A more special use of the third person singular pronoun in Shanghainese

Jialei Zhu
Shanghai International Studies University

This paper investigates the syntax and semantics of the third person singular pronoun *hi⁶* in Shanghainese in its non-referential use. Evidence from its phonological dependence and syntactic integration with the preceding host verb is presented to show that the non-referential *hi⁶* is a clitic. It is further observed that this use of *hi⁶* requires licensing from the [+subjunctive] feature, echoing Qian (2004) and Jin (2016). However, my analysis diverges from theirs in treating the *hi⁶* in question as an expletive licensed by the [+subjunctive] feature, rather than a subjunctive marker itself on grounds that it is not obligatory in a subjunctive sentence and that the subjunctivity must always be encoded by other elements in the sentence. *hi⁶* in this use serves as an emphatic, strengthening the effect of deontic or imperative force in subjunctive contexts. Furthermore, it is shown that the licensing must obey a locality condition, whereby the expletive *hi⁶* must be licensed by a c-commanding licenser in its local domain. From the perspective of grammaticalization, I propose that *hi⁶* is going through an intermediate stage of becoming a purely modal functional marker. A final stage of this "upward" grammaticalization can be found in the expletive use of the third person pronoun *keoi* in Cantonese, which has become a more grammaticalized marker that has scope over the sentence. It is pointed out that the development of the expletive pronoun suggests that being at the right-periphery is a crucial factor in motivating and facilitating grammaticalization in Chinese. Last, a comparison between the non-referential *hi⁶* and the Mandarin non-referential third person pronoun *ta* in the V-*ta-ge*-NP/AP construction is presented, showing that both cases manifest interactions between VP-internal projections and higher functional categories.

Keywords: expletive, mood/modal, clitic, locality condition, grammaticalization

1.   Introduction

The Shanghainese third person singular pronoun *hi⁶* has a number of uses, as exemplified in Examples (1) through (4).

Deictic use

(1) a. *伊　　辣海　上海。*
      hi⁶　　laʔ⁸he⁵ zaŋ⁶he⁵.[1]
      he/she in　　　Shanghai
      'He/She is in Shanghai.'

    b. *我 有　只　狗，伊 老　可愛 個。*
      ŋu⁶ hiɤ⁶　tsaʔ⁷ kɤ⁵,　hi⁶ lɔ⁶　ku⁵e⁵　heʔ⁸.
      I　have CLF dog　it　very lovely ASS
      'I have a dog. It is very lovely.'

Resumptive use

(2) a. *小王，　我 剛剛　　碰到　　　伊。*
      ɕiɔ⁵huaŋ⁶,　ŋu⁶ kaŋ¹kaŋ¹ baŋ⁶-tɔ⁵　　hi⁶.
      Xiaowang, I　just now bump-arrive him
      'Xiaowang, I bumped into him just now.'

    b. *掰只　檯子，我 剛剛　　搬脫　　　(*伊)。*
      gəʔ⁸-tsaʔ⁷ de⁶tsɿ⁵, ŋu⁶ kaŋ¹kaŋ¹ pø¹-tʰəʔ⁷　　(*hi⁶).
      this-CLF table　I　just now move-ASP$_{inn}$ it
      'This table, I moved it away just now.'

D-pronoun use

(3) a. *儂 拿 迭眼　物事　摜脫　　　　伊。*
      noŋ⁶ ne¹ dieʔ⁸-ŋe⁶ maʔ⁸zɿ⁶ gue⁶-tʰeʔ⁷　　hi⁶.
      you BA this-CLF thing　throw-ASP$_{inn}$ it
      'Throw these things away!'　　　　　　　　　　　　　　(Xu 1999: 6)

    b. *迭眼　　物事，儂 拿 伊 摜脫。*
      dieʔ⁸-ŋe⁶　maʔ⁸zɿ⁶, noŋ⁶ ne¹ hi⁶ gue⁶-tʰəʔ⁷.
      this-CLF$_{PL}$ thing　you BA it　throw-ASP$_{inn}$
      'These things, you throw them away!'

    c. *明朝　　開會　儂 拿 掰椿　事體／ *伊 通知　　下。*
      miŋ⁶tsɔ¹　kʰe¹hue⁶ noŋ⁶ ne¹ gəʔ⁸-tsaŋ zɿ⁶tʰi⁵/ *hi⁶ tʰoŋ¹tsɿ¹　ɕia⁵.
      tomorrow meeting you BA this-CLF thing　it　announce CLF
      'That we shall hold a meeting tomorrow, announce it!'

Non-referential/expletive use

(4) a. 大學　勿　讀　就　工作／搿椿　　事體，儂　想　也　朆
da⁶hoʔ⁸ vəʔ⁷ doʔ⁸ dʑiɤ⁶ koŋ¹tso?⁷/geʔ⁸-tsaŋ¹ zʅ⁶tʰi⁵, noŋ⁶ ɕiaŋ⁵ ha⁶ fiɔ⁵
college NEG read then work/this-CLF   thing you think even NEG
去　想　伊。
tɕʰi⁵ ɕiaŋ⁵ hi⁶.
go   think it
'Going to work without a college degree/This thing, don't you even think about it!'

  b. 身體　勿　適宜　　就　多　睏睏　　伊。
səŋ¹tʰi⁵ vəʔ⁷ saʔ⁷i⁵   dʑiɤ⁶ tu¹   kʰuəŋ⁵-kʰuəŋ⁵ hi⁶.
body NEG comfortable then more sleep-RED   it
'If you don't feel well, you should get more sleep.'

The most common use of *hi⁶* is the deictic use. As shown in (1), it refers to an object in the preceding discourse. In (2), it is used as a resumptive pronoun, referring back to a topic NP. Like its Mandarin counterpart *ta* (Li & Thompson 1981), when used referentially, *hi⁶* primarily refers to animate entities such as persons, animals, or personified objects; it sounds unnatural when referring to an inanimate object, as shown in (2b). In (3a) and (3b), the post-verbal and the post-*ne¹* (counterpart to Mandarin disposal marker *ba*) *hi⁶* has a plural and inanimate object as its antecedent, on a par with the Mandarin third person singular pronoun *ta* (Zhu 1982: 82). They display features of a D-pronoun (<D> standing for 'disposed-of'), which is usually used anaphorically in disposal structures. The latter differs from the more general uses of *hi⁶* in being restricted to irrealis, telic, agentive, and disposal events (see Xu 1999 and §2 below). Although it need not agree with its antecedent in number and can refer to inanimate objects, a D-pronoun seems to be referential because it is difficult to refer to a sentential antecedent, as shown in (3c). Thus, the uses of *hi⁶* presented in (1) through (3) can be categorized as *hi⁶*s referential use. In addition, *hi⁶* has a more special use, that is, the expletive use, as illustrated in (4). In (4a), *hi⁶* seems to be compatible with a sentential antecedent or an abstract NP, differing from all three referential uses of *hi⁶*. (4b) shows that *hi⁶* can even follow an intransitive verb and does not have an antecedent or anything in the context to refer to.² Thus, it meets Postal &

---

2. In fact, in his paper, Xu (1999) also mentions as a side that this use is on a par with expletive *ta* in Mandarin sentence such as *he ta yi-bei* (lit.: 'drink it one-cup', 'drink a cup up'). As the pronoun in this construction has neither an antecedent nor a referent, it is usually called a 'dummy', 'empty', or 'expletive' pronoun in literature (see Chao 1968; Lü 1985; Iljic 1987; Dai 1992; Yuan 2003; Lin & Zhang 2006; Yeh 2006; Wu & Matthews 2010; Su 2012; Zhang 2005, 2017 and references therein). A detailed comparison will be presented in §5.3.

Pullum's (1988: 636) criteria for expletives: (a) morphologically identical to a pro-form, (b) non-referential, and (c) devoid of any but a vacuous semantic role.

Expletive third person singular pronouns are not uncommon in Chinese languages (see Matthews & Yip 1994; Man 1998; Gan 2011; Jin 2016; Lin & Li 2019); however, in-depth syntactic and semantic studies are lacking. Jin (2016) is a pioneering study on the Shanghainese expletive hi^6. He proposes that this hi^6 is a subjunctive marker in Shanghainese, on the basis of the observation that the contexts in which the expletive hi^6 can appear share the feature of subjunctive.[3] Similarly, Qian (2004) suggests that subjunctive is grammaticalized in Shanghainese and is marked by the post-verbal hi^6. However, their analysis does not distinguish the expletive use from the D-pronoun use (the two share the feature of subjunctivity), and hence fails to capture some behaviors of the expletive hi^6. One characteristic is that the expletive hi^6 is incompatible with relative clauses unless embedded under a modal verb, which is not observed in other uses of hi^6. This is illustrated in (5).

(5) a. *老伯伯　　坐坐　(*伊) 個 地方*
      lɔ⁶paʔ⁷paʔ⁷ zu⁶-zu⁶ (*hi⁶) gəʔ⁸ di⁶faŋ¹
      old man　sit-RED　it　DE　place
      'a place where the old man can take a seat'
  b. *老伯伯　　好／想　　坐坐　伊 個 地方*
      lɔ⁶paʔ⁷paʔ⁷ hɔ⁵/ɕiaŋ⁵　zu⁶-zu⁶ hi⁶ gəʔ⁸ di⁶faŋ¹
      old man　　MOD/want sit-RED it　DE　place
      'a place where the old man can/want to take a seat'

Therefore, a distinction between the D-pronoun use of hi^6 (henceforth, $hi^6{}_1$) and its expletive use (henceforth, $hi^6{}_2$) needs to be made and a finer-grained description of $hi^6{}_2$ is necessary.

The purpose of this paper is two-fold: first, I shall provide a detailed description of syntactic distributions of $hi^6{}_2$, which has been lacking in the literature; second, I shall examine semantic restrictions on its use, in the hope of shedding light on the motivation of such use and its implication on grammaticalization. The paper is organized as follows: §2 identifies the expletive/non-referential use of Shanghainese third person singular pronoun by distinguishing it from the Shanghainese D-pronoun $hi^6{}_1$ and the Mandarin D-pronoun *ta*. The purpose is to account for its distinctive features and the dialectal variations between Mandarin

---

3. The terms "irrealis/realis" and "subjunctive/indicative" are sometimes used alternatively in this paper, except when the difference is indicated, but when used as a grammatical feature, we tend to avoid the term "irrealis/realis" as it is too broad a term to be useful in defining a grammatical function (see Bybee 1998).

and Shanghainese with respect to the use of D-pronoun noted by Xu (1999). §3 shows that morpho-syntactically hi^6_2 is a clitic. §4 argues that the expletive hi^6_2 does not itself mark subjunctive; instead, the subjunctive meaning comes from the context, which must bear the [+subjunctive] feature. Further, the relation between the licenser (i.e. the [+subjunctive] feature bearer) and hi^6_2 is observed in terms of a locality condition, based on which its syntactic derivation will be presented. §5 considers the grammaticalization pattern of hi^6_2 in terms of generative grammar. Data from other dialects (particularly Cantonese) will be used to demonstrate different development stages of the expletive third person singular pronoun. I shall also discuss the non-referential use of Mandarin *ta* in the V-*ta-ge*-NP/NP construction, with a comparison with hi^6_2, and present how they reflect interactions between the VP-internal domain and the higher functional domain. §6 is the conclusion.

2.   Distinguishing hi^6_2 from D-pronouns

In this section, I shall compare hi^6_2 and D-pronouns (hi^6_1) with respect to their syntactic and semantic properties. The two uses differ in at least three respects:

2.1   Syntactic position of hi^6_2

First, hi^6_2 is syntactically restricted to the VP-final position, while hi^6_1 has wider distributions. In a non-VP-final position, hi^6 can only function either as a fully specified pronoun or as a D-pronoun, but never as an expletive. As the two uses of hi^6 are identical in form, I shall resort to their compatibility with a pronominal antecedent to distinguish between them. Specifically, D-pronouns cannot take a pronominal antecedent (Xu & Shao 1998: 80) whereas hi^6_2, as an expletive pronoun, is compatible with any type of nominal since it has no interaction with any nominal in the construction, unlike the pronoun hi^6, which can only have a non-pronoun antecedent. With this in mind, let us take (6) for example. In (6a), hi^6 follows ne^1, and in (6b), it is sandwiched between the verb and the directional complement. Neither of the two hi^6s can take a pronoun as their antecedent, which means that the two non-VP-final positions are where only hi^6_1 but not hi^6_2 can occur.

(6) a. *掰眼   人／*伊拉 我 要 拿 伊 趕出去。*
         gəʔ⁸-ŋe⁶   ȵiŋ⁶/*hi⁶-la⁰ ŋu⁶ iɔ⁵   ne¹ hi⁶ kø⁵-tsʰaʔ⁷tɕʰi⁵.
         this-CLF_PL person/they I   will BA it   drive-out
         'These men, I shall drive them out.'

b. *我 要 拿 搿眼   人／*伊拉 趕   伊 出去。*
ŋu⁶ iɔ⁵ ne¹ gəʔ⁸-ŋe⁶   ŋiŋ⁶/*hi⁶-la⁰ kø⁵   hi⁶ tsʰaʔ⁷tɕʰi⁵i.
I   will BA this-CLF$_{PL}$ person/they drive it   out
'I will drive these men out.'

By contrast, the VP-final *hi⁶* in (7) is compatible with either a nominal antecedent or a pronominal antecedent, which indicates that only the VP-final *hi⁶* can be identified as an expletive.

(7) *搿眼   人／伊拉 我 要 解決脱   伊。*
gəʔ⁸-ŋe⁶   ŋiŋ⁶/*hi⁶-la⁰ ŋu⁶ iɔ⁵   tɕia⁵tɕyəʔ⁷-tʰəʔ⁷ hi⁶
this-CLF$_{PL}$ person/they I   will solve-ASP$_{inn}$ it
'These men / Them, I will get rid of.'

2.2 Antecedent

As mentioned in the introduction, a D-pronoun is insensitive to the number and the animacy of its antecedent (Xu 1999). In this respect, *hi⁶*$_2$ takes a further step in that it does not need an antecedent, as shown in (8), where the preceding verbs are intransitive.

(8) a. *腳   勿 好，覅 去 多   走 伊。*
tɕiaʔ⁷ vəʔ⁸ hɔ⁵, fiɔ⁵ tɕʰi⁵ tu¹   tsɤ⁵ hi⁶.
foot NEG well NEG go   much walk it
'If your feet hurt, do not walk too much.'

b. *身體 勿 適宜   就 多 睏睏   伊。*
səŋ¹tʰi⁵ vəʔ⁷ saʔ⁷i⁵   dʑiɤ⁶ tu¹   kʰuəŋ⁵-kʰuəŋ⁵ hi⁶.
body NEG comfortable then more sleep-RED   it
'If you don't feel well, you should get more sleep.'

The above observations bring home the point that *hi⁶* in this particular use does not refer and thus does not require an antecedent.

Following this line, the dialectal variation concerning A-bound D-pronouns noted by Xu (1999) can be explained. As shown in (9), the Mandarin D-pronoun *ta* cannot be A-bound in a passive sentence while the Shanghainese D-pronoun *hi⁶* can.

(9)   a.   *這些　東西，會　被　我　扔　　　了　他。　　　　　　(MC)
　　　　　*zhe-xie dongxi$_i$, hui bei   wo reng   le   ta$_i$.
　　　　　these   thing   will PASS I   throw-away ASP it

　　　b.   埃點　　物事　會得　　撥　我　丟脫　　　　伊。　　　　(SH)
　　　　　e^5-ti^5　$ma?^8z\text{ı}^6$ hue^6-$tə?^7$ $pə?^7$　ηu^6 $to?^7$-$t^hə?^7$　fii^6.
　　　　　that-CLF thing   will   PASS I   throw-ASP$_{inn}$ it
　　　　　'Those things will be thrown away by me.'

Example (9a) is ruled out by Binding Condition B (Chomsky 1981), which states that a pronoun cannot be bound in its binding domain, i.e. the smallest clause dominating it. On the contrary, the Shanghainese counterpart (9b) is grammatical. The fact that the fii^6 in question is immune to Binding Condition B follows as there is no coindexation relation in passive sentences–the pronoun fii^6_2 is simply unindexed because it is an expletive.[4] In other words, the different behaviors of Shanghainese fii^6 and Mandarin ta in passive sentences is not a case of dialectal variation of the use of D-pronouns, as Xu (1999) suggests; rather, the fii^6 here is an expletive.

2.3   Semantic constraints

As the D-pronoun use of the third person singular pronoun is particularly manifested in disposal sentences (see Chan 1985; Matthews & Yip 1994; Man 1998; Xu 1999; Yuan 2003; Gan 2011; Lin & Li 2019), it has been pointed out by Xu (1999)

---

4.   There is a possibility that the contrast may be ascribed to the different syntactic structures of passive sentences in the two languages. Suppose (9b) involves a bi-clausal structure and an operator movement in the sense of Huang (1999) (e.g. (i)), while (9a) involves only a mono-clausal structure, the grammaticality of the former can be explained in the way that the subject is outside the clausal domain of the pronoun, hence no violation of Binding Condition B.

(i)   [$_{IP}$ e^5-ti^5 $ma?^8z\text{ı}^6$ $_i$ [$_{I'}$ $fiue^6$-$tə?^7$ [$_V$ $pə?^7$ [$_{IP}$ OP$_i$ [$_{IP}$ ηu^6 ... [$_{V'}$ $to?^7$-$t^hə?^7$ fii^6_i]]]]]]
　　　that-CLF$_{PL}$ thing   will   PASS   I   throw-ASP$_{inn}$ it

However, this explanation is *ad hoc* since there is no independent evidence for the bi-clausal structure for Shanghainese passives; it also fails to predict the ungrammaticality of the passive sentence in (ii), which only differs from (9b) in mood: (9b) expresses the irrealis/subjunctive mood while (ii) expresses the realis/indicative mood.

(ii)   *埃點　　物事　撥　我　丟脫　　　伊　了。　　　　　　(SH: **realis**)
　　　*e^5-ti^5 $ma?^8z\text{ı}^6$ $pə?^7$ ηu^6 $to?^7$-$t^hə?^7$ fii^6 $lə?^8$.
　　　that-CLF$_{PL}$ thing PASS I   throw-ASP$_{inn}$ it ASP
　　　'Those things have been thrown away by me.'

(ii) shows that fii^6, when used in a realis sentence, is also subject to Binding Condition B. Therefore, it is more than likely that the different properties between ta and fii^6 give rise to the contrast shown in (9).

that the verb that takes a D-pronoun as its complement must bear the following four semantic features: telicity, disposal, irrealis, and agentivity. However, the expletive hi^6_2 imposes different semantic requirements on the preceding verbs: it can occur in atelic and non-disposal events, as shown in (10) and (11) respectively.[5]

(10) a. *這些   蘋果，你 吃掉／*吃吃   他 吧！*   (MC)
          zhe-xie   pingguo, ni chi-diao/*chi-chi ta ba!
          this-CLF$_{PL}$ apple   you eat-RES/eat-RED it SFP
          'These apples, you eat them all!' / 'These apples, you eat them!'

      b. *搿眼   蘋果，儂 吃脫／吃吃   伊 呀！*   (SH)
          gəʔ⁸-ŋe⁶ biŋ⁶ku⁵, noŋ⁶ tɕʰiəʔ⁷-tʰəʔ⁷/tɕʰiəʔ⁷-tɕʰiəʔ⁷ hi⁶ hia⁰!
          this-CLF$_{PL}$ apple   you eat-RES/eat-RED   it SFP
          'These apples, you eat them all!' / 'These apples, you eat them!'

(11) a. **這座   山頂   我們   一定 要 爬爬   他。*   (MC)
          *zhe-zuo shanding women yiding yao pa-pa   ta.
          this-CLF hilltop   we   must will climb-RED it
          'This hilltop we must climb up to.'

      b. *搿個   幾座   山，   阿拉 一定 要 爬爬   伊。*   (SH)
          gəʔ⁸-gəʔ⁸ tɕi⁵-zu⁶ se¹,   aʔla⁶ iəʔ⁷diŋ⁶ iɔ⁵ bu⁶-bu⁶ hi⁶.
          this-CLF how-CLF mountain we   must   will climb-RED it
          'These hilltops we must climb up to.'

The D-pronoun *ta* in (10a) is compatible with the resultative verb *chi-diao* 'eat up' but not with the reduplicated verb *chi-chi* 'eat-RED' because the latter denotes an atelic event. By contrast, the Shanghainese version of the sentence is grammatical with either predicate even though the reduplicated verb is also atelic.[6] Similarly,

---

5. Here, I shall only compare hi^6_2 with the Mandarin D-pronoun *ta*, based on the assumption that D-pronouns in Mandarin and in Shanghainese share the basic properties except for some minor dialectal variations in acceptability of using D-pronouns in certain contexts such as sub-topic sentences (due to independent language-specific properties such as more (sub)topic prominence in Shanghainese) (Xu 1999). The reason I have to take Mandarin *ta* instead of hi^6_1 as the comparative object is that hi^6_1 and hi^6_2 can be demarcated only in *ne*-construction (i.e. disposal construction) or with a resultant/directional complement (see §2.1), which requires the event be telic and disposal, leaving no way to determine whether the pronoun is hi^6_1 or hi^6_2 in other types of context.

6. That the Mandarin and the Shanghainese reduplicated verb in the examples are both atelic is evidenced by their incompatibility with time-frame phrases such as *zai…nei* 'within…'.

the contrast between (11a) and (11b) suggests that the occurrence of hi^6_2 does not require the verb to describe a "disposed-of" event, unlike Mandarin *ta*.

On the other hand, hi^6_2 and D-pronouns are both subject to two semantic requirements, namely, irrealis and volition, as shown in (12), where the event is realized, and in (13), where the event is non-volitional.

(12) a. *那些 東西 我們 已經 吃 了 他。
　　　naxie dongxi women yijing chi le ta.
　　　those things we 　　already eat ASP it
　　　'Those things, we already ate it.' 　　　　　　　　(Xu 1999: 13)

　　 b. *埃眼 物事, 阿拉 已經 吃脫 伊 了。
　　　e⁵-ŋe⁶ maʔ⁸zɿ⁶, aʔ³la⁶ hi⁶ʨiŋ⁵ ʨʰiəʔ⁷-tʰəʔ⁷ hi⁶ ləʔ⁸.
　　　those things we 　　already eat-ASP$_{inn}$ it SPF
　　　'Those things, we already ate it.'

(13) a. *颱風 會 把 這棟 房子 吹倒 他。
　　　taifeng hui ba zhe-dong fangzi chui-dao ta.
　　　typhoon will BA this-CLF house blow-down it
　　　'A typhoon may blow down the house.'

　　 b. *颱風 會得 拿 迭棟 房子 吹脫 伊。
　　　deⁿfoŋ¹ hue⁶-təʔ⁷ ne¹ diəʔ⁸-doŋ⁶ vaŋ⁶ʦɿ⁵ ʦʰɿ¹-tʰəʔ⁷ hi⁶.
　　　typhoon will 　　BA this-CLF house blow-ASP$_{inn}$ it
　　　'The typhoon may blow down the house.' 　　　(Xu 1999: 15)

The incompatibility of hi^6_2 with non-volitional predicates is also manifested by the fact that it cannot follow unaccusative verbs, as shown in (14).

(14) *死脫 伊!
　　ɕi⁵-tʰəʔ⁷ hi⁶!
　　die-ASP$_{inn}$ it
　　'To die!'

The above comparisons clearly demonstrate that hi^6_2 is different from hi^6_1 with regard to its VP-final position, its absence of an antecedent and the semantic conditions imposed on the predicates. They also provide evidence for a new category

---

(i) a. *一 小時 之內 吃吃 這頓 飯! 　　　　　　　　(MC)
　　　yi xiaoshi zhinei chi-chi zhe-dun fan!
　　　one hour within eat-RED this-CLF meal

　　 b. *一個 鐘頭 裡向 吃吃 搿頓 飯! 　　　　　　(SH)
　　　iəʔ⁷-gəʔ⁸ ʦoŋ¹dɤ⁶ li⁶ɕiaŋ¹ ʨʰiəʔ⁷-ʨʰiəʔ⁷ gəʔ⁸-təŋ⁵ ve⁶!
　　　one-CLF hour within eat-RED this-CLF meal
　　　'Try to finish the meal in one hour!'

of pronouns in Shanghainese: the expletive use of the third person singular pronoun. I summarize the syntactic and semantic distinctions between the two uses of the third person singular pronoun in Table 1, including the following three features: syntactic positions, referentiality, and the semantics of the selecting verb.

Table 1. Distinctions between D-pronoun and hi^6_2

Features	D-pronoun hi^6_1	hi^6_2
syntactic position	postverbal; post-BA; between V and complement	postverbal (VP-final)
referentiality	[+antecedent]; [−animacy]; [−number]	[−antecedent]; [−animate]; [−number]
verb semantics	[+telic]; [+disposal]; [+irrealis][a]; [+agentive]	[−telic]; [−disposal]; [+irrealis]; [+agentive]

a. To cluster an [+irrealis] feature with features of "verb semantics" is somewhat inaccurate because irrealis is usually correlated with mood or modality. Nevertheless, for ease of comparison with Xu (1999), I leave the categorization as it is.

3.   Non-referential hi^6_2 as a clitic

In this section, I shall present further syntactic behaviors of hi^6_2 with special reference to its close relation with the preceding verb. I shall propose a clitic analysis for these behaviors.[7]

---

7. The difficulty in teasing clitics and affixes apart is not uncommon cross-linguistically and much attention has been drawn to the issue as to whether clitics should be categorized independently of affixes or should be taken as a subtype of affixes, e.g. phrasal affixes. For the heterogeneous nature of clitics as a linguistic category and indeterminacy of the Zwicky-criteria, interested readers are referred to van Riemsdijk (1999: 7–12), who intends to treat clitics as phrasal affixes.

Another major trend within the framework of generative grammar in the study of clitics is brought forth by Kayne (1975). Based on the assumption that "clitic + verb" has some special syntactic status rather than being a normal V-O combination, he proposed several criteria for identifying the clitic status, which involve fixed distribution, dependence on the host verb, resistance of modification, conjunction, and stress. Though hi^6_2 also exhibits many of these features, I shall not adopt Kayne's criteria, because in his work, clitics are essentially treated as a particular class of pronominal elements, most commonly the Romance pronouns, and are

3.1   Phonological dependence

Tone sandhi domain distinguishes hi^6_2 from the referential uses of hi^6: a pronominal object is not in the tone sandhi domain when in focus whereas hi^6_2 must form a sandhi domain with the preceding verb. For example, hi^6 in (15a) is ambiguous between the referential reading and the non-referential reading, while in (15b), when being focused, as indicated by the emphasis mark, hi^6 can only be interpreted as a referential pronoun.

(15)   a.   *儂   看看   伊   呀 !*
         noŋ⁶ kʰø⁵-kʰø⁵ hi⁶   hia⁰!
         you look-RED him/it SFP
         'You look at him! / You take a look!'

     b.   *儂   看看   伊. 呀 !*
         noŋ⁶ kʰø⁵-kʰø⁵ hi⁶ hia⁰!
         you look-RED him SFP
         'You look at him!'

3.2   Host

hi^6_2 is more tightly bound with the preceding V than any other post-verbal argument in two respects. First, hi^6_2 must be adjacent to the preceding verb, a restriction not expected of V-O combinations. As illustrated in (16), durational phrases can appear between the verb and the object, and when the object is a pronoun, it can never be interpreted as an expletive.

(16)   a.   *去 看 脫   歇   書。*
         tɕʰi⁵ kʰø⁵ tʰəʔ⁷ ɕiəʔ⁷   sɿ¹.
         go   read ASP$_{inn}$ sometime book
         'Go read a book for a while.'

---

analyzed as an instance of head movement (in order to account for their complementary distribution with the corresponding full NP). Shanghainese hi^6_2, probably along with other non-referential pronominal clitics in Chinese and its dialects, however, are categorically different from Romance pronominal clitics in the sense that it is not obligatory and does not correspond to any full NPs. The other major difference is that no clitic-climbing is involved in the derivation of Shanghainese hi^6_2, as opposed to Romance clitics. Therefore, I take a more theory-neutral and descriptive stance in identifying the status of hi^6_2, and do not attempt to compare it with other "canonical" pronominal clitics in Romance languages.

b. 去　看　脫　歇　　　伊。
　　 tc^hi^5 $k^hø^5$ $t^hə?^7$ $ɕiə?^7$　　 hi^6.
　　 go　read ASP$_{inn}$ sometime him(her)/*it
　　 i.　'Go see him/her for a while.'
　　 ii.　'*Go see (something) for a while.'

The close relation between V and hi^6_2 is further shown in the inaccessibility of syntactic operations, such as deletion and movement, to the subpart of V-hi^6_2. Take a look at (17a), where the two pronouns are hi^6_2 as their preceding verbs are both intransitive. It shows that when two sequences of V-hi^6_2 are conjoined, neither of the hi^6_2's can be deleted without the other also being deleted. In other words, since hi^6_2 is not obligatory, they can be omitted at the same time in (17a), but it is ungrammatical to drop only one with the other one left behind. By contrast, in (17b), where neither of the pronouns can be expletive because the realis event encoded by the individual-level predicate in its present tense does not allow the use of hi^6_2, the hi^6 in the first conjunct can be deleted with no change in meaning.

(17) a. 醫生　叫　儂　覅　多　　坐　*(伊)　還是　覅　多　　走　　*(伊)？
　　　　 $i^1saŋ^1$　$tɕiɔ^5$ $noŋ^6$ $viɔ^6$ tu^1　　 zu^6 *(hi^6) he^6-$z̩^6$ $viɔ^6$ tu^1　 $tsɤ^5$　 *(hi^6)?
　　　　 doctor ask　you　not much sit　　it　or　　not much walk　it
　　　　 'Did the doctor suggest that you not sit too much or not walk too much?'
　　 b. 儂　　歡喜 (伊)　還是　勿　歡喜　伊？
　　　　 $noŋ^6$ $hø^1ɕi^5$ (hi^6)　he^6-$z̩^6$ $və?^7$ $hø^1ɕi^5$ hi^6?
　　　　 you　like　　him or　　not like　him
　　　　 'Do you like him or not?'

Furthermore, the preceding verb cannot be separated from hi^6_2 by other clitic-like elements. In Shanghainese, VV is often combined with -$tɕiɔ^5$, whose original meaning 'to yell/call' has been completely bleached.[8] Once the VV-$tɕiɔ^5$ construction is formed, hi^6_2 cannot be attached anymore, while a referential pronoun hi^6 can, as shown by the contrast in (18).

(18) a. 搿眼　　書，儂　拿 伊 看看　　叫　(*伊)。
　　　　 $gə?^8$-$ŋe^6$　$s̩^1$,　$noŋ^6$ ne^1 hi^6 $k^hø^5$-$k^hø^5$ $tɕiɔ^5$ (*hi^6).
　　　　 this-CLF$_{PL}$ book you BA it read-RED JIAO　it
　　　　 'These books, you take a look at them.'

---

8. Although the exact grammatical status of $tɕiɔ^5$ is yet to be determined at this stage, I intend to treat it not as an independent word because: (i) it must be accentually dependent on its host, i.e. the preceding VV; and (ii) it is selective of its host as it can only attach to a small set of VV combinations, e.g. $k^hø^5$-$k^hø^5tɕiɔ^5$ 看看叫 'to take a look at', *$tsɤ^5$-$tsɤ^5tɕiɔ^5$ 走走叫 'to take a walk'.

b. *儂　看看　　叫　伊。*
noŋ⁶ kʰø⁵-kʰø⁵　tɕiɔ⁵ hi⁶.
you　look-RED JIAO him/her
'Take a look at him/her.'

Hence, $hi⁶_2$ is a clitic, with the preceding verb as its host.[9] In §4, I shall argue that the strict adjacency between V and $hi⁶_2$ result from the status of $hi⁶_2$ as the complement to V.

3.3 Scope

Although it is semantically associated with the irrealis mood, $hi⁶_2$ must be located lower than IP in terms of syntax. The evidence comes from A-*not*-A question, which is generally considered to be formed at I (Huang 1991). In (19), the verb $hiɤ⁶$ 'have', as the variant of the aspect marker $ləʔ⁸$, is inserted into the node I to form the A-*not*-A construction and in turn takes the VV-$hi⁶_2$ sequence as its complement.[10]

(19) *儂　有勿有　　　坐坐　伊 啊？*
noŋ⁶ hiɤ⁶-vəʔ⁷-hiɤ⁶　zu⁶-zu⁶ hi⁶ ha⁰?
you　have-NEG-have sit-RED it　SFP
'Did you take a seat?'

As a piece of side evidence, Shanghainese, as many other Wu dialects, used to have a split resultative construction in the order of verb-object-result. Modern Shanghainese retains VOR construction in some highly restricted contexts and the sandwiched object is usually a monosyllabic pronoun or a bare classifier. In this case, $hi⁶$ can have a non-referential interpretation.

(20) *燒　伊 酥。*
sɔ¹　hi⁶ su¹.
cook it　crispy
'Cook till it gets crispy.'

---

9. It is noteworthy that although Shanghainese possesses a wide range of post-V elements that tend to be phonologically dependent on V and thus some linguists term these elements as phonological clitics, not all need to be distributionally adjacent to the preceding V like $hi⁶_2$. For instance, as shown in $kʰø⁵-kʰø⁵ hi⁶ tɕiɔ⁵$ 看看伊叫 (lit.: 'look-RED it JIAO', 'try to take a look at it'), the clitic-like -$tɕiɔ⁵$ follows the V-O combination without being adjacent to the verb.

10. This example seems to pose a problem to the argument that $hi⁶_2$ can only be embedded under subjunctive contexts, as this A-not-A question asks about a past event. However, I shall argue in §4.2 that the question is syntactically encoded as subjunctive, hence not a true counterexample.

The word order shows that hi^6_2 is syntactically under vP, below the main predicate.

Moreover, hi^6_2 should base-generate as low as post-verbal complements in view of their complementary distribution, as emphasized in §2.1. To reiterate, unlike its referential and D-pronoun use, hi^6_2 only occurs at the right edge of VP, impossible to be followed by any argument or any kind of complement such as a resultant phrase or a directional phrase. Hence, the evidence indicates that hi^6_2 is only attached to V and V-hi^6_2 remains in the VP-domain, syntactically below IP.

To summarize, I have argued in this section for a clitic analysis of hi^6_2. This analysis not only captures the distributions of hi^6_2 in terms of its phonological dependence on and linear adjacency to the preceding V, but it also sheds light on the grammaticalization of hi^6_2: the phonological dependency, the restricted syntactic position compared to the other uses of hi^6 and the loss of semantic content (i.e. the semantic bleaching) are all characteristics of grammaticalization from a referential pronoun to an expletive in the process of cliticization.[11] Moreover, accompanied by semantic bleaching, it has developed quantificational properties which are characteristic of functional categories (Roberts & Roussou 2003). To be specific, despite its low attachment to the verb, the occurrence of hi^6_2 is always semantically associated with subjunctivity, which is usually regarded as a sentential-level mood (Givón 1994; Portner 2018). In this respect, hi^6_2 exhibits a syntactic-semantic mismatch, which will be addressed in detail in §4 and in §5, where cross-dialectal data on the expletive use of the third person singular pronoun will be discussed. Another implication of the clitic analysis is that the existence of this kind of pronominal clitics in Shanghainese confirms Lin & Zhang's (2006) claim that Chinese has pronominal clitics that are different from Romance clitics in that they are non-specific and hence are not forced to move out of VP in order to avoid the violation of Diesing's (1992) Mapping Hypothesis (Uriagereka 1995).

4.   Deriving V-hi^6_2 structure

Having established the clitic status of hi^6_2, I shall go into the details of the semantic restrictions on its use, which bears crucially on its interactions with mood/modality.

---

11. It might be its cliticization process that facilitates the grammaticalization of hi^6_2 from a referring pronoun to a semantically bleached element associated with some grammatical function. This possibility awaits a detailed diachronic study.

It has been noticed that hi^6_2 is compatible with imperatives and subordinated clauses embedded under main verbs that express notions such as wish, command, request, suggestion, and directive (cf. Jin 2016). Since these contexts are all subjunctive, Jin (2016) argues that hi^6_2 is a subjunctive marker, a proposal that echoes Qian (2004). However, this analysis is inadequate as it does not specify the exact syntactic position of hi^6_2, and it also fails to account for the ungrammaticality of hi^6_2 in subordinated contexts such as relative clauses. This section aims to offer a detailed syntactic-semantic analysis of hi^6_2. I shall argue that hi^6_2 is not a subjunctive marker, as suggested by Jin (2016); rather, the subjunctive meaning is expressed by a functional category that carries the feature [+subjunctive] in its local domain.

4.1 The licensing condition of hi^6_2: Subjunctive

As mentioned in § 2.3, hi^6_2 requires that the event be irrealis; a realis context such as (21) cannot license it.

(21) 搿眼　　人，　警察　　拿 伊拉 僔 解決脫　　　（*伊）了。
　　 $gə\gamma^8$-ηe^6　$\underline{n}i\eta^6$,　$tɕi\eta^5tsʰa\gamma^7$ ne^1 hi^6-la^0 ze^6 $tɕia^5tɕyə\gamma^7$-$tʰə\gamma^7$ (*hi^6) $lə\gamma^8$.
　　 this-CLF$_{PL}$ people police　BA them all solve-ASP$_{inn}$　　it ASP
　　 'These people, the police have got rid of them.'

Nor can other asserted contexts such as the complement clause of propositional attitude verbs or epistemic verbs license hi^6_2, as shown in (22).

(22) 我 認為／曉得　　小王　　拿 搿本　　書　拿 伊 看脫　　　（*伊）
　　 ηu^6 $\underline{n}i\eta^6 hue^6$/$ɕiɔ^5tə\gamma^7$ $ɕiɔ^5 huan^6$　ne^1 $gə\gamma^8$-$pən^5$ $sʅ^1$　　ne^1 hi^6 $kʰø^5$-$tʰə\gamma^7$　（*hi^6）
　　 I　　think/know　　Xiaowang BA this-CLF book BA it　read-ASP$_{inn}$　it
　　 個
　　 $gə\gamma^8$.
　　 SFP
　　 'I think/know that Xiaowang has finished the book.'

According to Portner (2018: 70), intellectual/cognitive predicates select indicative complement clauses, which are *realis*. They stand in contrast to the irrealis contexts such as imperatives (e.g. (23)), interrogatives that ask for permission or willingness of the addressee (e.g. (24)), subordinate clauses embedded under predicates expressing permissive, optative, or directive,[12] whereby the speaker desires an event of some participant (Chung & Timberlake 1985: 247) (e.g. (25)),

---

12. The most canonical sentence type that expresses optative or directive is imperative.

and complements of feature-oriented or deontic modalities (including obligation and permission; e.g. (26)).

(23) a. 拿 搿眼   書   儕 看脫   伊！
          ne¹ gəʔ⁸-ŋe⁶   sʅ¹   ze⁶ kʰø⁵-tʰəʔ⁷   hi⁶!
          BA this-CLF_PL book all read-ASP_inn it
          'Finish all the books!'

      b. 儂   快眼   跑跑   伊 哦！
          noŋ⁶ kua⁵ŋe⁶   bɔ⁶-bɔ⁶   hi⁶ vaʔ⁸!
          You immediately run-RED it SFP
          'You take a run immediately!'

(24) a. 我 搿本   書   拿 伊 擺好   伊 咯？
          ŋu⁶ gəʔ⁸-pəŋ⁵ sʅ¹   ne¹ hi⁶ pa⁵-hɔ⁵   hi⁶ lɔ⁰?
          I   this-CLF book BA it place-RES it SFP
          'Can I put this book back?'

      b. 儂   出去   走走   伊 哦？
          noŋ⁶ tsʰəʔ⁷tɕʰi⁵ tsɤ⁵-tsɤ⁵   hi⁶ vaʔ⁸?
          you go out   walk-RED it SFP
          'Do you want to go out for a walk?'

(25) a. 老王   多   走走   伊 比較   好。
          [*lɔ⁶huaŋ⁶ tu¹   tsɤ⁵-tsɤ⁵   hi⁶*] *pi⁵tɕiɔ⁵ hɔ⁵*.
          Laowang much walk-RED it   more good
          'It is better for Laowang to walk more.'

      b. 我 勸／建議／強迫／希望   老王   多   走走   伊。
          ŋu⁶ tɕʰy⁵/tɕi⁵hi⁶/dʑiaŋ⁶pʰaʔ⁷/ɕi¹huaŋ⁶ [*Lɔ⁶huaŋ⁶ tu¹   tsɤ⁵-tsɤ⁵   hi⁶*].
          I   persuade/suggest/force/wish   Laowang more walk-RED it
          'I persuade/suggest/force/wish Laowang to walk more.'

(26) a. 搿眼   人   警察   要 拿 伊拉 儕 解決脫   伊。
          gəʔ⁸-ŋe⁶ ŋiŋ⁶   tɕiŋ⁵tsʰaʔ⁷ iɔ⁵   ne¹ hi⁶-la⁰ ze⁶ tɕia⁵tɕyəʔ⁷-tʰəʔ⁷ hi⁶
          this-CLF people police   will BA them all solve-ASP_inn   it
          'The police will get rid of these people.'

      b. 伊 應該／好／可以／要   拿 搿眼   書   儕 拿 伊
          hi⁶ iŋ¹ke⁶/hɔ⁵/kʰu⁵hi⁶/iɔ⁵   *ne¹ gəʔ⁸-ŋe⁶   sʅ¹   ze⁶ ne¹ hi⁶*
          He should/can_possibility/can_permission/will BA this-CLF_PL book all BA it
          看脫   伊。
          kʰø⁵-tʰəʔ⁷   hi⁶.[13]
          read-ASP_inn it
          'He should/can/will finish reading all these books.'

---

13. The modal verbs *hɔ⁵* 好 and *kʰu⁵hi⁶* 可以 'can' in Shanghainese are three-way ambiguous: they can express permission ('to be allowed'), opportunity/possibility ('can') and dynamic abil-

According to Han (1998), imperative clauses contain an imperative operator carrying two features, [directive] and [subjunctive],[14] the former encoding the directive illocutionary force and the latter the irrealis mood. Embedded directives or optatives can also be treated in the same way, involving subjunctivity, since these main predicates do not express commitment to the truth of their proposition and hence lexically subcategorize for an irrealis future-oriented event. Semantically, the contexts where hi^6_2 can occur can be either deontic (e.g. (23)–(26)) or epistemic, as long as the event embedded under the epistemic modality is future-oriented. The minimal pair in (27) indicates that hi^6_2 is compatible with a future-oriented epistemic modal, but not with an epistemic modal that expresses a past event.

(27) a.   *書，伊 應該／一定　　會得　　儕 拿 伊 看脫　　　伊 個。*
　　　　sɿ¹, hi⁶ iŋ¹ke¹/iəʔ⁷diŋ⁶　　hue⁶-təʔ⁷ ze⁶ ne¹ hi⁶ kʰøʔ⁵-tʰəʔ⁷　hi⁶ gəʔ⁸.
　　　　book he probably/certainly will   all BA it   read-ASP$_{inn}$ it SFP
　　　　'As for these books, he will probably/certainly read them all.'

　　　b.   *★書，伊 應該／可能　　儕 拿 伊 看脫　　　伊 個。*
　　　　★sɿ¹, hi⁶ iŋ¹ke¹/kʰu⁵nəŋ⁶　　ze⁶ ne¹ hi⁶ kʰøʔ⁵-tʰəʔ⁷　hi⁶ ləʔ⁰.
　　　　book he probably/perhaps all BA it   read-ASP$_{inn}$ it SFP
　　　　'As for these books, he probably/perhaps has read them all.'

It is noteworthy that in Shanghainese (and also in Mandarin Chinese), epistemic modal predicates like *iəʔ⁷diŋ⁶* 'certainly', *iŋ¹ke¹* 'probably', when applied to an irrealis event, requires that the embedded event be marked by an overt future-shifting element; thus, *hue⁶təʔ⁷* 'will', counterpart of MC *hui* 'will', cannot be omitted, as shown in (27a). The ungrammaticality of (27b) can be ascribed to the lack of the [+subjunctive] feature due to the perfectivity of the event. In a nutshell, the distributions of hi^6_2 in modal sentences are typical of a grammaticalized subjunctive, which mostly appears in epistemic irrealis (expressing lower certainty) or deontic irrealis (expressing weaker manipulation), according to Givón (1994: 278).[15]

　　　That hi^6_2 is compatible with the feature [+subjunctive] is further supported by the fact that counterfactuals, which are subjunctive contexts *par excellence*, are readily compatible with hi^6_2, as exemplified in (28), where the second hi^6 is unambiguously hi^6_2 as it co-occurs with a preceding pronoun hi^6 in the post-*ne* posi-

---

ity ('be able to'). However, when co-occurring with hi^6_2, the ability reading is unavailable. I shall return to this point later.

14. The correlation between imperative and the irrealis mood is also manifested in morphology: in a considerable number of languages that mark the realis-irrealis distinction, imperative always requires the irrealis marking (Han 1998).

15. In Givón (1994), he treats "subjunctive" as a sub-part of irrealis.

tion. The whole sentence begins with the adjective *mehao* '(would have been) better', whose only function is to encode counterfactual when taking scope over the whole sentence (Qiang 2011; Jiang & Wang 2016).

(28) 蠻好 本 書 早點 拿 伊 看脫 伊 個 嗇！
  me^{6}hɔ^5 pəŋ^5 sʅ^1 tsɔ^{5}ti^5 ne^1 hi^6 kʰø^5-tʰəʔ^7 hi^6 gəʔ^8 nɔ^0!
  better CLF book sooner BA it read-ASP$_{inn}$ it ASS SFP
  'It would have been better to have finished the book sooner!'

Additionally, as also mentioned in Xu (1999) and Jin (2016), another subjunctive construction, namely, the antecedent clause of a conditional sentence, whether counterfactual or not, can also license the appearance of *hi$^6_2$*, as illustrated in (29a) and (29b) respectively.

(29) a. 伊 多 動動 伊 就 勿 會 生 搿種 毛病 了。
    hi^6 tu^1 doŋ^6-doŋ^6 hi^6 dʑiɤ^6 vəʔ^7 hue saŋ^1 gəʔ^8-tsoŋ^5 mɔ^{6}biŋ^6 ləʔ^0.
    he more move-RED it then NEG will get this-CLF illness SFP
    'If he had exercised more, he would not have got such illness.'
  b. 伊 多 動動 伊 就 會得 好 個。
    hi^6 tu^1 doŋ^6-doŋ^6 hi^6 dʑiɤ^6 hue^{6}təʔ^7 hɔ^5 gəʔ^8.
    he more move-RED it then will cure SFP
    'If he exercises more, he will be cured.'

The last piece of evidence comes from the compatibility of *hi$^6_2$* with A-*not*-A questions, as illustrated in (30), repeated from (19).

(30) 儂 有勿有 坐坐 伊 啊？
  noŋ^6 hiɤ^6-vəʔ^7-hiɤ^6 zu^6-zu^6 hi^6 ha^0?
  you have-NEG-have sit-RED it SFP
  'Have you taken a seat?'

The negative marker in Shanghainese takes two forms: *vəʔ^7* and *məʔ^8*. The former is restricted to irrealis events, while the latter to realis events. Although the A-*not*-A question in (30) asks about a past event, the use of *vəʔ^7*, however, indicates that the head I bears the [+subjunctive] feature. This is consistent with Givón's (1994) cross-linguistic study on subjunctivity, which generalizes that a yes-no question is strongly associated with irrealis due to its low certainty.

  In summary, *hi$^6_2$* is licensed in imperatives, counterfactuals, conditionals, deontic predicates (including complement clauses under optative/directive main verbs), and future-shifting modality expressing uncertainty, all of which share the feature of subjunctivity, whereas non-subjunctive or sentences expressing a realis event all disallow the use of *hi$^6_2$*. Therefore, it can be concluded that *hi$^6_2$* is closely associated with subjunctivity, as argued by Qian (2004) and Jin (2016).

However, I differ from them in not treating hi^6_2 as a subjunctivity marker for the following two reasons. First, without the occurrence of hi^6_2, the meaning of the host sentences remains the same because subjunctivity must be encoded by other elements (e.g. modals, imperatives, etc.) instead. This is unpredicted if hi^6_2 is a subjunctive marker. Second, the analysis of hi^6_2 as a subjunctive marker cannot explain why the host verb preceding hi^6_2 is restricted to agentive or volitional verbs, as discussed in §2.3, given that a fully grammaticalized subjunctive marker, however, would not be semantically selective of the verb that it applies to. Therefore, rather than taking hi^6_2 as a subjunctive marker, I propose that hi^6_2 is only related to the subjunctive feature in such a way that subjunctivity allows for the non-referential construal, analogous to indefinite *wh*-words under the licensing of the existential operator. Evidence in support of the licensing relation between subjunctivity and hi^6_2 comes from the locality constraint, which is found to regulate the distributions of hi^6_2, as will be discussed shortly.

4.2   Deriving V-hi^6_2 structure: Locality condition

Having established the status of hi^6_2 and the licensing mechanism of its use, we are now ready to map out its derivation. To begin with, it is widely accepted that pronominal clitics usually have a dual role: on the one hand, they are affixal as they are attached to other free words; on the other hand, they function as an argument or the head of a single-word phrase (Zwicky 1977; Zwicky & Pullum 1983; Klavans 1985). As has been argued in §3.3, hi^6_2 has a scope within *v*P or VP level. If this is on the right track, there are two possibilities of the exact position of hi^6_2: either it is a post-verbal object, or it is a post-verbal adjunct. I argue that the first analysis is more viable on the basis of two reasons. First, it has been assumed that all types of post-verbal nominals in Mandarin are complements rather than adjuncts (see Huang 1982) and Shanghainese basically shares the same structure with Mandarin with respect to the post-verbal elements, it is reasonable to analyze hi^6_2 to be base-generated in the complement position of V, on grounds of its complementary distribution with post-verbal objects or any other post-verbal elements. Secondly, by assuming that hi^6_2 is a post-verbal adjunct, we would lose insight of the diachronic relation between hi^6_2 and post-verbal resumptive pronouns as well as D-pronouns, which are used to refer to the preposed object. (The diachronic issue will be discussed in §5.3.) Therefore, in line with Postal's (1969) analysis of pronouns as D, I suggest that it is base-generated as the head of the complement DP and the attachment of hi^6_2 to V can be seen as a result of D-to-V movement (see Lin & Zhang 2006 for the same analysis of Chinese post-verbal

non-referential TA). Further, it is licensed by a functional head bearing the feature of subjunctivity. Let us take a look at the tree diagram for the imperative in (31).

(31)   敲碎脱   伊 !
       $k^h\mathfrak{o}^1$-se^5-$t^h\mathfrak{a}?^7$ $ɦi^6$!
       smash-broken-ASP$_{inn}$ it
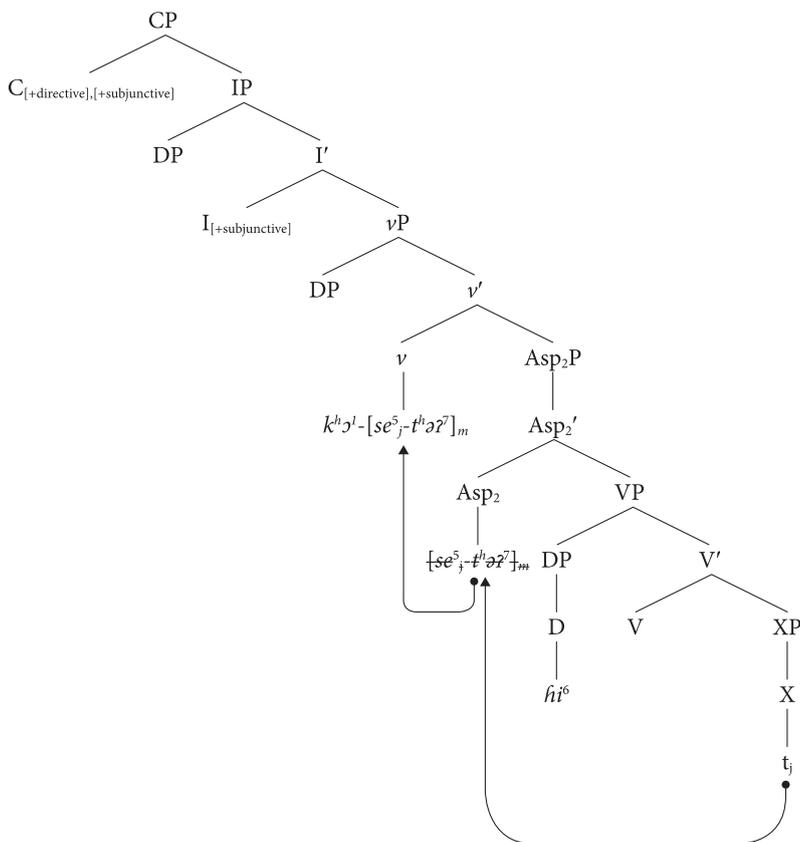   'Break it!'

Figure 1. The derivation of (31)

Before delving into the licensing relation between the subjunctive I and V-$ɦi^6{}_2$, there are several properties that are worth pointing out concerning the syntactic status of the functional element $t^h\mathfrak{a}?^7$. As shown in the above structure, it is analyzed as the head of vP-internal AspP, i.e. the inner aspect in the sense of Travis (2010), on several grounds. First of all, when following an activity verb such as $k^h\varnothing^5$ 'look' and $b\mathfrak{o}^6$ 'run', $t^h\mathfrak{a}?^7$ provides the event with an endpoint, rendering the event telic. Second, most change-of-state verbs in Shanghainese have to be fol-

lowed by $t^h \partial \textrm{?}^7$, whether used alone or in a resultative compound, as illustrated in (32a) and (32b) respectively.

(32) a. *玻璃 碎* (脱)   了。*
          pu^{1}li^6 se^5-*(t^{h}ə?^{7})   lə?^{0}.
          glass broken-ASP$_{inn}$ PFV
          'The glass is broken.'
      b. *玻璃 敲碎* (脱)   了。*
          pu^{1}li^6 k^{h}ɔ^1-se^5-*(t^{h}ə?^{7})   lə?^{8}.
          glass smash-broken-ASP$_{inn}$ PFV
          'The glass is smashed to pieces.'

In (32b), R-$t^h \partial \textrm{?}^7$ 碎脱 as a complex unit expressing the change-of-state result takes up the second slot in a verb resultative compound 敲碎脱. Without $t^h \partial \textrm{?}^7$, the adjective (e.g. 碎) can only describe the state of being broken, without an entailment of the change from the unbroken state to the broken state. Therefore, if the adjective depicts the final state of the change-of-state event, the entailment of change has to be attributed to the occurrence of $t^h \partial \textrm{?}^7$. Third, the fact that it is both compatible with a result and an aspect marker (e.g. (32b)) indicates that it can be neither a result nor an aspect marker. Therefore, it seems to be forced upon us to analyze it as the head of the inner aspect à la Travis (2010), which can be translated into BECOME in event template according to her. Along this line, I assume that Shanghainese change-of-state verbs have the event structure [BECOME [X$_{cos}$ $_{verb}$]], in which BECOME is realized by $t^h \partial \textrm{?}^7$ (see Zhu (forthcoming) for a detailed discussion).

Back to the above tree diagram, VP denotes the result state of the event, in which SpecVP is the object and XP denotes the result state *se^5* 'broken', which moves up to Asp$_2$, the inner aspect, to get the change-of-state meaning, and then the complex *se^5-t^{h}ə?^{7}* moves together to adjoin to the cause verb *k^{h}ɔ^1*. However, this derivation causes trouble to the current analysis of cliticization of *hi$^6_2$*. Note that if the cliticization involves syntactic head movement, it would have to skip the head V, which has already been filled by the trace of the moved Asp$_2$, hence violating the Head Movement Constraint (Travis 1984; Chomsky 1986). Although I do not have a solution, it is noteworthy of pointing out that such non-local clitic climbing is not uncommon cross-linguistically (see Haverkort 1993; van Riemsdijk 1999). Consider the Italian (33a) and French (33b) examples hereunder:

(33) a. *Lo$_i$ voglio fare* [e]$_i$.
          it I-want do
          'I want to do it.'

b. *Jean nous$_i$ aurait   aidés* [e]$_i$.
   John us   would-have helped
   'John would have helped us.'

In either case, the clitic climbing from the most embedded position to some higher position would inevitably incur violation of the HMC by skipping the governing verb head (*fare* and *aidés*, respectively). The fact that violations of the HMC nonetheless yield a well-formed outcome suggests that the HMC is too strong a constraint for clitic movement (see Haverkort 1993 for an extensive discussion on this issue). One way to account for the non-local cliticization is to resort to the Empty Category Principle (ECP) as the constraint for clitic movement. The ECP, which states that the traces must be properly governed, is a looser constraint than the HMC insofar as it only requires the clitics not to cross a barrier (Chomsky 1986). As the movement from X to Asp$_2$ and further to *v* voids all these projections of barrierhood, the trace of *hi*$^6_2$ can still be c-commanded by its antecedent in *v*, given a particular implementation proposed by Kayne (1994: 18), which allows an adjoined category to c-command both the category to which it adjoins and out of that category. However, Chomsky (2000) suggests that Kayne's definition of c-commanding is stipulative. In questioning the head movement as a core syntactic operation, he instead points out the possibility that head movement is a PF-operation. (See Roberts (2011) for a comprehensive review of the current state of the art of head movement in the Minimalist Program.) This provides us with another way to circumvent the HMC violation, that is to say, *hi*$^6_2$ does not undergo movement at all; instead the cliticization happens at PF, just as Mandarin resultative *de* (cf. Zhang 2007). A full review of these possibilities is far beyond this paper. Without further evidence in favor of either account, I shall leave this issue open for future inquiry.

Now let us look at the licensing of *hi*$^6_2$ in the structure in (31). I propose that the [+subjunctive] feature generated at C is responsible for selecting a [+subjunctive] I (à la Han 1998), which licenses the occurrence of *hi*$^6_2$ in imperatives. This structure can carry over to the subjunctive sentences embedded under verbs expressing directive, optative, command, etc.: the CP selected by these main predicates carries the [+subjunctive] feature so as to satisfy their subcategorization requirement, and in turn licenses *hi*$^6_2$. As for sentences with a deontic modal or future-shifting modal, the modal head, located within IP-domain, would inherently bear the [+subjunctive] feature, hence licensing *hi*$^6_2$.

Furthermore, the licensing relation between *hi*$^6_2$ and the subjunctive marker must obey some locality condition. This is manifested when *hi*$^6_2$ is embedded. To begin with, let us take a look at relative clauses. What is shown in (34) and (35) is that *hi*$^6_2$ cannot occur in the relative clause without a deontic or future-shifting

modal, such as $h\jmath^5$ 'can (in the sense of possibility)' and $hue^6t\partial\Omega^7$ 'will (in the epistemic sense)', or a verb expressing optative or directive such as $\varepsilon ia\eta^5$ 'wish', $ts\partial\eta^5be^6$ 'be ready'.

(34) a. 尋　只　老伯伯　　坐坐　(*伊) 個　地方！
   $zi\eta^6$ $tsa\Omega^7$ $l\jmath^6pa\Omega^7pa\Omega^7$ zu^6-zu^6 (*hi^6) $g\partial\Omega^8$ $di^6fa\eta^1$!
   look CLF old man　sit-RED it　DE place
   'Find a place where the old man (can) take a seat!'

  b. 我　走走　　　(*伊) 個　辰光
   ηu^6 $ts\gamma^5$-$ts\gamma^5$　(*hi^6) $g\partial\Omega^8$ $z\partial\eta^6kua\eta^1$
   I　walk-RED it　DE time
   'the time when I take a walk'

(35) a. 尋　只　老伯伯　　*(好／會得／想)　坐坐　伊 個　地方!
   $zi\eta^6$ $tsa\Omega^7$ $l\jmath^6pa\Omega^7pa\Omega^7$　*($h\jmath^5$/$hue^6t\partial\Omega^7$/$\varepsilon ia\eta^5$) zu^6-zu^6 hi^6 $g\partial\Omega^8$ $di^6fa\eta^1$!
   look CLF old man　　can/will/wish　　sit-RED it DE place
   'Find a place where the old man can/will/wish to take a seat!'

  b. 我　*(想／準備)　　走走　　伊 個　辰光
   ηu^6 *($\varepsilon ia\eta^5$/$ts\partial\eta^5be^6$) $ts\gamma^5$-$ts\gamma^5$　hi^6 $g\partial\Omega^8$ $z\partial\eta^6kua\eta^1$
   I　　want/ready　walk-RED it　DE time
   'the time when I wanted to take a walk'

The contrast between the two examples indicates that hi^6_2 can appear in a relative clause as long as it is licensed by modals or optative/directive verbs within the relative clause. As has been demonstrated in §4.1, the function of these licensing predicates is to create a subjunctive environment for the occurrence of hi^6_2: they subcategorize for a [+subjunctive] complement clause, where hi^6_2 can occur. In addition to licensing from these predicates, hi^6_2 can also search for a higher functional head which encodes subjunctive-inducing speech acts (i.e. imperative, counterfactual, conditional). However, the latter option is not available in relative clauses because these functional projections are too high to be projected in a relative clause, which is known for lack of a full CP-periphery (Haegeman 2012). On the contrary, if hi^6_2 is first embedded under a licensing predicate (i.e. an optative verb or a deontic/future-oriented modal) in a relative clause (e.g. (34)), it can seek the [+subjunctive] feature locally and thus its occurrence in the relative clause becomes acceptable. Therefore, the non-embeddability of hi^6_2 in a relative clause can be ascribed to the absence of a subjunctive feature when the relative clause does not have an overt subjunctive-inducing predicate. That is why the modal predicates are obligatory in the relative clauses where hi^6_2 appears.

  Moreover, Example (34a) also shows that hi^6_2 cannot search for a long-distance [+subjunctive] feature outside the relative clause. As demonstrated in

(36) (repeated from 34a), even if the main clause contains a [+subjunctive] feature by being an imperative, the occurrence of hi^6_2 is still unacceptable. The ungrammaticality of (36) suggests that licensing is subject to a locality condition: hi^6_2 cannot be licensed by the $I_{[+subjunctive]}$ outside its clausal domain. The derivation is given below.

(36) 尋 只 老伯伯 坐坐 (*伊) 個 地方！
zin^6 $tsa\textipa{P}^7$ $l\textipa{O}^6pa\textipa{P}^7pa\textipa{P}^7$ zu^6-zu^6 (*hi^6) $g\textipa{@}\textipa{P}^8$ di^6fan^1!
look CLF old man sit-RED it DE place
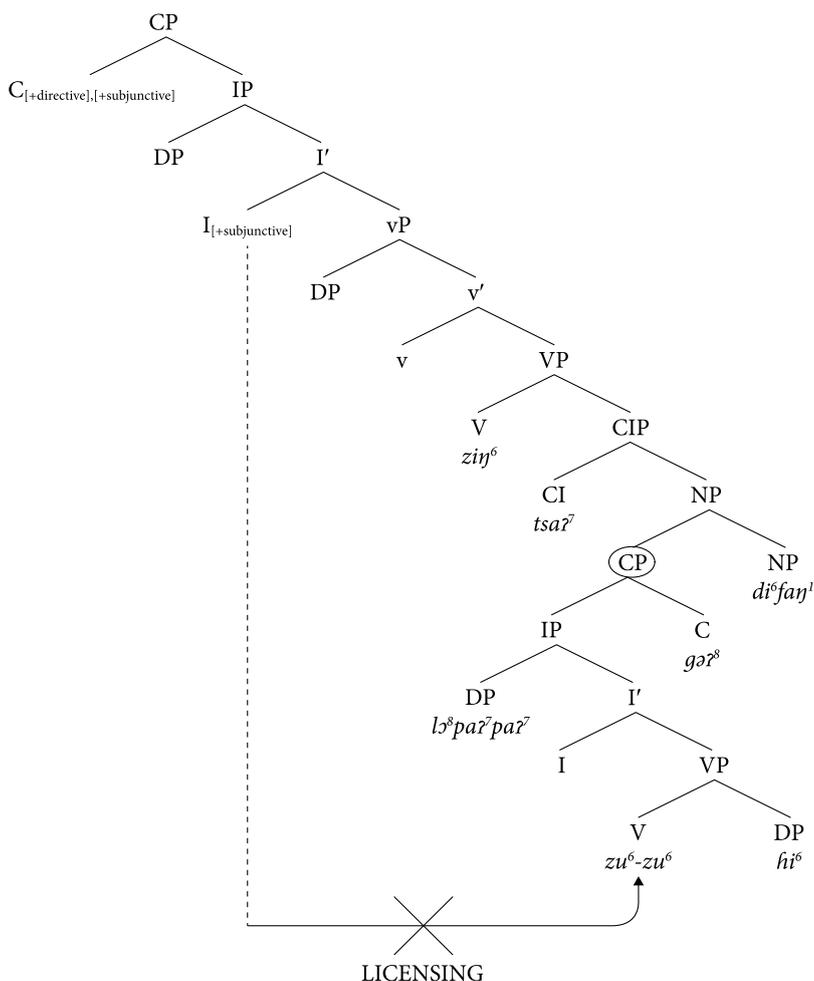'Find a place where the old man (can) take a seat!'

Figure 2. The derivation of (36)

That the expletive cannot depend on the subjunctive-bearing feature from another clause can be exemplified with other subordinate clauses. For example, in the subject clause, which contains no [+subjunctive] feature, as shown in (37), hi^6_2 is excluded even though the matrix clause has a subjunctive-inducing predicate. By contrast, in (38), akin to those optative predicates taking subjunctive object clauses, the main predicate conveying the meaning of suggestion or advice can select subjunctive subject clauses, where the C head bears the [+subjunctive] feature. Therefore, the I of the subject clause would acquire the [+subjunctive] feature by inheritance from C, hence licensing the occurrence of hi^6_2.

(37) 到   公司   走走   (ˀ伊) 大概   要 花 十 分鐘。
      $tɔ^5$ $koŋ^1sᶎ^1$ $tsᶅ^5$-$tsᶅ^5$ (ˀhi^6) da^6ke^5 $iɔ^5$ hu^1 $zaʔ^8 fəŋ^1tsoŋ^1$.
      arrive company walk-RED   it   perhaps will cost ten minutes
      'Perhaps it will cost ten minutes to walk to the company.'

(38) 多   走走   (伊) 比較   好。
      tu^1 $tsᶅ^5$-$tsᶅ^5$ (hi^6) $pi^5tɕiɔ^5$ $hɔ^5$.
      more walk-RED it   relatively good
      'It is better to walk more.'

Again, the contrast between (37) and (38) demonstrates that hi^6_2 can only be licensed by its clausemate subjunctive I, but not the long-distance subjunctive I in the matrix clause. The same pattern is also found in object complement clauses and other subordinate clauses.

Based on these observations, the licensing condition on hi^6_2 can be stated as below.

(39) Licensing condition of hi^6_2
      hi^6_2 must be licensed by a c-commanding [+subjunctive] feature within the minimal clause.

This condition hinges on the clause boundedness between hi^6_2 and the licensor. However, (40) poses a challenge to the condition.

(40) 我 希望   小王   會得   走走   (*伊)。
      $ŋu^6$ $ɕi^1huaŋ^6 ɕiɔ^5huaŋ^6$ $hue^6təʔ^7$ $tsᶅ^5$-$tsᶅ^5$ (*hi^6).
      I wish   Xiaowang can   walk-RED   it
      'I wish Xiaowang is able to walk.'

To satisfy the subcategorization of the main predicate $ɕi^1huaŋ^6$ 'wish', the embedded CP clause must bear the [+subjunctive] feature and the embedded I in turn inherits the feature from C. If the clausemate condition is at work here, the embedded hi^6_2 should be acceptable, contrary to fact. This indicates that the mere

coexistence of a clausemate c-commanding subjunctive feature and hi^6_2 does not ensure the licensing of the latter. The subjunctive I in the complement clause in (40) is still too far away from hi^6_2 to license the latter. The ungrammaticality seems to result from the incompatibility of hi^6_2 with the dynamic modal verb $hue^6tə?^7$ 'can' or *hao* 'can', as evidenced by (41).

(41) a. 小王　　會得　　走走路／走走　　　(*伊) 個。
   $ɕiɔ^5huaŋ^6$　$hue^6tə?^7$ $tsɤ^5$-$tsɤ^5$ lu^6/$tsɤ^5$-$tsɤ^5$　(*hi^6) $gə?^8$.
   Xiaowang can walk road/walk-RED it ASS
   'Xiaowang can walk.'

  b. 掰台　　鋼琴，　三個　　人　　好　拿 伊 搬脫　　　(*伊)。
   $gə?^8$-de^6 $kaŋ^1dʑiŋ^6$, se^1-$gə?^8$　$n̻iŋ^6$　　$hɔ^5$　ne^1 hi^6 $pø^1$-$t^hə?^7$　(*hi^6).
   this-CL piano　　three-CLF person MOD BA it move-ASP$_{inn}$　it
   'This piano, three people can move it away.'

According to Hackl (1998), ability *can* behaves like an individual level predicate,[16] and thus it is a non-subjunctive modal. Moreover, as dynamic modal lies at the vP-domain (Tsai 2015), it seems that it would block hi^6_2 from searching for a higher [+subjunctive] feature and leave hi^6_2 unlicensed. This is what happens in (40): before merging with the embedded I, hi^6_2 has been embedded under the non-subjunctive-inducing dynamic modal and thus is prevented from searching for the [+subjunctivity] I above. Therefore, to rule out sentences as (41b), the locality condition on the licensing of hi^6_2 in terms of "clause boundedness" should be revised as follows.

(42) Licensing condition of hi^6_2 (revised)
  hi^6_2 must be licensed by a c-commanding [+subjunctive] feature in a local domain.
  The local domain of hi^6_2 is the minimal XP that contains hi^6_2 and a [+/−subjunctive] feature.

Condition (42) basically says that a c-commanding head that carries the (non-)subjunctivity feature would create a domain for hi^6_2 and if this head is specified as [−subjunctive], hi^6_2 will not be licensed. To put it simpler, the [−subjunctive] feature (usually brought by the indicative mood or the dynamic mood) that is closer to hi^6_2 would block the latter from searching for a higher [+subjunctive] feature, and would exclude the occurrence of hi^6_2 within its scope. The revised version of the licensing condition of hi^6_2, which is more restrictive, can account

---

16. Also, I have shown in Example (17b) that individual level predicates cannot license hi^6_2 as it does not create a subjunctive environment.

for the previous data, as well as sentences like (40), where the non-subjunctive modal verb (below I) blocks the local relation between I and hi^6_2.

4.3   Advantages and implications of the analysis

Certain advantages and implications fall out from the above analysis. To begin with, not only is the account consistent with the licensing conditions on the use of hi^6_2, it also captures its distributions in subordinate clauses, especially in relative clauses. First, that hi^6_2 needs to be licensed by the subjunctive feature has been well justified in §4.1, where I argued that hi^6_2 can only appear in subjunctive environments, and subjunctivity as a necessary requirement is also extensively argued for in previous studies on the third person singular expletive pronoun in Shanghainese (Qian 2004; Jin 2016) and also in other dialects (Lin & Li 2019). What underlies my analysis is that as long as hi^6_2 is locally licensed by subjunctivity, it can appear in any context. On this view, the relation between hi^6_2 and subjunctive is akin to that between *wh*-indefinites and the existential quantifier (Tsai 2015), or that between negative polarity items and NEG head or downward entailing contexts (Ladusaw 1980): rather than encoding subjunctivity itself, it gets its value by being immediately within the subjunctive local domain.

Another implication of this analysis is that contrary to Qian (2004), Shanghainese does not have a subjunctive category that is morphologically marked on verbs; otherwise, it would have been allowed to appear in relative clauses alone as subjunctivity and relative clauses are not incompatible (Panzeri 2006). Rather, subjunctivity in Shanghainese is most commonly encoded either by the lexicalized predicates (such as modals and optative verbs) which subcategorize for a subjunctive complement (see Kao 2014 for the similar analysis of Mandarin subjunctivity) or by certain sentence types that inherently carry the subjunctive feature at C, such as imperative, counterfactuals or conditionals.

Last, analyzing hi^6_2 as a base-generated object may also give us a clue to the discourse effect it brings. As mentioned previously, the use of hi^6_2 is optional. It does not affect the truth value of the relevant sentence, as deleting it would not cause any semantic change. Nevertheless, the occurrence of hi^6_2 yields an emphatic reading on the event expressed by the host predicate as if the action denoted by its host verb should exert a certain effect on some unknown object. Take (43) for example:

(43)   *儂 (腳　勿　好) 有勿有　　坐坐　伊 啊？*
      noŋ⁶ (tɕiaʔ⁷ vəʔ⁷ hɔ⁵)　hiɤ⁶-vəʔ⁷-hiɤ⁶　zu⁶-zu⁶ hi⁶ haᵒ?
      you   leg   NEG good have-NEG-have sit-RED it   SFP
      'Did you take a seat (since your legs are hurt)?'

The sentence is most felicitous in the scenario where the addressee has some physical condition so that he/she has to stay seated as much as possible. As the verb *sit* is intransitive in most cases, the occurrence of hi^6_2, which according to my analysis is base-generated as the complement of the verb, brings the connotation such that the addressee can "sit the physical condition away". Put it simply, hi^6_2 somehow enhances the verb's degree of transitivity, whether the verb is transitive or intransitive. Apart from that, the occurrence of hi^6_2 also strengthens the effect on the optative or deontic force. Consider (44).

(44) *儂　快點　幫　我　坐坐　ʔ(伊)！*
      noŋ⁶ kua⁵ti⁵ paŋ¹ ŋu⁶ zu⁶-zu⁶ ʔ(hi⁶)!
      you quickly help I   sit-RED it
      'You take a seat quickly!'

In (44), *paŋ¹-ŋu⁶* (lit. 'help me') is the counterpart of the Mandarin outer-affective construction *gei-wo* (lit. 'give me') (Tsai 2018), which is strictly speaker-oriented; therefore, the whole sentence in (44) has a strong flavor of command or imperative, which is why dropping hi^6_2 renders the sentence less natural. The contribution of hi^6_2 to the discourse-related meaning of the sentence would not be surprising under the current analysis where hi^6_2 base generates as the object of the verb and is associated with the higher functional domain that encodes subjunctivity which is closely associated with imperative, optative, or alike.

Interestingly, discourse-oriented functions of pronouns are not untested cross-linguistically. For example, it has been reported that logophoric third person singular pronouns in Finnish and Saami have developed discourse-related functions: in Saami, it appears in "questions expressing speculation, reflection or wonder" and in Finnish, it occurs in sentences expressing "a reminder of a familiar fact" or "an event contrary to expectations" (Laitinen 2002). The phenomenon is also common in Chinese languages. In §5.2 and §5.3, I shall take a closer look at the similar use of third person singular pronouns in other Chinese dialects, with a special reference to Mandarin non-referential *ta* in the V-*ta*-*ge*-NP/AP construction.

5.   Further implications on grammaticalization

As mentioned in §3, the clitic hi^6_2, exhibiting phonological dependence, semantic attrition, and distributional fixation, and the operator-variable relation with a subjunctive operator, manifests itself as a clear case of grammaticalization. In this section, adopting a formal view of grammaticalization (cf. Roberts & Roussou

2003; Wu 2004), I shall discuss the development of hi^6_2 and show that it is halfway to becoming a more grammaticalized functional head.

5.1   Why subjunctive? Why agentive?

Two questions on the semantic requirements of hi^6_2 can be asked. First, why does hi^6_2 only occur in subjunctive contexts? Second, why does hi^6_2 only follow agentive or volitional verbs?

For the first question, Wu & Matthews (2010) give an interesting account in discussing the expletive pronoun *ta* in Mandarin Chinese, as shown in (45). They argue that only in an irrealis event can the pronoun and the following associate NP be interpreted as indefinite, hence making the expletive reading of the pronoun possible.[17]

(45)   *吃 他 一碗   飯！*
       Chi ta yi-wan fan!
       eat it one-CLF rice
       'Eat a bowl of rice!'

Though I do not fully agree with their analysis of the expletive use of *ta* in Chinese, I am sympathetic to their view of the relation between an expletive reading of the pronoun and the irrealis (or subjunctive in my terminology) mood. Following their account, I argue that pronouns appearing in realized events must be referential (more specifically, deictic) or be variables which must be bound by quantificational operators, because participants in a realized event must be identified (also see Jackendoff 1972); therefore, in order to be interpreted expletively (with no theta-role), hi^6_2 can only appear in irrealis contexts.

The second question concerns a necessary semantic restriction imposed on the preceding verb, namely, verbs must be agentive or volitional, which holds across all the above licensing contexts, i.e. imperatives, counterfactuals, conditionals, deontic predicates, and future-shifting contexts. If subjunctivity is the only licensing condition on the use of hi^6_2, where does this restriction on verb semantics come from? Here I offer a tentative explanation based on the interplay between semantics of subjunctivity and the grammaticalization path of hi^6_2. It is recognized that deontic irrealis (expressing weaker manipulation) is the most common context where a grammaticalized subjunctive can appear (Givón 1994: 278). Han (1998), within the formal framework, also concludes that subjunctives generate directive force via pragmatic inference. This property of sub-

---

17.   Whether Mandarin V-*ta*-NP can only appear in irrealis contexts is controversial. See §5.3.

junctive might force the verb to which the subjunctive applies to be controllable and hence agentive. On this view, subjunctivity and agentivity can be seen as two sides of the same coin. However, it should be pointed out that this semantic account falls short of explaining why verbs must also be agentive in the context that only expresses low certainty of an irrealis event (as in epistemic modal). A plausible way is to look at the grammaticalization of the expletive use of the pronoun. As it is essentially developed from a D-pronoun (Jin 2016), which can only follow a volitional verb to express the meaning of disposal, the semantic restriction may persist, as a residue of its origin.[18]

5.2 Some speculations on the grammaticalization process

In the generative framework, grammaticalization can be regarded as "an instance of parameter change" upward "along the functional hierarchy" (Roberts & Roussou 2003: 201–202). More specifically, according to Wu (2004: 251), this kind of "vertical" grammaticalization usually involves three steps: first, an element α is originally base-generated in a lower position X; second, it raises from the position X to a higher functional-head position Y, with which α is semantically associated, and finally it is reanalyzed as being base-generated directly in Y and no longer instantiates the properties of X. One clear case of such development is French negative marker *pas* 'step', whose original use still survives in modern French. It originates as the DP complement (surprisingly more frequently of intransitive verbs), and as it turns into a head with the loss of its *phi*-features and enters into an Agree relation with NEG, it gradually takes on a negative meaning and eventually becomes a negative marker, hence allowing the appearance of an overt object (since *pas* no longer occupies the object position) (Roberts & Roussou 2003: 137), as shown below.

(46) *Je n'ai   pas vu   Marie.*
     I   NEG-have PAS seen Marie
     'I haven't seen Marie.'

In the case of hi^6_2, its development can also be seen as an instantiation of this kind of "upward" grammaticalization and hi^6_2 seems to be at the intermediate stage of this process: first, it is generated in the object position as a resumptive pronoun in object-preposing constructions (Jin 2016) and later obtains the D-pronoun use, which is still productive in Shanghainese. Later it becomes part of a licensing relation involving the subjunctive feature (encoded in the higher mood functional

---

18. It can be predicted that if the pronoun is further grammaticalized, it might become blind to the verb semantics. This prediction is attested in Cantonese, which will be discussed below.

category), with the loss of its *phi*-features as evidenced by its compatibility with an intransitive verb. In fact, though rare, these uses can also be found in early literary Shanghainese. The following is a sentence from a text book of early Shanghainese for traders in Shanghai.

(47) 地票　存貨，看（*山勢*）　　（*風頭*）　　　好 賣脫　　伊 者，
　　　di⁶pʰiɔ⁵ zəŋ⁶hu⁵, kʰø⁵ (se¹sɿ⁵)　　(fəŋ¹dɤ⁶)　　hɔ⁵ ma⁶-tʰəʔ⁷　hi⁶ tse⁰,
　　　Ticket stock　see　situation circumstance can sell-ASP$_{inn}$ it if
　　　賣脫　　　伊 個 好。
　　　ma⁶-tʰəʔ⁷　hi⁶ gəʔ⁸ hɔ⁵.
　　　sell-ASP$_{inn}$ it DE good
　　　'As for the tickets and the stocks, judging from the current situation, you'd bet-
　　　ter sell them if possible.'
　　　(*Huyu bian shang* 《滬語便商》 'The Shanghainese dialect guide for visiting
　　　traders', Obata 1892: 31)[19]

In (47), the two *hi⁶*s both refer to the topic, which does not agree with the pro-noun in number and it can therefore be seen as a D-pronoun use. Unfortunately, however, I do not have evidence to exclude the possibility that it could also be a case of expletive use as the context here cannot discriminate between the two uses of *hi⁶*.

If Wu's (2004) grammaticalization path is universal, I would predict that *hi⁶*$_2$ might further turn into a functional head itself and base generate at the CP-periphery taking the whole VP/IP as its complement. Although I do not know if this is the path *hi⁶*$_2$ will take, the expletive third person singular pronoun in other dialects, especially the pronoun *keoi* in Cantonese, might shed some light on this grammaticalization process.

The expletive use of the third person singular pronoun is attested in many Chinese dialects, including Gan, Jianghuai Mandarin (Gan 2011, Jiujiang dialect), and Cantonese (Matthews & Yip 1994; Man 1998; Lin & Li 2019). Although the licensing conditions and their distributions are subject to variation, these dialects share the feature that the expletive use of the pronoun is only licensed in irrealis events. Additionally, some of these dialects also impose the same semantic requirements on the preceding verb, i.e. the verb must be agentive or the patient must be strongly affected. In Cantonese, however, although the expletive third person singular pronoun *keoi* can only be licensed in non-asserted contexts (Man 1998), just like *hi⁶*$_2$, it seems to have undergone a further step in not being restricted to agentive events or events that involve an affected object (see (48a)); moreover, it can follow the whole VP (see (48b)).

---

(48) a. *死 咗 佢 咪咩 都 可以 解決　 喇！*
           Sei zo   keoi maime dou hoji   kaikyut la!
           die ASP it   what   all   can solve   SPF
           'Go to die and everything can be solved!'   (Lin & Li 2019: 97)
      b. *A-Fai 想　 讀　 完　 本　 書　 佢。*
           A-Fai soeng tai   jyun bun syu   keoi.
           A-Fai want read finish CLF book it
           'A-Fai wants to finish reading the book.'   (Man 1998: 55)

The distribution of *keoi* shown in (48b) shows that it is projected syntactically higher than Shanghainese hi^6_2 because it can follow the VP. Furthermore, its blindness to the predicate strongly indicates that has been grammaticalized into a purely functional category encoding mood. Hence the pronoun *keoi* in Cantonese provides an example of a further grammaticalized case of the third person singular pronoun. In terms of syntactic hierarchy, I assume that it has been reanalyzed as a base-generated mood functional head that scopes over the IP.

A recent study (Lin & Li 2019) on the expletive *keoi* in Lianjiang dialect (a variety of Cantonese) identifies the pronoun as a fully grammaticalized sentence-final particle as it can be preceded CP-peripheral elements such as *dek* (counterpart of Mandarin le_2, which is argued to be projected in the CP-domain), as shown in (49). It marks the disposal construction and also conveys subjectivity.

(49) *你　食 了 嗰碗　 飯　 (嘚) 佢。*
       Nei sek liu go-un   fan (dek) keoi.
       you eat ASP this-CLF rice PFV   he
       'You eat this bowl of rice!'   (Lin & Li 2019: 95)

If their analysis is on the right track, the expletive pronoun in Lianjiang dialect might be regarded as a fully grammaticalized element that is base-generated in the CP domain. Its syntactic position would be even higher than that of the Cantonese *keoi*.

As shown in the cross-dialectal data, the expletive use of the third person singular pronoun is not uncommon and seems to be a productive way to express modal/tense/aspect-related information, as well as discourse-related/speaker-oriented meaning. But a question arises as to what motivates its grammaticalization. There is an agreement that the expletive use of the pronoun originates from the resumptive use of the pronoun in object-fronting constructions such as topicalization and disposal construction (i.e. *ba*-construction). It is even proposed that *keoi* in Cantonese is a marker for the disposal construction (cf. Tang 2003: 112). Nonetheless, taking the pronoun as the disposal marker fails to capture a crucial difference between the expletive pronoun and the disposal marker: the former is restricted to the irrealis mood while the latter is not. I hypothesize

that that the object expletive pronoun gains the grammatical meaning related to tense/aspect/modal or subjectivity is closely associated with their VP-peripheral (e.g. Shanghainese) or CP-peripheral (e.g. Cantonese) position: elements that occur at the VP/CP-peripheral position in Chinese tend to acquire grammatical functions such as aspect, modality or speech act.[20] Several post-verbal secondary predicates are argued to be undergoing or have undergone this process. The most representative case is the sentence-final *le* (also known as *le₂*, as opposed to post-verbal *le₁*), which is widely assumed to be grammaticalized from verb *liao* (see Wu 2004). See the example given in (50), which involves both post-verbal *le₁*, which functions as a perfective aspect suffix and sentence final *le₂*, which functions as a perfect marker or as a sentence final particle (Chao 1968; Li & Thompson 1981; Sun 1996, among others). According to diachronic studies, their origin, i.e. the content verb *liao* 'to finish', was first reanalyzed as an aspectual marker in the serial verb construction (e.g. *shai liao* 'dry up') around the Tang Dynasty and then further developed its sentence final particle use during the Song Dynasty. Focusing on the sentence final *le₂*, although there is no consensus on its exact function, it is widely accepted that it has scope over the whole proposition and carries a pragmatic meaning associated with speaker-addressee interactions (Lu & Su 2009). Therefore, in syntactic terms, it can be assumed that the sentence final particle *le₂* is more grammaticalized in that it occupies the CP domain while *le₁* is located at the lower VP or IP (tense-aspect) domain. The development of *le* thus instantiates the V>*v*>(T)>C movements typical for grammaticalization (cf. Roberts & Roussou 2003).

(50) 我 吃 了 三碗　　飯 了。
　　　Wo chi le　san-wan　fan le.
　　　I　eat ASP three-CLF rice SFP
　　　'I have had three bowls of rice.'

Other instance involves semi-sentence final particle *qu* ('go' 去) and *kan* ('look' 看), as shown in (51) and (52), respectively.

(51) 你 去死 去！
　　　Ni　qu si　qu!
　　　you go die SFP
　　　'Go to hell!'

---

(52) 小張　　應該　再　修修　那輛　　車　看。
　　　Xiaozhang yinggai zai　xiu-xiu na-liang che kan.
　　　Xiaozhang should　again fix-RED that-CLF car look
　　　'Xiaozhang should try to fix that car again.'　　　　　(Sui & Hu 2019: 356)

In (51), while the pre-verbal *qu* 'go' retains the meaning of directional, the post-verbal *qu* 'go' is semantically bleached and functions on a par with sentence final particles, expressing command or directive. In the similar vein, the sentence final *kan* in (52) is argued to be a CP-peripheral tentative mood marker taking the preceding IP as its complement (Sui & Hu 2019).

The above cases of grammaticalization involving right-periphery in a sentence suggest that the VP-final or right-peripheral positions in Chinese are crucial for grammaticalization. In the case of the third person singular pronoun, regardless of the historical source, the modal meaning arises from the domain it merges in, namely the right periphery, as well as the way it interacts with the predicate.

5.3　A comparison between hi^6_2 and ta[21]

Mandarin also possesses a non-referential third person singular pronoun, that is, the *ta* in the V-*ta*-*ge*-NP/AP construction. The post-*ge* element can either be a numeral phrase or an adjectival phrase. When it is a numeral phrase, *ge* can be omitted. Examples are given below.

(53)　a.　吃 他 (個) 十碗　飯
　　　　　chi ta (*ge*) *shi-wan fan*
　　　　　eat it　GE ten-CLF rice
　　　　　'eat ten bowls of rice'
　　　b.　吃 他 個 痛快
　　　　　chi ta ge tongkuai
　　　　　eat it　GE satisfaction
　　　　　'eat to one's satisfaction'

This construction has many interesting properties but has not enjoyed much attention (see Chao 1968; Iljic 1987; Lin 1994; Zhang 2005; Lin & Zhang 2006; Yeh 2006; Wu & Matthews 2010; Su 2012; Zhang 2017). In this section, I present a detailed comparison between hi^6_2 and *ta*, and argue that they both involve interactions between lower categories and higher functional categories.

The non-referential *ta* in the V-*ta*-*ge*-NP/AP construction shares many properties with Shanghainese hi^6_2. First of all, they are both clitics, which have to be

---

21. I thank a reviewer for suggesting that we should compare the non-referential *ta* in Mandarin and hi^6_2.

adjacent to the preceding verb, i.e. their hosts (see Lin & Zhang 2006; Su 2012 for the clitics analysis of *ta*). Second, they are both optional in the sense that their absence does not affect the acceptability of the sentence; on the other hand, both bring out some pragmatic discourse effects (though different effects, as will be discussed shortly). Third, both require a volitional agent (Yeh 2006), as illustrated by the Mandarin Example (54a) and the Shanghainese one (54b), repeated from (13b).

(54) a. *這個　燈　閃　他個五百下。   (MC)
　　　　　Zhe-ge　deng shan ta ge wubaixia.
　　　　　this-CLF light flash it GE five.hundred.CLF
　　　　　'(Intended) The light flashed five hundred times.'   (Yeh 2006: 108)

　　　b. *颱風　　會得　　拿 迭棟　　房子　吹脫　　　　伊。   (SH)
　　　　　de⁶fəŋ¹　hue⁶tə⁷⁷　ne¹ diə⁷⁸-doŋ⁶ vaŋ⁶tsʅ⁵ tsʰʅ¹-tʰə⁷⁷　hi⁶.
　　　　　typhoon will　BA this-CLF　house　blow-ASP$_{inn}$ it
　　　　　'The typhoon might blow the house down.'

Last but not least, like Shanghainese hi^6_2, it has been noticed that *ta* is incompatible with realis contexts (Kojima 2006; Wu & Matthews 2010; Su 2012).[22] For

---

22. The generalization that the V-*ta*-*ge*-NP/AP construction is only compatible with irrealis contexts is not without controversy in the literature. For example, Zhang (2005) and Lin & Zhang (2006: 806–807) provide counterexamples to the generalization that the construction only appears in irrealis.

　(i) a. 昨天　　我 (本來)　想　買 它二 斤　　　　　羊肉　　吃 涮羊肉。
　　　　　zuotian　wo (benlai)　xiang mai ta er　jin　　　yangrou chi shuanyangrou.
　　　　　yesterday I　originally want buy it two ½ kilograms mutton eat dipped mutton
　　　　　'Yesterday, I wanted to buy two ½ kilograms of mutton to eat dipped mutton.'
　　　b. 以前 每天　晚上，　我 都 要　　看 他 幾　　本 雜誌。
　　　　　yiqian meitian wanshang, wo dou yao　kan ta ji　　ben zazhi.
　　　　　before every　evening　I　all　would read it several CLF magazine
　　　　　'In the past, I read several magazines every evening.'

Yeh (2006) makes the same observation based on the following examples.

　(ii) a. 以前 年輕時　　還 可以 熬熬夜，玩 他個 一兩　　天。
　　　　　yiqian nianqingshi hai keyi aoaoye,　wan ta ge yiliang tian.
　　　　　before young　　still can stay.up.late play it GE one.two day
　　　　　'When (I) was still young, (I) could stay up late and have fun for one or two days.'
　　　b. 他 知道 斐涵 常常　　就 在 網上　　掛 他個 一 整　　晚。
　　　　　ta zhidao Feihan changchang jiu　zai wangshang gua ta ge yi　zheng wan
　　　　　he know　Feihan often　　then at on.the.web hang it GE one whole night
　　　　　'He knows that Feihan often surfs the web all night long.'   (Yeh 2006: 106)

Zhang (2017) further points out that the construction is compatible with realized event marked by *le*, as shown below.

example, in (55), given by Wu & Matthews (2010), the pronoun can only be interpreted as referential in the context where the event has been realized, indicating that only irrealis modal can license the non-referential reading of *ta*. Similarly, both of the two sentences in (56), which depict an ongoing event and a past event respectively, exclude the non-referential reading of *ta*.

(55) *我們　吃 了 他　　十碗　　面。*
      women chi le   ta   shi-wan mian.
      we   eat ASP him/her ten-bowl noodle
      'We ate ten bowls of noodles of his/hers.'   (Wu & Matthews 2010: 1807)

(56) a. **他 在　吃 他 個 幾碗　　飯。*
         *ta zai   chi ta ge ji-wan   fan.
         he PROG eat it   GE some-CLF rice
         'He is eating some bowls of rice.'
      b. **他 吃 他 個 幾碗　　飯 過。*
         *ta chi ta ge ji-wan   fan guo.
         he eat it   GE some-CLF rice EXP
         'He had some bowls of rice.'

Further, it has been noticed that the non-referential use of *ta* is restricted to imperatives (e.g. (57a)) and root modals (Su 2012: 72), on a par with Shanghainese hi^6_2. (57b) is ungrammatical as it involves an epistemic modal instead of root modals, which usually express directives, desires, and obligations.

(iii) *達利 居然　　　煮了　他 個 五 個 雞蛋。*
       Dali juran   zhu-le   ta ge wu ge jidan.
       Dali unexpectedly boil-PRF it GE five CLF egg
       'Dali boiled five eggs unexpectedly.'   (Zhang 2017: 392)

However, these counterexamples are dubious. They either involve an embedding structure where V-*ta-ge*-NP/AP is subordinated by modal verbs such as *keyi* ('can'), *xiang* ('want') (e.g. (i.a)), which are argued to involve covert modality and usually select an irrealis complement clause (Bhatt 2006) or involve a habitual event (e.g. (i.b) & (ii)), which generally behaves differently. For example, habituals can license verb reduplication in simple indicative sentences and relative clauses, which otherwise would not be compatible with reduplicated predicates (see Sui & Hu 2016). As for (iii), I have consulted ten native speakers, among whom five are southerners and five are northerners, among which three are native speakers of the Beijing dialect. None of them accept the sentence in (iii), and moreover, all of them reject V-*le-ta-ge*-NP/AP with *ta* being interpreted as non-referential. I also conducted a corpus study through Baidu as well as in the CCL and BCC corpora, only to run across no examples where the V-*ta-ge*-NP/AP construction co-occurs with the perfective marker *le*, the progressive markers -*zhe* and *zai*, or the experience marker *guo*. Based on the survey and the corpus study, I conclude that the V-*ta-ge*-NP/AP construction is not acceptable when it appears in realis contexts.

(57) a. *買 它 幾百本   書 吧！*
          Mai ta ji-bai-ben   shu ba!
          buy it   several-hundred-CLF book SFP
          'Let's buy several hundreds of books!'
      b. *??張三   可能／也許   買 它 幾百本   書。*
          ??Zhangsan keneng/yexu   mai ta ji-bai-ben   shu.
          Zhangsan possibly/maybe buy it   several-hundred-CLF book
          'Zhangsan possibly bought/maybe buy several hundreds of books.'

In a nutshell, hi^6_2 and *ta* are subject to similar semantic licensing conditions, namely, volition/agentvitity and subjunctivity. However, they differ in the following two respects. First and most obviously, the two pronouns occupy different syntactic positions: although they both have to attach to the preceding verb, hi^6_2 only occurs in the periphery while *ta* has to be followed by a numeral phrase or a result phrase. Second, while hi^6_2 can be preceded by a resultative compound, *ta* is complementarily distributed with resultatives.

(58) a. *吃脫   伊*
          tɕʰiəʔ⁷-tʰəʔ⁷ hi⁶
          eat-ASP$_{inn}$ it
          'eat it up'
      b. *吃（*光）   它 個 三碗   飯／精光*
          chi-(*guang) ta ge san-wan fan/jing-guang
          eat-RES   it   GE three-CLF rice/completely-gone
          'eat up three bowls of rice/eat it up'

On the basis of the observation that the post-*ta-ge* NP/AP shares many properties with the result in a resultative construction and the two are in complementary distribution, Zhang (2017) suggests that the non-referential *ta* in this construction generates as the specifier of ResultP, selected by the verb and headed by *ge*. Her structure is given in (59), with simplification for ease of exposition.

(59) a. *畫了   他 個 四 只 貓*
          hua-le   ta ge si   zhi mao
          draw-PRF it   GE four CLF cat
          'draw four cats'
      b. [$_{InitiationP}$...[$_{ProcessP}$ [$_{Process'}$ *hua-le* [$_{ResultP}$ *ta* [$_{Result'}$ *ge* [$_{NumeralP}$ *si zhi*
          mao]]]]]][23]   (Zhang 2017: 390)

This analysis nicely captures the fact that the post-*ta-ge* element usually marks the boundary of the event and is complementarily distributed with the result phrase.

---

23. In more traditional terms, InitiationP can be seen as *v*P and ProcessP as VP.

It is worth pointing out that the incompatibility of the V-*ta-ge*-NP/AP construction with realis modal (as discussed in Footnote 22) does not falsify her analysis as the structure given above only deals with the event structure, in particular the ResultP, but the modal reading is represented higher than Init(iation)P. Thus, one can always enrich the domain above InitP to capture the modal reading and also the discourse function, which I discuss below.

As has been reported in Iljic (1987) and Chan (1985), the Mandarin expletive *ta* is excluded from subordinate clauses such as relative clauses. Moreover, unlike hi^6_2, even if it is embedded under a modal verb, the construction still sounds unnatural in a relative clause. As shown by the contrast in (60):

(60)   a.   *他們 找到　了 我 想　吃 他 十碗　飯 的 那　家   (MC)
          *tamen zhaodao le   wo xiang chi ta shi-wan fan de na jia
          they   find   ASP I   want eat it ten-CLF rice DE that CLF
          飯店。
          fandian.
          restaurant
          'They found the restaurant where I want to eat ten bowls of rice.'
  b.   尋　只　老伯伯　　*(好／會得／想)　坐坐　伊 個 地方。   (SH)
          $ziŋ^6$ $tsaʔ^7$ $lɔ^6paʔ^7paʔ^7$ *($hɔ^5$/$hue^6təʔ^7$/$ɕiaŋ^5$) zu^6-zu^6 hi^6 $gə^{28}$ $di^6faŋ^1$
          look CLF old man   can/will/wish   sit-RED it DE place
          'Find a place where the old man can/will/wish to take a seat.'

Non-referential *ta* seems to display a strong effect of the Main Clause Phenomenon (MCP henceforth), which refers to transformations that only occur in matrix/root clauses, such as topicalization and Negative Constituent Preposing (Emonds 1970; Hooper & Thompson 1973; Haegeman 2012). The incompatibility of the V-*ta-ge*-NP/AP construction with relative clauses suggests that the expletive use of *ta* might be associated with speaker-oriented functional categories at CP-periphery, which are missing from the latter. The hypothesis is reasonable if we take into consideration the semantics and pragmatics of the V-*ta-ge*-NP/AP construction. According to Yeh (2006), the V-*ta-ge*-NP/AP construction conveys an excessive meaning. The evidence comes from its (in-)compatibility with two evaluative adverbs *cai* 才 and *jiu* 就. The former implies that the situation is considered demanding and the event requires more effort than expected, while the latter implies the opposite, namely, the event requires less effort than expected. The following example shows that the V-*ta-ge*-NP/AP construction can only co-occur with *cai* 才 but not *jiu* 就, indicating that buying one hundred books is more than expected or involves a more demanding situation.

(61)　*這　書　要　買　他　個 一百本　　　?就／才　夠。*
　　　zhe shu yao mai ta ge yibaiben　　　?jiu/ cai gou.
　　　this book want buy it GE one.hundred.CLF then only enough
　　　'(We) have to buy one hundred copies of this book. (Only by doing so, it'll)
　　　then be enough.'　　　　　　　　　　　　　　　　　　　(Yeh 2006: 100)

Built on her analysis, I further argue that this excessive meaning is speaker oriented. Consider (62). Although the V-*ta-ge*-NP/AP construction is embedded under a modal verb, expressing the subject's (i.e. Zhangsan's) desire, the follow-up comment from the speaker sounds contradictory. The pragmatic anomaly can only be explained if we assume that the V-*ta-ge*-NP/AP construction expresses the speaker's evaluation or attitude, namely, in using the construction to describe Zhangsan's desire to eat rice, the speaker is expressing his/her evaluation that it is an excessive amount of rice for him.

(62)　*張三　　想　吃 他 個 十碗　　飯，??我 覺得 太 少　了。*
　　　Zhangsan xiang chi ta ge shi-wan fan, ??wo juede tai shao le.
　　　Zhangsan want eat it GE ten-CLF rice　I think too little SFP
　　　'Zhangsan wants to eat ten bowls of rice, but I think it is too little for him.'

According to Pan (2015), the more subjective an element is, the less likely it can be embedded.[24] Following this line of thought, I assume that it is the speaker-oriented excessive meaning that prevents it from appearing in a relative clause, which is known to have a deficit CP-peripheral domain. Specifically, *ta* can be associated with some speaker-oriented CP-peripheral projection such as $Mood_{evaluative}P$ in the way that it has to be licensed by the latter. Since $Mood_{evaluative}P$ is missing in the relative clause, the non-referential *ta* fails to be licensed, hence the ungrammaticality of (60a). On the contrary, hi^6_2 does not convey speaker-oriented attitude or evaluation, which is why hi^6_2 can appear in any context as long as it gets licensed by subjunctivity.

　　　To summarize, given the position of *ta* in the V-*ta-ge*-NP/AP construction, I analyze *ta* as the Spec of the lower VP and *ge*-NumP/AP as the complement of V (cf. Zhang 2017). Further, in order to capture the fact that *ta* shows strong

---

24. For example, adverbs expressing speaker's attitude is excluded from relative clauses.

(i)　*他 找到　了 張三　　(*居然)　　經常　　去 的 飯店。*
　　　Ta zhaodao le   Zhangsan (*juran)　jingchang qu de fandian.
　　　he find　ASP Zhangsan unexpectedly often　go DE restaurant
　　　'He found the restaurant that Zhangsan (*unexpectedly) often dines in.'

From a cartographic perspective, *juran* is excluded from relative clauses because it must be licensed by $Mood_{evaluative}P$ (by occupying its Spec position), which is lacking in relative clauses.

modal and discourse meaning (evidenced by its incompatibility with realis contexts and those without a full CP domain, i.e. relative clauses), I assume that just as Shanghainese hi^6_2, it needs licensing from a local [+subjunctive] feature at LF, (cf. Su 2012). Differing from hi^6_2, however, it further needs to be licensed by Mood$_{evaluative}$P in the higher CP-peripheral domain, whereby it gets the speaker-oriented excessive evaluation reading. The derivation is illustrated in (63), where the dashed lines represent licensing at LF.[25]

(63) a. *張三　　要　吃 它 個 十碗　飯*
          Zhangsan yao   chi ta ge shi-wan fan
          Zhangsan want eat it GE ten-CLF rice

     b. [$_{Mood_{evaluative}P}$ [$_{Mood_{evaluative}'}$ Mood$_{evaluative}$ [$_{TP}$ *Zhangsan* [$_{T'}$ T [$_{ModP}$ [$_{Mod'}$ *yao*$_{[subjunctive]}$] [$_{vP}$ *chi* [$_{VP}$ *ta* [$_{V'}$

          ~~*chi*~~ [$_{DP}$ *ge* [$_{NumP}$ *shi wan fan*]]]]]]]]]]]

The analysis presented here is effectively in line with Zhang's (2017) ResultP analysis, except that I take a simpler version of event structure, where the lower VP encodes the template [x BECOME y], where *x* is realized by SpecVP and *y* by the complement XP of V. The structure given above can account for the incompatibility of a resultative and the post-*ta-ge* NP/AP: on a par with the double object constructions, which involve the VP-shell structure, also the post-*ta-ge* NP/AP excludes a resultative phrase because they compete for a single V-complement position. Furthermore, the V-*ta-ge*-NP/AP construction is argued to be historically related to double object constructions with the pronoun being semantically bleached (Xu 1987), the VP-shell structure given here, which can also extend to double object constructions, may also capture the development. On the contrary, since Shanghainese hi^6_2 does not have the speaker-oriented reading, it only needs to be in agreement with [+subjunctive] feature locally. Despite the difference, both cases involve elements that surface low in the *v*P domain but are associated with the functional domain in CP-periphery, hence, manifesting cross-domain interactions between low and high categories.

---

25. I do not intend to delve into the technical mechanism at work here. The licensing relation presented by the dashed lines here may either be achieved by LF-movement to the Spec of the functional categories or by long-distance feature agreement. I leave the implementation open for future study.

6.   Concluding remarks

In this paper, I have provided a comprehensive description of the morphological, and syntactic behaviors of the expletive hi^6_2. A clitic analysis is brought forward to account for its distributions. The semantic restrictions on the use of hi^6_2 are also re-examined in detail. Differing from previous assumptions of hi^6_2, which take it to be a subjunctive marker, I have argued that it does not itself mark subjunctive, but instead, it is licensed by the [+subjunctive] feature and that the licensing must obey a locality condition, which requires hi^6_2 be licensed by a clause-bound [+subjunctive] feature and not be blocked by any [−subjunctive] bearing feature.

My analysis also suggests that hi^6_2 is at the intermediate stage of grammaticalization in terms of Wu's (2004) grammaticalization path. A further step of the process could be observed in Cantonese third person singular pronoun *keoi*, which follows the whole VP, i.e. at the sentential level, and is semantically unselective of the preceding verb. I believe the different grammaticalization stages along the syntactic tree of the expletive use of the third person singular pronoun can be found in Chinese dialects, which will be taken up in future study.

Abbreviations

AP	Adjective Phrase	D-pronoun	Disposed-of pronoun
ASP	aspect	DEM	demonstrative
ASP_{inn}	inner aspect	ECP	Empty Category Principle
AspP	aspect phrase	EXP	experience aspect
ASS	assertion	HMC	Head Movement Constraint
CLF	classifier	IP	Inflectional Phrase
CL_{PL}	plural classifier	LF	Logical Form
CP	Complementizer Phrase	MC	Mandarin Chinese

MCP	Main Clause Phenomenon	RED	reduplication
MOD	modal	RES	resultative
NEG	negation	ResultP	Result Phrase
NP	Noun Phrase	SFP	sentence-final particle
NumP	Number Phrase	SH	Shanghainese
OP	Operator	Spec	Specifier
PASS	passive	VP	Verb Phrase
PFV	perfective	XP	X-Phrase

References

Bhatt, Rajesh. 2006. *Covert modality in non-finite contexts* (Interface Explorations 8). Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110197341

Bybee, Joan L. 1998. "Irrealis" as a grammatical category. *Anthropological Linguistics* 40(2). 257–271.

Chan, Ning-ping. 1985. The use of the third-person pronoun in Mandarin Chinese. *Cahiers de Linguistique-Asie Orientale* 14(1). 47–81. https://doi.org/10.3406/clao.1985.1167

Chao, Yuan-Ren. 1968. *A grammar of spoken Chinese*. Berkeley: University of California Press.

Chomsky, Noam. 1981. *Lectures on government and binding* (Studies in Generative Grammar 9). Dordrecht: Foris.

Chomsky, Noam. 1986. *Barriers* (Linguistic Inquiry Monograph 13). Cambridge: The MIT Press.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Martin, Roger & Michaels, David & Uriagereka, Juan & Keyser, Samuel Jay (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge: The MIT Press.

Chung, Sandra & Alan Timberlake. 1985. Tense, aspect, and mood. In Timothy Shopen (ed.), *Language typology and syntactic description, volume 3: Grammatical categories and the lexicon*, 202–258. Cambridge: Cambridge University Press.

Dai, Xiang-ling. 1992. *Chinese morphology and its interface with the syntax*. Columbus: The Ohio State University. (Doctoral dissertation.)

Diesing, Molly. 1992. *Indefinites* (Linguistic Inquiry Monographs 20). Cambridge: The MIT Press.

Emonds, Joseph E. 1970. *Root and structure-preserving transformations*. Cambridge: MIT. (Doctoral dissertation.)

Gan, Min. 2011. Jiujiang fangyan zhong de chuzhishi "keoi"ziju [Disposed sentences with third person singular pronoun *keoi* in Jiujiang dialect]. *Xiandai Yuwen* [Modern Chinese] 2011(7). 146–149.

Givón, Talmy. 1994. Irrealis and the subjunctive. *Studies in Language* 18(2). 265–337. https://doi.org/10.1075/sl.18.2.02giv

Hackl, Martin. 1998. On the semantics of "ability attributions". Cambridge: MIT. (Manuscript.)

Haegeman, Liliane. 2012. *Adverbial clauses, main clause phenomena, and the composition of the left periphery* (The Cartography of Syntactic Structures 8). New York: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199858774.001.0001

Han, Chung-hye. 1998. *The structure and interpretation of imperatives: Mood and force in universal grammar*. Philadelphia: The University of Pennsylvania. (Doctoral dissertation.)

Haverkort, Jacobus Maria Wilhelmus. 1993. *Clitics and parametrization: Case studies in the interaction of head movement phenomena*. Tilburg: Tilburg University. (Doctoral dissertation.)

Hopper, Joan B. & Thompson, Sandra A. 1973. On the applicability of root transformations. *Linguistic Inquiry* 4(4). 465–497.

Huang, C.-T. James. 1982. *Logical relations in Chinese and the theory of grammar*. Cambridge: MIT. (Doctoral dissertation.)

Huang, C.- T. James. 1991. Modularity and Chinese *A*-not-*A* questions. In Georgopoulos, Carol & Ishihara, Roberta (eds.), *Interdisciplinary approaches to language: Essays in honor of S.-Y. Kuroda*, 305–332. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-011-3818-5_16

Huang, C.-T. James. 1999. Chinese passives in comparative perspective. *Tsing Hua Journal of Chinese Studies* 29(4). 423–509.

Iljic, Robert. 1987. Empty *ta* in Mandarin Chinese. *Computational Analyses of Asian and African Languages* 26. 15–34.

Jackendoff, Ray S. 1972. *Semantic interpretation in generative grammar* (Studies in Linguistics Series 2). Cambridge: The MIT Press.

Jiang, Yan & Wang, Yuying. 2016. Counterfactual subjunctive assertions in Shanghai dialect. In Chin, Andy C.-O. & Kwok, Bit-chee & Tsou, Benjamin K. (eds.), *Commemorative essays for Professor Yuen-Ren Chao: Father of modern Chinese linguistics*, 193–201. Taipei: Crane.

Jin, Yaohua. 2016. Cong rencheng daici dao xuni biaoji—Shanghaihua "dongci chongdieshi + *yi*" de yufahua [From personal pronoun to subjunctive marker: On grammaticalization of the VV+[i] construction in Shanghai dialect]. *Fangyan* [Dialect] 2016(4). 420–424.

Kao, Grant. 2014. What makes a Mandarin complement clause subjunctive? In Lam, Zoe & Weber, Natalie (eds.), *Proceedings of Northwest Linguistics Conference 29* (University of British Columbia Working Papers in Linguistics 38), 59–98. Vancouver: University of British Columbia.

Kayne, Richard S. 1975. *French syntax: The transformational cycle*. Cambridge: The MIT Press.

Kayne, Richard S. 1994. *The antisymmetry of syntax* (Linguistic Inquiry Monograph 25). Cambridge: The MIT Press.

Klavans, Judith L. 1985. The independence of syntax and phonology in cliticization. *Language* 61(1). 95–120. https://doi.org/10.2307/413422

Kojima, Miyuki. 2006. Yu "geiyu" xiangguan de rencheng daici wuzhi yongfa [The non-referential uses of personal pronouns related to *give*]. (Paper presented at the IACL-14 & IsCLL-10, Taipei, 25–29 May 2006.)

Ladusaw, William A. 1980. *Polarity sensitivity as inherent scope relations*. Bloomington: Indiana University Linguistic Club. (Doctoral dissertation.)

Laitinen, Lea. 2002. From logophoric pronoun to discourse particle: A case study of Finnish and Saami. In Wischer, Ilse & Diewald, Gabriele (eds.), *New reflections on grammaticalization* (Typological Studies in Language 49), 327–344. Amsterdam: John Benjamins. https://doi.org/10.1075/tsl.49.21lai

Li, Charles N. & Thompson, Sandra A. 1981. *Mandarin Chinese: A functional reference grammar*. Berkeley: University of California Press.

Lin, Jo-wang. 1994. Object expletives, definitesness effect and scope interpretation. In Gonzàlez, Mercè (ed.), *NELS 24: Proceedings of North Eastern Linguistics Society*, vol. 1, 287–301. Amherst: GLSA, University of Massachusetts at Amherst.

Lin, Jo-wang & Zhang, Niina Ning. 2006. The syntax of the non-referential *TA* 'it' in Mandarin Chinese. *Language and Linguistics* 7(4). 799–824.

Lin, Huayong & Li, Minying. 2019. Cong Lianjiang fangyan kan Yueyu "keoi" zi chuzhiju [The Cantonese disposal construction with *keoi*: Evidence from the Lianjiang dialect]. *Zhongguo Yuwen* [Studies of the Chinese Language] 2019(1). 89–101.

Lu, Louis Wei-lun & Su, Lily I-wen. 2009. Speech in interaction: Mandarin particle *Le* as a marker of intersubjectivity. *Zeitschrift für Interkulturellen Fremdsprachenunterricht* 14(1). 155–168.

Lü, Shuxiang. 1985. *Jindai Hanyu zhidaici* [Modern Chinese pronouns]. Shanghai: Academia Press.

Man, Patricia Yuk-Hing. 1998. Postverbal KEOI as a marker for nonasserted bounded clauses. In Matthews, Stephen (ed.), *Studies in Cantonese linguistics*, 53–62. Hong Kong: Linguistic Society of Hong Kong.

Matthews, Stephen & Yip, Virginia. 1994. *Cantonese: A comprehensive grammar*. London: Routledge.

Obata, Masabumi. 1892. *Huyu bian shang* [The Shanghainese dialect guide for visiting traders]. Shanghai: Nihondō Shoten.

Pan, Victor Junnan. 2015. Mandarin peripheral construals at the syntax-discourse interface. *The Linguistic Review* 32(4). 819–868. https://doi.org/10.1515/tlr-2015-0005

Panzeri, Francesca. 2006. Subjunctive relative clauses. In Denis, Pascal & McCready, Eric & Palmer, Alexis & Reese, Brian J. (eds.), *Proceedings of the 2004 Texas Linguistics Society Conference: Issues at the Semantics-Pragmatics Interface*, 60–68. Somerville: Cascadilla Proceedings Project.

Portner, Paul. 2018. *Mood*. New York: Oxford University Press.

Postal, Paul M. 1969. On so-called "pronouns" in English. In Reibel, David A. & Schane, Sanford A. (eds.), *Modern studies in English: Readings in transformational grammar*, 201–224. Hoboken: Prentice-Hall.

Postal, Paul M. & Pullum, Geoffrey K. 1988. Expletive noun phrases in subcategorized positions. *Linguistic Inquiry* 19(4). 635–670.

Qian, Nairong. 2004. Shanghai fangyan zhong de xuniju [On subjunctive sentence of the Shanghai dialect]. *Fangyan* [Dialect] 2004(2). 97–110.

Qiang, Xingna. 2011. Shanghaihua guoqu xuni biaoji "manhao"–jianlun Hanyu fangyan guoqu xuni biaoda de leixing [The past subjunctive mood marker *manhao* in the Shanghai dialect]. *Zhongguo Yuwen* [Studies of the Chinese Language] 2011(2). 155–163.

Roberts, Ian & Roussou, Anna. 2003. *Syntactic change: A minimalist approach to grammaticalization* (Cambridge Studies in Linguistics 100). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511486326

Roberts, Ian. 2011. Head movement and the minimalist program. In Boeckx, Cedric (ed.), *The Oxford handbook of linguistic minimalism*, 195–219. New York: Oxford University Press.

Su, Yu-Ying Julia. 2012. *The syntax of functional projections in the vP periphery*. Toronto: University of Toronto. (Doctoral dissertation.)

Sui, Na & Hu, Jianhua. 2016. Dongci chongdie de jufa [The syntax of verbal reduplication in Chinese]. *Dangdai Yuyanxue* [Contemporary Linguistics] 18(3). 317–338.

Sui, Na & Hu, Jianhua. 2019. Jumo zhuci "kan" de jufa he yuyi [The syntax and semantics of the tentative particle *kan* in Chinese: From the perspective of the new descriptivism]. *Dangdai Yuyanxue* [Contemporary Linguistics] 21(3). 350–363.

Sun, Chaofen. 1996. *Word-order change and grammaticalization in the history of Chinese*. Stanford: Stanford University Press.

Tang, Sze-Wing. 2003. *Hanyu fangyan yufa de canshu lilun* [A parametric theory of Chinese dialectal grammar]. Beijing: Peking University Press.

Travis, Lisa deMena. 1984. *Parameters and effects of word order variation*. Cambridge: MIT. (Doctoral dissertation.)

Travis, Lisa deMena. 2010. *Inner aspect: The articulation of VP* (Studies in Natural Language and Linguistic Theory 80). Dordrecht: Springer. https://doi.org/10.1007/978-90-481-8550-4

Tsai, Wei-Tien Dylan. 2015. On the topography of Chinese modals. In Shlonsky, Ur (ed.), *Beyond functional sequence* (The Cartography of Syntactic Structures 10), 275–294. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780190210588.003.0015

Tsai, Wei-Tien Dylan. 2018. High applicatives are not high enough: A cartographic solution. *Lingua Sinica* 4. 1–21. (Article no. 2.) https://doi.org/10.1186/s40655-018-0034-y

Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry* 26(1). 79–123.

van Riemsdijk, Henk. 1999. Clitics: A state-of-the-art report. In van Riemsdijk, Henk (ed.), *Clitics in the languages of Europe*, 1–30. Belin: Mouton de Gruyter. https://doi.org/10.1515/9783110804010.1

Wu, Xiu-Zhi Zoe. 2004. *Grammaticalization and language change in Chinese: A formal view*. New York: Routledge Curzon. https://doi.org/10.4324/9780203420645

Wu, Yicheng & Matthews, Stephen. 2010. How different are expletive and referential pronouns? A parsing perspective. *Lingua* 120(7). 1805–1820. https://doi.org/10.1016/j.lingua.2009.11.005

Xu, Dan. 1987. *Ta* non référentiel. *Cahiers de Linguistique-Asie Orientale* 16(2). 259–276. https://doi.org/10.3406/clao.1987.1232

Xu, Liejiong. 1999. A special use of the third person singular pronoun. *Cahiers de Linguistique-Asie Orientale* 28(1). 3–22. https://doi.org/10.3406/clao.1999.1542

Xu, Liejiong & Shao, Jingmin. 1998. *Shanghai fangyan yufa yanjiu* [Studies on Shanghainese grammar]. Shanghai: East China Normal University Press.

Yeh, Jui-chuan. 2006. On the excessive construction in Mandarin Chinese. *Concentric: Studies in Linguistics* 32(2). 93–118.

Yuan, Yulin. 2003. Wuzhi daici "ta" de jufa yuyi gongneng [The syntactic and semantic functions of the non-referential pronoun *ta*]. In Editorial Office of *Zhongguo Yuwen* (ed.), *Yufa yanjiu he tansuo* [Research & explorations in Chinese grammar], vol. 12, 44–64. Beijing: The Commercial Press.

Zhang, Niina Ning. 2005. Juggling singular and plural pronouns. Chiayi: National Chung Cheng University. (Manuscript.)

Zhang, Niina Ning. 2007. A syntactic account of the direct object restriction in Chinese. *Language Research* 43(1). 53–75.

Zhang, Niina Ning. 2017. Unifying two general licensors of completive adverbials in syntax. *Linguistics* 55(2). 371–411. https://doi.org/10.1515/ling-2016-0042

Zhu, Dexi. 1982. *Yufa jiangyi* [Lectures on grammar]. Beijing: The Commercial Press.

Zhu, Jialei. Forthcoming. Shanghaihua zhong "dongjieshi-tʰəʔ⁷" de jufa jiegou [The syntax of VR-tʰəʔ⁷ construction in Shanghainese]. (Accepted by *Yuyan Kexue* [Linguistic Sciences].)

Zwicky, Arnold M. 1977. *On clitics*. Bloomington: Indiana University Linguistics Club.

Zwicky, Arnold M. & Pullum, Geoffrey K. 1983. Cliticization vs. inflection: English *n't*. *Language* 59(3). 502–513. https://doi.org/10.2307/413900

Author's address

Jialei Zhu
Institute of Linguistics
Shanghai International Studies University
Room 617, Bd. 5, No. 550 West Dalian Road
Hongkou District, Shanghai 200083
China
zhujialei@shisu.edu.cn