ø<real>.’
          *(ii) ‘Peter<real> shaved Ø<statue>.’
    b. Peter barberede sig selv.
       Peter shaved REFL self
       ‘Peter shaved himself.’
          (i) ‘Peter<real> shaved himself<real>.’
          (ii) ‘Peter<real> shaved himself<statue>.’

(16) Selv ‘self’ can be used as adnominal intensifier, sig ‘REFL’ cannot (7iv):
       Peter selv/ *sig kom til mødet.
       Peter self REFL came to meeting-the
       ‘Peter himself attended the meeting.’

(17) Selv ‘self’ can be used as exclusive adverbial intensifier, sig ‘REFL’ cannot (7v):
       Peter løste opgaven selv / *sig.
       Peter solved task-the self
       ‘Peter solved the problem himself.’
We conclude that *ziji* should be treated as an intensifier (or intensified Ø-reflexive) since it has five properties in common with the intensifier *selv* and the intensified reflexive *sig selv* ‘REFL self’ but only one property in common with *sig* (i.e. LD-binding).

The analysis of Chinese outlined in (6), which yields a morphologically transparent system of adnominal intensification on a par with those proposed for Danish and English in chapters 3 and 5 respectively, is based on the hypotheses listed in (18).

(18) a. Chinese *ziji* is not a reflexive anaphor but rather an adnominal intensifier (e.g. *huang-di ziji* ‘the emperor himself’).
   b. Chinese has Ø-reflexives, e.g. *Peter, xi-le Ø, ‘Peter washed Ø’*, see (19)\(^{12}\).
   c. What looks like locally bound reflexives, e.g. *Peter, hen ziji, ‘Peter hates himself’, is really locally bound adnominally intensified Ø-reflexives, e.g. *Peter, hen Ø, ziji ‘Peter hates Ø, himself’, see (20).
   d. What looks like locally free reflexives (also called “logophors”) is really adnominally intensified pronominals, e.g.: *Peter 說 Mary 跟除了[他]自己以外所有的人跳舞。*  
   *Peter, shuo Mary gen chu-le [ta] ziji yi-wai-suo-you de ren tiao-wu*  
   ‘Peter said that Mary danced with everyone except [him] himself.’

The sentences in (19-24) illustrate the elements predicted to exist by the analysis sketched in (6) and (18): (19) testifies to the existence of Ø-reflexives (or at least phonetically null arguments which may receive a reflexive interpretation), (20) illustrates what is meant by intensified Ø-reflexives, (21)-(22) illustrate unintensified and intensified object pronouns, and (23)-(24) illustrate unintensified and intensified subject pronouns. Adnominally intensified DPs have already been illustrated in (2).

\(^{12}\) Note that the absence of overtly realized objects in sentences of this type does not have to be construed as evidence that Chinese has Ø-reflexives. Mandarin Chinese is known for being able to leave out arguments which can be recovered from information in the surrounding discourse or pragmatic context. What the sentence in (19) does show, is that phonologically unrealized objects are possible in Chinese and that it is at least possible to analyze them as Ø-reflexives. Needless to say, more work is needed to determine the exact nature of such empty categories in Chinese. One possibility is that the Ø-reflexive is identical to little *pro*, which has to be identified by the closest c-commanding antecedent (or bound by a null operator). More work is needed before any definite conclusion can be made.
(19) **Unintensified Ø-reflexives in Chinese**

Q: 你有沒有洗澡？
    "Ni you-mei-you xi-zao?"
    you have not-have have wash-bath
    ‘Have you bathed’

A: 有，我已經洗了。
    "You, wo, yi-jing xi Ø le."
    have I already wash PERF
    ‘I have, I have already washed Ø.’

(20) **Adnominally intensified Ø-reflexives in Chinese**

Q: 你有沒有推薦你的同學
    "Ni you-mei-you tui-jian ni-de tong-xue?"
    you have-not-have recommended your classmates
    ‘Have you recommended your classmates?’

A: 沒有，我只推薦了自己。
    "Mei-you, wo, zhi tui-jian-le Ø ziji."
    not-have I only recommended PERF self-self
    ‘No, I only recommended Ø myself.’

(21) **Unintensified/simple object pronouns in Chinese**

Q: 你去皇宮的時候有沒有看到皇帝？
    "Ni qu huang-gong de shi-hou you-mei-you kan-dao huang-di,?"
    you go emperor palace DE time have-not-have see-reach emperor
    ‘Did you see the emperor when you went to the palace.’

A: 有，我有看到他。
    "You, wo you kan-dao ta."
    have I have see-reach him
    ‘I have, I saw him (there).’

(22) **Adnominally intensified/complex object pronouns in Chinese**

While *ziji* is acceptable in (20), the complex form *wo ziji* ‘me self’ would in most contexts be more felicitous, see (i). The existence of locally bound complex forms, e.g. *wo ziji* ‘me self’, will be discussed in more detail below.

(i)  "Wo, yi-jing tui-jian le wo, ziji."
    I already recommend PERF I self-self
    ‘I already recommended myself.’

The answer in (22) sounds a bit awkward with the intensified pronoun *ta ziji*. The sentence in (i) would be more appropriate.

(i)  "Wo you kan dao huang-di ta, ziji."
    I have see reach emperor he self-self
    ‘I saw the emperor himself.’

Alternatively, using the adnominal intensifier 本人 *ben-ren* ‘(lit.) root-person, in person’ instead of *ziji* would also yield a more felicitous sentence:

(ii) "Wo you kan dao ta, ben-ren."

Q: 你去皇帝的時候有看到皇帝？還是只有看到他的侍衛？

Ni qu huang-gong de shi-hou you kan-dao huang-di, 
Hai-shi zhi you kan-dao ta-de shi-wei?

you go emperor palace DE time have see-reach emperor or is only have see reach he DE serve guard

‘Did you see the emperor when you went to the palace? Or did you merely see his guards?’

A\textsuperscript{15}: 我有看到他自己。

Wo you kan-dao ta ziji.

I have see-reach him self-self

‘I saw him himself (there).’

(23) Unintensified/simple subject pronouns in Chinese

張三常常說他不喜歡看電影。

Zhangsan, chang-chang shuo ta, bu xi-huan kan dian-ying.

Zhangsan often-often say he not like see movies

‘Zhangsan often said that he didn’t like movies.’

可是昨天他去看“The Lord of the Rings”。

Ke-shi zuo-tian ta, qu kan “The Lord of the Rings”.

but yesterday he go see “The Lord of the Rings”

‘But yesterday he went to see “The Lord of the Rings”’

\textsuperscript{15} The Chinese informants consulted for these sentences were speakers of Standard Taiwanese Mandarin Chinese. This explains why the verb 有 ‘have’ is used to for the perfect. Speakers of Mainland Mandarin Chinese would use the particle le 了 instead, see (i) below. Needless to say, the formation of the perfect does not directly bear on the behavior of reflexives and intensifiers.

(i) 我看到了他自己。

Wo kan-dao le ta ziji.

I see-reach PERF him self-self

‘I saw him himself (there).’

I have see reach he root-person

‘I saw him himself.’

Needless to say an exhaustive account of adnominal intensification in Chinese should include discussion of other adnominal intensifiers than ziji, e.g. 本人 ben-ren, 本身 ben-shen, etc. However, since such a study would largely exceed the scope of this dissertation, we leave that for further research.
Adnominally intensified/complex subject pronouns in Chinese

張三常常說他不喜歡看電影。

Zhangsan, chang-chang shuo ta, bu xi-huan kan dian-ying.

Zhangsan often-often say he self-self not like see movies

‘Zhangsan often said that he didn’t like movies.’

可是昨天他自己去看 "The Lord of the Rings"

Ke-shi zuo-tian ta, ziji qu "The Lord of the Rings"

but yesterday he self-self go see "The Lord of the Rings"

‘But yesterday he himself went to see “The Lord of the Rings”’

In the following sections the hypotheses listed in (18) will be discussed in more detail as the present analysis of Chinese is compared to previous analyses. While it may still be too early to reach a definitive verdict, argue that the present analysis has the advantage of making it possible to explain the intensifier-behavior of ziji and ta ziji and thereby unify the analysis of adnominally intensified DPs (e.g. huang-di ziji ‘the emperor himself’) and uses of ziji which have hitherto been analyzed as reflexive anaphors and logophors. Other analyses of ziji appear to be incapable of achieving a unified account of all uses/properties of ziji. Furthermore, most existing accounts of Chinese (e.g. Huang and Liu 2001) suffer from the drawback that they need to assume\(^{17}\) the existence of two, three, or even more different ziji’s: (i) ziji\(_1\) = adnominal intensifier (e.g. huang-di ziji ‘the emperor himself’), (ii) ziji\(_2\) = locally bound reflexive anaphor subject to a syntactic principle A, and (iii) ziji\(_3\) = locally free reflexive/logophor\(^{18}\).

\(^{16}\) To maintain the analysis proposed here one would have to assume the existence of \(\emptyset\)-subject pronouns (which may or may be adnominally intensified by adjunction of ziji) as in (i). Such examples will be discussed more in later sections.

\(^{17}\) Huang and Liu (2001) adduce a long list of solid facts illustrating the different behavior of local (syntactically bound) ziji and LD (pragmatically governed) ziji. While we do not challenge the validity of these facts, we do dispute the need to assume two different ziji’s to account for them. We argue that the difference between local ziji and LD ziji should not be captured as a lexical difference between homophonous words, but rather as a difference between adnominally intensified (locally bound) \(\emptyset\)-reflexives (\(\emptyset\) ziji) and adnominally intensified locally free phonetically unrealized pronominals ([ta] ziji). In other words, there is only one ziji which may intensify different nominal expressions, see sections 6.4-6.6 below.
In this section we have discussed data which support analyzing intensifiers and reflexives in Mandarin Chinese based on the assumptions in (1) and (18). The following sections will be dedicated to more detailed discussion of different aspects of this analysis.

6.3 Internal structure of adnominal intensifiers in Chinese

In this section the internal structure of adnominal intensifiers in Chinese will be discussed. In section 6.3.1, which focuses on the morphology of ziji, it will be argued that this element is bi-morphemic rather than mono-morphemic as is often claimed in the literature. Section 6.3.2. contains a discussion of whether Chinese has complex intensifiers of the English type, e.g. ta zji ‘he/him self-self’ which is composed of a pronominal element (ta ‘he/him’) plus an intensifier element (ziji ‘self-self’).

6.3.1 Is ziji really mono-morphemic?

In the literature on binding, ziji has often been claimed to be mono-morphemic. The distinction between simple/mono-morphemic reflexives and complex reflexives dates back to Faltz (1977) who observed that in many languages mono-morphemic reflexives allow LD-binding (i.e. clause-external binding) while complex/multi-morphemic reflexives have to be locally bound. Since ziji allows clause-external antecedents it is naturally to assume that it is mono-morphemic. While it is certainly true that ziji is morphologically simpler than ta ziji, this does not mean that it is mono-morphemic. Except for a few loan words Chinese lexical

18 To this list of different ziji’s most analyses would have to add one more, namely the so-called exclusive adverbial intensifier, see (i).

(i) 張三不自己作功課。

Zhangsan bu ziji zhuo gong-ke

‘Zhangsan doesn’t do the homework himself.’

See chapter 2 for more discussion of the exclusive adverbial use of intensifiers. As discussed in chapter 2, the approach to intensification defended in this dissertation makes the unification of all uses of intensifiers seem less utopian.
morphemes are all monosyllabic. The fact that *ziji* is bi-syllabic is thus strong indication that it consists of two morphemes. The bi-morphemic structure of *ziji* is further confirmed by the fact that both the 自 *zi-* and the 己–*ji* parts of *ziji* can be used independently, see (25-6).

\[\text{(25) a. 自欺} \\
\text{zi-qi} \\
\text{self-cheat} \\
\text{‘self-deceit’} \\
\text{b. 自愛} \\
\text{zi-ai} \\
\text{self-love} \\
\text{‘have regard for oneself; self-respect(ing)’}\]

\[\text{(26) a. 知己} \\
\text{zhi ji} \\
\text{know self} \\
\text{(i) ‘bosom/intimate friend’, (ii) ‘be intimate/close’, (iii) ‘know oneself’,} \\
\text{b. 利己主義} \\
\text{li ji zhu yi} \\
\text{benefit self master thought} \\
\text{‘egoism (lit. ‘self-benefitism’)’}\]

Since both the 自 *zi-* and the 己–*ji* parts of *ziji* can be used independently, 自己 *ziji* is obviously a bi-morphemic compound, composed of two different morphemes which both mean ‘self’\(^{19}\). Now the question is whether its bi-morphemic status affects its binding properties.

\[\text{\underline{19} In Classical Chinese 自 *zi* and 己 *ji* also both mean ‘self’ but they had different syntactic functions. While 自 *zi* was used as pre-verbal reflexive clitic indicating coreference between two arguments of a predicate, see (i), 己 *ji* was more often used as a logophor (i.e. a reflexive ‘referring not to the subject of its own verb but to that of a clause in which its clause is embedded’ (Pulleyblank 1995:83)), see (ii).} \\
\text{(i) 王自殺} \\
\text{wang zi sha} \\
\text{king self kill} \\
\text{‘The king killed himself.’} \\
\text{(ii) 不懼人之不己知} \\
\text{bu huan ren zhi bu ji zhi} \\
\text{not worry people DE not self know} \\
\text{‘[I] do not worry that people do not know me.’}\]

Notice, that the typical word order of the Classical language (i.e. 自 *zi* being pre-verbal while 己 *ji* is post-verbal) still tends to be preserved in Modern Chinese compounds.
According to the Pica-style LF movement approach to LD-anaphora only reflexives which can undergo successive cyclic head-movement are able to be LD-bound. This is how the alleged difference between simple and complex reflexives in Danish, i.e. *sig* and *sig selv*, has often been accounted for (cf. Jakubowicz (1994) discussed in Chapter 3). Since *sig* is a mono-morphemic phonological clitic it automatically qualifies as a head. The complex reflexive *sig selv*, on the other hand, claimed to be unable to undergo head movement since it behaves syntactically as an XP. Similarly the difference between *ziji* (which can be both locally and LD bound) and *ta ziji* (which allegedly has to be locally bound) has been explained as following from the morphological properties of these elements, i.e. the simple reflexive *ziji* being able to function as a head while the complex reflexive *ta ziji* is blocked from head movement due to its status as XP (cf. Cole, Hermon and Sung 1991, and others).

Notice that the question whether *ziji* is mono- or bi-morphemic does not have to bear on its ability to function syntactically as a head. Syntactically words can still be heads even though they are not mono-morphemic. In other words, even though *ziji* is clearly bi-morphemic and is thus not a clitic it may still function syntactically as a head. In other words, the bi-morphemic status of *ziji* does not by itself suffice to exclude a Pica-style analysis of this element as a head reflexive able to undergo successive cyclic head movement. However, as shown in section 6.2, there is ample evidence elsewhere in the grammar showing that *ziji* behaves more like *himself* (i.e. complex reflexive/adnominal intensifier) than like the simple reflexive *sig* in Danish.

---

20 There is plenty of evidence suggesting that this generalization is wrong. Sentences with LD-bound *ta ziji* will be discussed below.
6.3.2  *Ta ziji*: complex intensifier, complex reflexive Ø ta ziji, or intensified pronoun ta ziji?

It has been claimed that Chinese has two forms of the adnominal intensifier, viz. (i) *ziji* ‘self-self’ (27a) and (ii) *ta ziji* ‘he/him self’ (27b).

(27)  

a. 皇帝自己來了。  
*Huang-di ziji lai le.*  
Emperor self-self come PERF  
‘The Emperor himself came.’

b. 皇帝他*自*己來了。  
*Huang-di ta ziji lai le.*  
Emperor he self-self come PERF  
‘The Emperor himself came.’

(28)  

a. 皇帝恨自己。  
*Huang-di hen ziji.*  
emperor hate self-self  
‘The emperor hates himself.’

b. 皇帝恨他自己。  
*Huang-di hen ta ziji.*  
emperor hate he self-self  
‘The emperor hates himself.’

While the existence of complex intensifiers of the *ta ziji* type in Mandarin Chinese, see (27b), is still debated\(^{21}\), the existence of languages which have both simple and complex forms of intensifiers is beyond dispute. Some registers of French allow two different forms of the adnominal intensifier, the simple form *même* ‘same, self’, see (29a), and the complex form *lui-même* ‘himself’, see (29b), which is composed of the pronoun *lui* ‘him’ + *même* in the same way as Modern English *himself* was formed by adding the Old English simple adnominal intensifier *self* ‘self’ to the object pronoun *him*.

(29)  

a.  *Le roi même est venu.*  
the king same is come  
‘The king himself came.’

\(^{21}\) People who do not recognize the existence of *ta ziji* as a complex adnominal intensifier in Mandarin Chinese may chose to analyze the sentences in (27b) as consisting of *Huang-di* ‘emperor’ as topic which is resumed by a subject pronoun *ta* intensified by *ziji* ‘self-self’.
b. *Le roi lui-même est venu.
   the king him-same is come
   ‘The king himself came.’

It is therefore not unrealistic to imagine that, during the transition period from Old English to Modern English, English also may also have had both a simple and a complex form of the intensifier. However, unlike French which appears to still be in such a transition period, Modern English now only allow the complex form of the intensifier, see (30a) vs. (30b).

   b. The king himself came.

One would expect both the simple and the complex forms of the adnominal intensifier in languages like French and Chinese to be able to intensify any kind of nominal expression. This is, however, not the case. There seems to be a strong tendency to avoid using the complex form of the intensifier to intensify object pronouns, see the Chinese examples in (31a,b).

(31) a. Peter 說 Mary 跟除了 他自己以外所有的人跳舞。
   Peter, shuo Mary gen chu-le ta, ziji yi-wai suo-you de ren tiao-wu
   ‘Peter, said that Mary danced with everyone except [him] himself.’
   b. *Peter 說 Mary 跟除了 他他自己以外所有的人跳舞。
   Peter, shuo Mary gen chu-le ta ta, ziji yi-wai suo-you de ren tiao-wu
   c. Peter 說 Mary 跟除了 自己以外所有的人跳舞。
   Peter, shuo Mary gen chu-le ziji yi-wai suo-you de ren tiao-wu
   ‘Peter, said that Mary danced with everyone except himself.’

English displays a similar tendency to avoid overly redundant forms. That is repetitive forms like him himself are usually simplified to himself, see (32a-b).

(32) a. Peter, said that Mary danced with everyone except himself;
   b. *?Peter, said that Mary danced with everyone except him, himself.
   c. *self.
It is to the best of my knowledge still an open question why English does not allow intensified object pronouns, i.e. why do forms like */??me myself, */??him himself tend to be shunned by native speakers. Haplology might be a plausible account of the absence of the forms him himself, her herself, them themselves but such an explanation seems to run into trouble with forms like me myself and us ourselves^{22}. In any case, some rule must be at play reducing him himself to himself. Whatever the rule is, the same phenomenon appears in Fr., compare (32a-c) and (33a-c).

(33) a. Pierre bavardait avec lui-même
   b. *lui lui-même
   c. *mème

   Peter chatted with him-same/him him-same/same
   ‘Peter chatted with himself.’

In the case of Chinese, one can imagine several different accounts of why *ta ta ziji does not occur. One way would be to assume the existence of a morpho-phonological rule simplifying ta ta ziji to [ta] ta ziji in the same way as him himself is reduced to [him] himself in English. Another approach would be to assume that only the simple adnominal intensifier ziji is allowed to intensify the object pronoun ta.

English and French illustrate that the absence of object pronouns intensified by complex intensifiers (e.g. *him himself, and *lui lui-même) is not in itself enough to falsify the hypothesis that a language has complex intensifiers. That is, the absence of forms such as ta ta ziji does not by itself suffice to falsify the hypothesis that Chinese has complex intensifiers of the ta ziji type. We thus conclude that the existence of complex intensifiers (Huang-di ta ziji ‘the Emperor himself’) in Modern Chinese is at least a theoretical possibility.

^{22} Baker (1995) suggests that the absence of intensified object pronouns might be a consequence of his prominence condition. If intensifier-adjunction is sensitive to syntactic prominence and if subjects are assumed to be syntactically more prominent than objects then it follows that only nominal expressions in subject position can be intensified. Such an account, however, is unable to explain why Danish allow intensified object pronouns and reflexives and why, even in English, sentence like Mary wrote a letter to the King himself are ok in the right context. See the critique of Baker’s prominence condition in chapter 2, section, 2.2.3.2.2, (56).
Critics of this analysis might claim that the sequence *Huang-di ta ziji* in (27b) should be analyzed as the DP *Huang-di* in topic position resumed by the intensified pronoun *ta ziji* in subject position. While such an analysis of (27b) is possible it is worth remembering that the topic position is characterized by being separated from the rest of the sentence by a brief intonational pause. Since (27b) can be pronounced without intonational pause we conclude that *Huang-di ta ziji* can be analyzed as a complex DP. Independent evidence for this comes from other complex post-nominal modifiers, e.g. *yi-ge-ren* ‘alone’\(^{23}\), which are known to be able to form complex DPs, compare (34) and (35).

(34) Adnominally intensified DP:

```
  DP
 / \  
DP  ta ziji  
   |        
   huang-di
```

(35) DP modified by *yi-ge-ren* ‘alone’:

```
  DP
 / \  
DP  yi-ge-ren  
   |        
   huang-di
```

In section 6.5.1 below we argue that locally bound *ta ziji* is in fact a Ø-reflexive intensified by the complex intensifier *ta ziji*, i.e. *Ø ta ziji*, see (36).

(36) Intensified DP:

```
  DP
 / \  
DP  ta ziji  
   |        
   Ø
```

\(^{23}\) Cf. Siemund (2000) who also discusses the close similarities between adnominal intensifiers and other post-nominal modifiers, e.g. Ger. *allein* ‘alone’ in *Der König allein* ‘the King alone’ vs. *der König selbst* ‘the king himself’.
6.4 Analyzing what appears to be uses of ziji as reflexive anaphors as adnominal intensifiers

In this section we outline analyses of what appears to be (and is generally assumed to be) uses of ziji as locally (section 6.4.1) or LD-bound (section 6.4.2) simple reflexive anaphors as complex intensified Ø-reflexives (i.e. Ø ziji). Section 6.4.3 concludes the section by summarizing the results.

6.4.1 Locally bound Ø-reflexives in argument position: complex reflexives = a sub-type of adnominal intensification

In this section we investigate whether the distribution of locally bound unintensified Ø-reflexives and intensified Ø-reflexives in Mandarin Chinese can be accounted for within the framework assumed here. Is the distribution of locally bound unintensified Ø-reflexives and intensified Ø-reflexives (i.e. Ø ziji) determined by predicate meaning in the same way as the distribution of sig vs. sig selv in Danish and Ø vs. Ø himself in English? Do we have evidence of a distinction between anti-reflexive, neutral, and inherently reflexive predicates in Chinese?

6.4.1.1 Anti-reflexive predicates

According to the analysis proposed here, all semantically anti-reflexive (or “hidden” neutral) predicates should potentially require the intensified reflexive Ø ziji in object position24. As far as we can tell at this point (not having done an exhaustive survey), this prediction is borne out by facts. That is, the anti-reflexive verbs in (37) do seem to require the intensified form of the Ø-reflexive, see (38a,b), (39a,b) and (40).

---

24 Anti-reflexive predicates require adnominal intensification of reflexive pronouns because they presuppose representational non-identity. This presupposition creates an inherently contrastive environment which triggers adnominal intensification. See chapter 3 for more details of this analysis of the relation between anti-reflexivity and intensification.
(37)  a. **恨**  
    ‘hate’
    b. **欺騙**
    ‘cheat’
    c. **替代**
    ‘replace, substitute for’
    d. **追**
    ‘follow, court, pursue’
    e. etc.

(38)  a. *張三恨。
    ‘*Zhangsan hates Ø’
    b. 張三恨自己。
    ‘Zhangsan hates Ø self-self’

(39)  a. *張三欺騙。
    ‘*Zhangsan cheats Ø’
    b. 張三欺騙自己。
    ‘Zhangsan cheats Ø self-self’

(40)  a. 小明以為老師又要責怪了。
    Xiaoming1 think teacher again will blame CSR
    ‘Xiaoming1 thinks that the teacher2 will blame (me/you/him1/3/her/himself/herself/us/you/them . . . ) again.’
    b. 小明以為老師又要責怪自己了。
    Xiaoming1 think teacher again will blame self-self CSR
    ‘Xiaoming1 thinks that the teacher2 will blame (him1/himself2) again.’

The examples in (38) and (39) show that local unintensified Ø-reflexives are ungrammatical with anti-reflexive predicates. The example in (40a) (which is from Huang (2000:86) furthermore illustrates that null objects in Chinese can receive a number of different

---

25 While finding it marginally acceptable, none of my informants liked the sentence in (40a), which Huang (2000:86) finds to be ok.
interpretations. However, in spite of the range of possible interpretations of the null object in (40a), it cannot (or only very marginally) be interpreted as a Ø-reflexive bound by the local subject. Adnominal intensification is necessary to (i.e. Ø ziji in (40b)) save the sentence.

Ba-constructions or co-verb + verb sequences also behave as anti-reflexive constructions in that they do not allow unintensified Ø-reflexives, see (41) and (42).

(41) a. 把 __ 槍斃 ba __ qiangbi ‘shoot __’
   b. 把 __ 丟出去 ba __ diu-chu-qu ‘throw __ out’

(42) a. 為 __ 辯護 wei __ bianhu ‘defend __’
   b. 跟 __ 說話 gen __ shuo hua ‘speak with __’

In this respect they behave like Danish prepositional predicates which also do not allow the simple unintensified reflexive. And similar to the case of Danish prepositional predicates, the absence of unintensified Ø-reflexives with ba-constructions or co-verb + verb sequences may follow from the morpho-phonological properties of Ø-reflexives (i.e. lack of stressability), rather than being due to the semantic properties of the predicate.

6.4.1.2 Neutral predicates

As described in chapter 3-5 many of the neutral predicates in English and Danish are either grooming verbs, or verbs denoting movement\(^\text{26}\), see (43-44).

(43) Neutral grooming verbs:
   a. He; washes \(DP_z\) / \(Ø\); / \(Øi\); himself.
   b. Han; vasker \(DP_z\) / sig; / sig; selv.

(44) Neutral verbs denoting non-translational movement:
   a. He; bends \(DP_z\) / \(Ø\); / \(Øi\); himself.
   b. Han; böjer \(DP_z\) / sig; / sig; selv.

\(^{26}\) Some verbs denoting emotional states may also qualify as neutral in Danish, e.g. bekymre ‘worry’, etc. See chapter 4 for more discussion of different types of neutral predicates.
One would therefore expect verbs of these semantic types to qualify as neutral predicates in Chinese as well. This, however as shown in (45)-(46), appears not always to be the case.

(45) Predicates denoting grooming activities:

a. 洗澡 *
   xi-zao *
   *洗澡自己 *
   xi-zao ziji *
   *洗澡 DP
   xi-zao DP
   'wash (oneself), take a bath, bathe (oneself)'

b. 梳頭 *
   shu-tou *
   *梳頭自己 *
   shu-tou ziji *
   *梳頭 DP
   shu-tou DP
   'comb (oneself)'

c. 刮鬍子 *
   gua hu-zi *
   *刮鬍子自己 *
   gua hu-zi ziji *
   *刮鬍子 DP
   gua hu-zi DP
   'shave (oneself).'

(46) Predicates denoting non-translational movement:

a. 灣下腰 *
   wan xia yao *
   *灣下腰自己 *
   wan xia yao ziji *
   *灣下腰 DP
   wan xia yao DP
   'bend down, duck'

b. 低頭 *
   di tou *
   *低頭自己 *
   di tou ziji *
   *低頭 DP
   di tou DP
   'duck'

c. 伸展身體 *
   shen zhan shen ti *
   *伸展身體自己 *
   shen zhan shen ti ziji *
   *伸展身體 DP
   shen zhan shen ti
   'stretch oneself''

Unlike the typical grooming verbs in English and Danish allow reflexives in object position, the Chinese counterparts are often complex predicates composed of a verbal element denoting the action + either a nominal element denoting an inalienable body-part, e.g. tou ‘head’ in shu-tou ‘(lit. comb head) comb’ as in (45b) and (46a,b,c), or a cognate object as in (45a). Since these cognate or inalienably possessed objects saturate the position of internal argument there is no room for any more direct objects. This accounts for the judgments in (45-46); the starred sentences are ungrammatical because they contain two internal arguments where there is only room for one thematically
One way to contrast the activity of combing oneself with combing somebody else is to add an overt possessor to the otherwise inalienably possessed object, see (47).

(47)  
\begin{align*}
a. \quad & \text{張三梳頭。} \\
& \text{Zhangsan shu } \varnothing \text{(de) tou.} \\
& \text{‘Zhangsan combs Ø.’} \\
b. \quad & \text{(?)} \text{張三梳自己的頭。} \\
& \text{Zhangsan shu ziji de tou.} \\
& \text{‘Zhangsan combs Ø himself.’} \\
c. \quad & \text{(?)} \text{張三梳我DE頭。} \\
& \text{Zhangsan shu wo DE tou.} \\
& \text{‘Zhangsan combs me.’} \\
\end{align*}

Notice, however, that the sentences in (47b,c) are only marginally acceptable. The idiomatically correct way to say “Zhangsan combs me’ would be by using a circumlocution with the verb \textit{bang} ‘help’ as in (48).

(48)  
\begin{align*}
a. \quad & \text{張三幫我梳頭。} \\
& \text{Zhangsan shu bang wo shu-tou.} \\
& \text{Zhangsan help me comb-head} \\
& \text{‘Zhangsan combs me.’} \\
b. \quad & \text{張三幫我洗澡。} \\
& \text{Zhangsan shu bang wo xi-zao.} \\
& \text{Zhangsan help me wash-bath} \\
& \text{‘Zhangsan bathes me.’} \\
\end{align*}

In the case of the verb+cognate object \textit{xi-zao} ‘wash’, the only way to make this verb transitive is to use the \textit{bang}-construction illustrated in (48), see (49)\textsuperscript{27}.

(49)  
\begin{align*}
a. \quad & \text{*張三洗我DE澡。} \\
& \text{Zhangsan xi wo de zao} \\
& \text{Zhangsan wash I DE bath} \\
b. \quad & \text{張三幫我洗澡。} \\
& \text{Zhangsan shu bang wo xi-zao.} \\
& \text{Zhangsan help me wash-bath} \\
& \text{‘Zhangsan bathes me.’} \\
\end{align*}

Likewise most verbs denoting non-translational bodily movement also cannot be found (or are highly infelicitous) in the genitive construction illustrated in (47), see (50)\textsuperscript{28}.

\textsuperscript{27} Notice, however, that strongly contrastive contexts can, in many cases, improve judgments.
Notice, however, that the bang-constructions are all anti-reflexive\(^{29}\), see (51).

\[(51)\]

\[
\text{Zhangsan} \text{ shu bang} \quad \ast \circ / (??) \circ \text{ ziji} / \text{ Lisi} \quad \text{ xi-zao}.
\]

\[
\text{Zhangsan} \text{ help} \quad \circ / \circ \text{ self-self} / \text{ Lisi} \quad \text{ wash-bath}
\]

‘Zhangsan bathes himself/Lisi.’

Another way to achieve a reflexive reading of an empty object position is by omitting the cognate object, see (52A).

\[(52)\]

\[
\text{Unintensified } \circ \text{-reflexives in Chinese:}
\]

\[
\text{Q:} \quad \text{ Ni you-mei-you xi-zao?}
\]

\[
\text{you have not-have have wash-bath}
\]

‘Have you bathed’

\[
\text{A:} \quad \text{ You, wo yi-jing xi \circ / le.}
\]

\[
\text{have I already wash PERF}
\]

‘I have, I have already washed \circ.’

Finally, notice that the ability to have inalienably possessed objects is one way to test whether a verb is neutral or anti-reflexive. Just like in Danish, Chinese neutral verbs are compatible with inalienably possessed object while anti-reflexive and ‘hidden” neutral verbs are not\(^{30}\), see (53).

\(\text{\textsuperscript{28}}\) Notice that form some reason certain verbs denoting non-translational movement fare better in the genitive construction than certain other neutral constructions involving inalienable possession, compare (50a) and (50b).

\(\text{\textsuperscript{29}}\) As anti-reflexive bang-constructions should in principle be able to take \(\circ \text{ ziji}\). However, due to their meaning reflexive scenarios are highly unlikely (since helping is typically an other-directed activity) and thus tend to be only marginally acceptable. Furthermore, as discussed in section 6.4.1.1 all ba-constructions are distributionally anti-reflexive because of the phonological properties of \(\circ\)-reflexives. \(\circ\)-reflexives cannot carry stress on their own and are thus unable to occur in PPs. In this respect, \(\circ\)-reflexives behave like the simple reflexive sig in Danish, see chapter 3 section 3.3.6 and chapter 5 section 5.2.1.5.

\(\text{\textsuperscript{30}}\) See chapter 3, section 3.3.2.6 for discussion of inalienable possession in Danish.
(53) a. 我梳頭。
wo shu tou.
I comb head
(lit.) ‘I comb my head’ = ‘I am combing (myself).’

b. 我恨頭。
wo hen tou.
I hate head
*i(i) ‘I hate my head’
ok (ii) ‘I hate heads’ / ‘I hate the head’ (i.e. somebody else’s head)

We conclude that the absence of neutral predicates of the English/Danish type (e.g. Peter
washes Ø/shaves Ø/ducks Ø/etc.) in Chinese (except for forced examples as (52A), which
probably involve deleted objects rather than Ø-reflexives) does not constitute a serious
problem for the present proposal since it is the formal properties of predicate-formation in
Chinese which are responsible for the absence of mono-syllabic neutral transitive verbal
predicates\(^{31}\). That is, it appears to be the case that neutral predicates (i.e. grooming verbs,
movement verbs, etc.) in Mandarin Chinese are characterized by the mandatory presence of
either cognate objects (e.g. xi-zao ‘wash-bath’) or inalienably possessed objects (e.g. shu-tou
‘comb-head’). Hence the absence of mono-syllabic neutral verbs of the type xi Ø ‘to wash
oneself’ can not be used as proof that Chinese does not have neutral predicates which take Ø-
reflexives. All we need to do is to classify predicates as anti-reflexive, neutral or inherently
reflexive depending on whether they allow DPs, intensified Ø-reflexives, and unintensified Ø-
reflexives in possessor position, see (54).

<table>
<thead>
<tr>
<th>Predicate type</th>
<th>Distribution:</th>
<th>Examples:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Anti-reflexive:</td>
<td>DP /Ø ziji</td>
<td>*/Ø</td>
</tr>
<tr>
<td>b. Neutral:</td>
<td>DP /Ø ziji</td>
<td>/Ø</td>
</tr>
<tr>
<td>c. Inherently reflexive:</td>
<td>*/DP /*Ø ziji</td>
<td>/Ø</td>
</tr>
</tbody>
</table>

The sentence in (55) illustrates the type of “anti-reflexive possessive predicate” referred to in
(54).

\(^{31}\) It would thus be interesting to test whether bi-morphemic neutral verbs of the tui-jian ‘recommend’ type can take Ø-reflexives.
(55)  a. 張三偷了李四的錢包。
Zhangsan tou-le Lisi de qian-bao.
Zhangsan steal-PERF Lisi DE money-wrap
‘Zhangsan stole Lisi’s wallet.’

b. 張三偷了 Ø 自己的錢包。
Zhangsan tou-le ziji de qian-bao.
Zhangsan steal-PERF self-self DE money-wrap
‘Zhangsan stole his own wallet.’

c. *張三偷了 Ø 錢包。
Zhangsan tou-le Ø qian-bao.
Zhangsan steal-PERF money-wrap
‘Zhangsan stole wallet.’

6.4.1.3 Inherently reflexive predicates

In chapters 3, 4 and 5 we discussed inherently reflexive expressions in Danish and English, see (56-7).

(56)  a. Peter skynder sig / *sig selv / *Hans.
Peter hurries REFL / REFL self / Hans
‘Peter is in a hurry.’

b. Peter tog en kniv med sig / *sig selv / *Hans.
Peter took a knife with REFL / REFL self / Hans
‘Peter took a knife with him.’

c. Peter dukker sig / *sig selv / *Hans.
Peter ducks REFL / *REFL self / *Hans.
‘Peter ducks Ø / *Ø himself / *Hans.’

(57)  a. Peter is out of his / *his own / *Hans’s mind.

b. Peter took a knife with him / *himself / *Hans.

c. Peter ducks Ø / *Ø himself / *Hans.

Notice that the intensified forms of the reflexives (i.e. sig selv/sin egen and Ø himself/his own) are never allowed with inherently reflexive predicates. This (surprising) behavior of himself can be explained by assuming that it is an intensifier. Thus the absence of himself in those construction can be seen as following from the contrastiveness condition on adnominal intensification (see (62) in chapter 2, section 2.2.3.2.2) which states that intensifiers can only occur in positions where contrast with other entities is possible. Our analysis therefore predicts that Chinese should not have any predicates/constructions which are semantically
inherently reflexive while still allowing \textit{ziji}. To the best of our knowledge this prediction seems to be true: Chinese does not (appear to) have any inherently reflexive expressions which allow \textit{ziji}. The predicate \textit{低頭} \textit{di-tou} ‘lower head/duck’, discussed above (see (50)), may be a potential candidate for an inherently reflexive predicate, see (58).

\begin{tabular}{llll}
(58) & a. & 張三 & 低 Ø 處 \\
& & Zhangsan, & di Ø tou. \\
& & Zhangsan & low head \\
& & ‘Zhangsan lowers his head/ducks.’ \\

b. & *張三 & 低 Ø 自己 的 處 \\
& & Zhangsan, & di Ø self-self de tou. \\
& & Zhangsan & lower self-self DE head \\

& c. & *張三 & 低 我的 處 \\
& & Zhangsan, & di wo de tou. \\
& & Zhangsan & lower I DE head \\
\end{tabular}

\subsection*{6.4.1.4 Predicate types: summary}

On the basis of the discussion in this section we conclude that Chinese data relating to the behavior of empty object positions and locally bound \textit{ziji} do not empirically falsify the proposals in (1), and (18) on which the present framework is based. While there is a great deal of data supporting the hypothesis that \textit{ziji} always has the same properties as intensifiers in other languages (e.g. Eng. \textit{himself}, and Dan. \textit{selv}) and thus should be consistently analyzed as an intensifier, conclusive evidence that Chinese has Ø-reflexives is harder to come by. Some evidence of a contrast between anti-reflexive, neutral and inherently reflexive predicates was found in the “possessive predicates” discussed in the previous sections, but, needless to say, we still need to specify more precisely what exactly Chinese Ø-reflexives are. This and other related questions will be taken up in the following sections.
6.4.2 LD-bound *ziji*: complex pronoun or complex reflexive?

As described in Huang and Liu (2001) (among others) local *ziji* and LD *ziji* differ from each other in important ways. In their terminology, local *ziji* is a reflexive anaphor whose distribution is determined by the syntactic principles of the binding theory. LD *ziji*, on the other hand, is a logophoric element which has to be bound by some kind of attitude operator and whose distribution thus fall under both syntactic AND pragmatic principles. While we agree with their account of the facts, we disagree with their analysis which is based on the assumption that the lexicon contains two entries for *ziji*: (i) *ziji₁* = a reflexive anaphor subject to principle A of the binding theory, and (ii) *ziji₂* = a logophoric element bound by attitude operator and susceptible to pragmatic factors. Instead of proposing two lexical entries for *ziji*, we propose that *ziji* is always an intensifier and that the observable differences between local and LD *ziji* are due to a difference between the phonetically unrealized elements that *ziji* is intensifying in the two cases. In the case of “local *ziji*”, the element *ziji* is intensifying a Ø-reflexive (e.g. *Zhangsan hen Ø ziji* ‘*Zhangsan hates Ø himself’), which falls under principle A of the binding theory. In contrast, we suggest that in the case of “LD *ziji*”, *ziji* is intensifying a phonetically unrealized pronominal [ta]32 (e.g. [ta] *ziji* ‘[him] himself’ (= Dan. *ham selv*)) which falls under principle B of the binding theory. See section 3.4 in chapter 3, and section 5.2.3 for discussion of intensified object pronouns in Danish and English. Intensified pronouns in Mandarin Chinese will also be taken up in section 6.6 below.

6.5 Intensifier analysis of local and LD *ta ziji*

In this section, the consequences of extending the intensifier-based analysis proposed here to local (section 6.5.1) and LD *ta ziji* (section 6.5.2) will be discussed.

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32 We follow the convention, introduced in chapter 5, to indicate phonetically unrealized material with square brackets. Instances of locally free *himself* in Modern English, are thus represented as *[him]* *himself*.
6.5.1 Locally bound *ta ziji*: complex pronoun or complex reflexive?

At first sight the fact that Chinese allow the complex form *ta ziji* to be locally bound may seem like a serious counterexample to the analysis proposed here, see (59b).

\[(59)\]
\[
a. \quad *Zhangsan, ai ta_i.
\]
\[
b. \quad ta_i ziji.
\]
\[
c. \quad \emptyset, ziji.
\]

Zhangsan love him/him self/self-self/self-self

‘Zhangsan loves himself.’

The simple unintensified pronoun *ta* ‘he/him’ in (59a) behaves as expected, i.e. it cannot be locally bound without violating principle B\(^{33}\). As shown in (60a,b), intensification of pronouns in Danish does not affect their binding properties, i.e. they remain pronouns subject to principle B whether they are intensified or not.

\[(60)\]
\[
a. \quad Peter, vasker *ham,.
\]
\[
b. \quad *ham, selv.
\]

Peter washes him/him self

The same applies to pronouns in Modern English, see (61a-b).

\[(61)\]
\[
a. \quad Peter, washes *him,.
\]
\[
b. \quad *him, himself.
\]
\[
c. \quad himself.
\]

If *ta ziji* were an intensified pronoun of the same type as Danish *ham selv* ‘him self’ then (59b) should be just as bad as (60b) and (61b). The fact that this is not the case indicates that *ta ziji* in (59b) is not an intensified pronoun. But if *ta ziji* in (59b) is not an adnominally intensified pronoun, then what exactly is it? Traditionally it has been analyzed as a complex reflexive which due to its status as an XP has to be locally bound, cf. Cole, Hermon & Sung (199?) following Pica (1987). Since this solution implicitly assumes that adding *ziji* to the pronominal *ta* changes the binding properties of the latter it cannot be adopted in the present framework which is based on the independence of binding and intensification. One option

\(^{33}\) Genitive constructions which appear to violate this generalization (that simple *ta* ‘he/him’ cannot be locally bound) are discussed in more detail in section 6.6.1.1.1 below.
consists in analyzing the occurrence of *ta ziji* in (59b) as a Φ-reflexive adnominally intensified by the complex intensifier *ta ziji*, see (62a) and (63a).

(62)  
\[ \text{Ø-reflexive + complex intensifier:} \quad \text{DP} \quad \text{(e.g. (63a))} \]
\[ / \quad \text{DP} \quad \text{ta ziji} \]
\[ \text{DP} \quad \text{Ø} \]

\[ \text{Ø-reflexive + simple intensifier:} \quad \text{DP} \quad \text{(e.g. (63b))} \]
\[ / \quad \text{DP} \quad \text{ziji} \]
\[ \text{DP} \quad \text{Ø} \]

(63)  
\[ a. \quad \text{Zhangsan, ai Ø, ta ziji.} \quad \text{(see (62a))} \]
\[ \text{Zhangsan loves REFL he self’self} \]
\[ ‘Zhangsan loves himself.’ \]

\[ b. \quad \text{Zhangsan, ai Ø, ziji.} \quad \text{(see (62b))} \]
\[ \text{Zhangsan loves REFL self’self} \]
\[ ‘Zhangsan loves himself’ \]

In other words we need to assume that Modern Chinese has both simple and complex intensifiers which can intensify Φ-reflexives, compare (62a) and (62b). As discussed in section 6.3.2 there is independent evidence supporting the existence of both simple and complex adnominal intensifiers in Mandarin Chinese.

6.5.2 LD-bound *ta ziji*: complex pronoun or complex reflexive?

In spite of what has often been claimed in the literature, the complex form *ta ziji*, which is composed of the third person pronoun *ta* ‘he/she/it’ + the adnominal intensifier *ziji* ‘self’, can be long-distance bound, see the following example from Huang (2000:96(2.169a))\(^{34}\), see (64)

(64)  
\[ \text{Xiaoming 1 shuo lei-sheng ba ta ziji 1 xiao le yi tiao.} \]
\[ \text{Xiaoming say thunder-sound BA 3SG self-self frighten PERF one jump} \]
\[ ‘Xiaoming said that the loud crash of thunder had given him a fright.’ \]

\(^{34}\) See also Pan (1998) for more such examples.
Such examples has sometimes been construed as evidence that complex reflexives can be LD-bound, contrary to Faltz’s (1985) generalization that LD reflexives are morphologically simplex. Notice, however, that one does not have to assume *ta ziji* ‘3SG self-self’ to be a complex reflexive in the first place. In the framework adopted here, it could also be considered an intensified pronoun on a par with Danish intensified pronouns like *ham selv* ‘him self’, etc. In others words, the apparent LD-binding of *ta ziji* follows from the pronominal character of *ta* ‘3SG’. See (65) which illustrates that the pronominal *ta* can be bound by the matrix subject *Xiaoming*.

(65) 小明說雷聲把他嚇了一跳。

*Xiaoming* say thunder-sound BA 3SG frighten PERF one jump

‘Xiaoming said that the loud crash of thunder had given him a fright.’

In summary, LD *ta ziji* is not a complex reflexive but rather a pronominal *ta* ‘he/him’ which has been intensified by adjunction of the adnominal intensifier *ziji* ‘self-self’, see (66b).

(66) a. *ta* + complex intensifier: 

```
      /
     / \ 
    DP  ta ziji  
   [ta]
```

(b) *ta* + simple intensifier: 

```
      /
     / \ 
    DP  ziji  
   [ta]
```

Just like with the pronominals in Danish (*ham* ‘him) and English (discussed in chapter 3 and chapter 5) adnominal intensification (e.g. *ham selv* ‘him self’) does not alter their binding properties, i.e. they still fall under principle B requiring them to be locally free.\(^{35}\)

\(^{35}\) Needless to say, the question why occurrences locally free *ta ziji* are so rare in Chinese compared with Danish *ham selv* ‘him self’ needs to be addressed. Due to space limitations, we leave this question for future research.
6.6 Intensified and unintensified pronouns in Mandarin Chinese

In this section we investigate the behavior of intensified and unintensified pronouns in Mandarin Chinese. According to the assumption that binding and intensification are independent of each other, we predict that intensification of pronouns should not interfere with the binding properties of the latter. As shown in chapters 3 and 5, this prediction seems to be borne out by the facts in both Danish and English. In the following we test to what extent this analysis can be extended to Chinese.

6.6.1 Simple/unintensified pronouns in Mandarin Chinese: Principle B

The sentences in (67-8) demonstrate the existence of principle B effects with third person personal pronouns in Chinese.

(67) a. Zhangsan, hen ta\_i/o. ziji\_i/o.
   Zhangsan hate him/self-self 'Zhangsan hates him/himself.'

b. Zhangsan i jiao Lisi k da ta\_i/k/o. ziji\_i/k/o.
   Zhangsan ask Lisi hit him/self-self 'Zhangsan asks Lisi to hit him/himself.'

The sentences in (67-8a) illustrate the fact that the pronominal ta ‘he/him’ must be locally free.

Now the question is whether intensification of pronouns affect their binding properties. The sentences in (69) seem to suggest that it does.

(69) a. Zhangsan, hen ta\_i/o ziji.
   'Zhangsan hates him/himself.'

   b. Zhangsan, jiao Lisi da ta\_i/k/o ziji.
   'Zhangsan asks Lisi hit him/himself.'

The complex form ta ziji ‘him self-self’ seem to follow the pattern of ziji in (60-61b).

Traditionally this has been taken as evidence that ta ziji is a complex reflexive which must be
locally bound. However, as discussed in sections 6.3 and 6.5.2 above several different analyses of *ta ziji* ‘him self-self’ are possible, see (70).

\[(70)\]

\[\begin{align*}
\text{a. Intensified pronoun:} & \quad \text{DP} \\
& \quad \text{DP} \quad \text{ziji} \\
& \quad \text{ta}
\end{align*}\]

\[\begin{align*}
\text{b. Intensified } \emptyset \text{-reflexive:} & \quad \text{DP} \quad (=69a,69b) \\
& \quad \text{DP} \quad \text{ta ziji} \\
& \quad \emptyset
\end{align*}\]

\[\begin{align*}
\text{c. Intensified pronoun:} & \quad \text{DP} \quad (=69b) \\
& \quad \text{DP} \quad \text{ta ziji} \\
& \quad \text{[ta]}
\end{align*}\]

Notice furthermore, that the sentence in (70b) illustrate LD-binding of *ta ziji*, see also discussion of (64-66).

### 6.6.1.1 Overlapping distribution of simple *ta* and *ziji/ta ziji*

The distribution of simple *ta* vs. *ziji/ta ziji* overlaps in two contexts: (i) possessive construction (section 6.6.1.1.1), and (ii) embedded subject position (section 6.6.1.1.2).

#### 6.6.1.1.1 Possessive constructions

The complementarity of simple pronominals (e.g. *ta* 他 ‘he/him’) and *ziji/ta ziji* breaks down in possessive constructions, see (71-2).

\[(71)\]

\[\begin{align*}
\text{a. } & \quad \text{Zhangsan, ai ta}^{\text{ui}} \quad \text{de gou.} \\
\text{b. } & \quad \text{ziji}^{\text{vi/0}} \\
\text{c. } & \quad \text{ta ziji}^{\text{vi/0}}
\end{align*}\]
The existence of two different possessives in Chinese, i.e. *ta* and *ziji*, has sometimes led to Chinese being compared to Danish which distinguishes between pronominal and reflexive possessives, see *hans* ‘his’ vs. *sin* ‘POSSREFL’ (73).

Notice, however that, unlike Chinese, the complementarity between pronominals and reflexives is maintained in Danish regardless of whether the intensifier *egen* ‘own’ is present or not. We therefore conclude that the Chinese system is closer to the English (or French) where both *his* and *his own* (Fr. *son* vs. *son propre*) can be locally or LD-bound, just like Chinese *ta* and *[ta] ziji*. 

### 6.6.1.1.2 Embedded subject pronominals

In Mandarin Chinese the subject of embedded clauses can be realized in three different ways: 

(i) a simple unintensified pronoun *ta* ‘he’ (74a), as an intensified pronoun *[ta] ziji* (74b), or as an a pronoun intensified by the complex intensifier *[ta] ta ziji* (74c).
As shown in (75-76) simple unintensified pronouns behave alike (i.e. obeying principle B) in both Chinese and English.

(75) Joan, believes that she_{i/z} will win.

(76) Joan 相信她自己會贏。

Joan, believes she_{i/z} will win.

‘Joan, believes that she_{i/z} will win.’

Since the simple pronoun does not display any surprising behavior we will focus our attention on the two types of intensified subject pronouns in Chinese, i.e. [ta] ziji and [ta] ta ziji. The examples in (77-8) illustrate both [ta] ziji and [ta] ta ziji behave like their English counterpart she herself in out-of-the-blue contexts.

(77) Joan, believes that she_{i/z} herself will win.

(78) a. Joan 相信她自己會贏。

Joan, xiang-xin [ta] ta ziji i/z hui ying.

Joan, believes she_{i/z} will win.

‘Joan, believes that she_{i/z} will win.’

b. *[ta] ta ziji

c. [ta] ziji

d. [ta] ziji

Joan, believes she herself/herself will win.

‘Joan, believes that she herself will win.’

In his (1991) article, McKay showed that, given the right context, intensified pronouns can be bound by an extra-sentential antecedent, see (79)

(79) Ann, wants to interview the winner. Joan_{k} believes that she_{i/k} herself will win.

As shown in (80) the judgments of the direct translations of (79) differ from those of their English counterparts.

(80) a. *Ann, xiang yao fang-wen de-jiang-zhe. Joan_{k} xiang-xin ta ziji i/z hui ying.

b. Ann, xiang yao fang-wen de-jiang-zhe. Joan_{k} xiang-xin ta ziji k hui ying.

c. *Ann, xiang yao fang-wen de-jiang-zhe. Joan_{k} xiang-xin ziji i/z hui ying.

d. Ann, xiang yao fang-wen de-jiang-zhe. Joan_{k} xiang-xin ziji k hui ying.

Ann think want interview receive-prize-NOM. Joan believe self-self will win

‘Ann, wants to interview the winner. Joan believes that she_{i/k} herself will win.’
It thus appears to be the case that \( [ta] \) ziji and \( [ta] \) ta ziji are more likely to be bound the closest subject than intensified pronouns in English. However, we do not want to rule out the possibility that Chinese intensified pronouns may be bound extra-sententially. As shown by (81-2) and (83-4) the intensified pronoun \( [ta] \) ta ziji may indeed have an extra-sentential antecedent.

(81)  \textbf{How will she herself do on the exam?}

(82)  \begin{enumerate}
  \item \( Ta \ ziji \) kao-shi hui kao-de zen-me yang?  
  \item \( (?)?Ziji \) kao-shi hui kao-de zen-me yang?  
\end{enumerate}

(he) self-self exam will exam DE how type

‘How will she herself do on the exam.’

(83)  Mary, has been worrying about the grades of her friends. How will she herself do on the exam?

(84)  Mary, zui-jin hen dan-xin ta de peng-you de cheng-ji.  
Mary recently very worry she DE friend(s) DE grade(s)

‘Mary has been worrying about the grades of her friends.’

(85)  Susan, told everyone who knew Mary, that she, herself was pregnant.
The contrast between (86b) and (88b) is entirely due to the richer context of (88). This kind of data (which shows that intensification of subject pronouns (e.g. [ta] ziji) is subject to semantic/pragmatic factors) is evidence that intensification and binding of subject pronouns are independent in similar ways in Mandarin as in Danish and English. Note however, that ziji (which we analyze as an intensified pronoun [ta] ziji) behaves in an unexpected way. As mentioned above, at this point we have nothing to say about sentences such as (86f) and (88f) and simply leave the matter for further research.

6.7 Conclusion

In this chapter we have outlined an analysis of Mandarin Chinese based on the proposal that binding and intensification are mutually independent modules of the grammar. While a number of problems remains we hope to have showed that this approach is at least a viable
option which deserves to be explored in greater detail. Among the evidence adduced in its favor were the fact that *ziji* has more in common with adnominal intensifiers in other languages than with true reflexives, see (4-5) repeated here as (89-90).

(89) Typological survey of reflexive and non-reflexive uses of reflexive elements:

<table>
<thead>
<tr>
<th></th>
<th>(i) Chinese</th>
<th>(ii) English</th>
<th>(iii) French</th>
<th>(iv) German</th>
<th>(v) Danish</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. reflexive</td>
<td>ziji</td>
<td>himself</td>
<td>se/soi</td>
<td>sich</td>
<td>sig</td>
</tr>
<tr>
<td>b. reciprocal</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-s</td>
</tr>
<tr>
<td>c. middle</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-</td>
</tr>
<tr>
<td>d. passive</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-s</td>
</tr>
<tr>
<td>e. deponent verbs</td>
<td>-</td>
<td>-</td>
<td>se</td>
<td>sich</td>
<td>-s/sig</td>
</tr>
<tr>
<td>f. intensifier</td>
<td>ziji</td>
<td>himself</td>
<td>(lui-)-même</td>
<td>selbst</td>
<td>selv</td>
</tr>
</tbody>
</table>

(90) Typological survey of different uses of adnominal intensifiers:

<table>
<thead>
<tr>
<th></th>
<th>Chinese</th>
<th>English</th>
<th>French</th>
<th>Danish</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Adnominal intensifier</td>
<td>guo-wang ziji</td>
<td>the king himself</td>
<td>le roi (lui-)-même</td>
<td>kongen selv</td>
</tr>
<tr>
<td>b. Complex reflexive</td>
<td>Ø ziji</td>
<td>Ø himself</td>
<td>soi-même/lui-même</td>
<td>sig selv</td>
</tr>
<tr>
<td>c. Doppelgänger-marker</td>
<td>Ø ziji</td>
<td>Ø himself</td>
<td>soi-même</td>
<td>sig selv</td>
</tr>
<tr>
<td>d. Intensified pronoun</td>
<td>[ta] (ta) ziji</td>
<td>[him] himself</td>
<td>[lui] lui-même</td>
<td>ham selv</td>
</tr>
<tr>
<td>e. Exclusive adv. inten.</td>
<td>ziji</td>
<td>himself</td>
<td>lui-même</td>
<td>selv</td>
</tr>
</tbody>
</table>

The main advantage of the present proposal is that it enables a unified account all uses of the intensifier element *ziji* ‘self-self’. In contrast, most existing analyses of Chinese are forced to assume *ziji* to be lexically ambiguous between (i) a simple reflexive anaphor, (ii) an adnominal intensifier, and (iii) a locally free logophor.