ON HISTORICAL SEMANTIC CHANGES
OF THE THAI MORPHEME *HÂJ**

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Abstract
The present paper investigates historical semantic changes of the Thai multifunctional morpheme *hâj* by analyzing actual tokens of *hâj* expressions in Thai inscriptions produced from the end of the thirteenth century[1] through the twentieth century. Having examined the diachronic corpus data, I consider that the following grammaticalization pathway of *hâj* is most plausible: (a) verb for change of location (caused motion) > (b) verb for change of state (induced situation) > (c) complementizer preceding complement clause for either a non-volitional or volitional situation of irrealis[2] (such as inducive and desiderative situations) > (d) complementizer preceding complement clause for volitional situation of irrealis (such as permissive and directive/coercive situations). On this basis, I assume that the notion of the event participant's volition had nothing to do with early semantic changes of *hâj* constructions.
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1. Introduction

The modern Thai morpheme *hâj* is multifunctional. It is frequently used as an oblique case marker (e.g., benefactive case marker, as exemplified in (6)) or irrealis complementizer (e.g., desiderative complementizer, as in (16)).[3] Notwithstanding its frequent use as a functional morpheme, it still retains the verbal meaning 'to transfer/give'. The prototypical structure of its use as a verb of transferring/giving is given in (1) and illustrated by example in (2) to (4).[4]

(1)   Verb of transferring/giving:
        [agent-NP **hâj** theme-NP (deictic-V/dative-P) goal/recipient-NP], e.g., (2) to (4)

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1   The dating of the Ram Khamhaeng Inscription, which is generally assumed to be the oldest Thai inscription, has been controversial for the past few decades (cf. Chamberlain 1991, Ṇa Nagara and Griswold 1992: 806–821). In this study, I follow the general view that it was engraved in 1292.

2   By the term 'irrealis,' I mean 'non-factual' or 'unreal' (cf. Palmer 2001: 1).

3   A caveat is in order here: In fact, the functional morpheme *hâj* is not necessarily solely responsible for marking a specific functional meaning. Normally, a construction that includes it, as a whole, encodes a certain grammatical meaning. For example, *hâj* in a desiderative construction composed of a desiderative verb (such as *khɔ̌ː* 'beg' or *jàːk* 'want') and its complement clause, by itself, does not denote a desiderative meaning; however, the whole construction does. Moreover, as will be discussed in Section 3, the morpheme *hâj* is equivocal between a verb and a complementizer. In this paper, however, *hâj* as a constituent of, say, a desiderative construction will be called a 'desiderative marker' or 'desiderative complementizer' for the sake of convenience.

4   Besides those that are cited from the inscription corpora, *hâj* expressions in this paper were composed for the purpose of this research. The following abbreviations are used in the English glosses: BEN = benefactive, CAUS = causative, CLF = classifier, DAT = dative, DES = desiderative, DIR = directive/coercive, IND = inducive, IRR = irrealis, MAL = malefactive, NEG = negative, PER = permissive, PRON = pronoun, and PURP = purposive.

(2) a.   *kháw*   ***hâj***   *túkkata:*   *dèk dèk*
              PRON   transfer/give   doll   children
              'He transferred a doll to the children.' / 'He gave the children a doll.'

      b.   *kháw*   *mâj*   ***hâj***   *túkkata:*   *dèk dèk*
              PRON   NEG   transfer/give   doll   children
              'He did not transfer a doll to the children.' / 'He did not give the children a doll.'

(3) a.   *kháw*   ***hâj***   *túkkata:*   *paj*   *dèk dèk*
              PRON   transfer/give   doll   go   children
              'He transferred a doll away to the children.' / 'He gave the children a doll.'

      b.   *kháw*   *mâj*   ***hâj***   *túkkata:*   *paj*   *dèk dèk*
              PRON   NEG   transfer/give   doll   go   children
              'He did not transfer a doll away to the children.' / 'He did not give the children a doll.'

(4) a.   *kháw*   ***hâj***   *túkkata:*   *kɛ̀:*   *dèk dèk*
              PRON   transfer/give   doll   DAT   children
              'He transferred a doll to the children.' / 'He gave the children a doll.'

      b.   *kháw*   *mâj*   ***hâj***   *túkkata:*   *kɛ̀:*   *dèk dèk*
              PRON   NEG   transfer/give   doll   DAT   children
              'He did not transfer a doll to the children.' / 'He did not give the children a doll.'

Generally, the primary object of the verb of transferring/giving refers to either a person receiving a thing (goal/recipient) or a thing transferred/given to the person (theme). In examples (2) to (4), the referent of the primary object of the verb *hâj* is not a goal/recipient (*dèk dèk* 'children') but a theme (*túkkata:* 'doll'). Speakers of languages that express a goal/recipient with the primary object (e.g., English and Chinese) view the event of transferring/giving from the perspective of human interaction, whereas speakers of languages that identify a theme with the primary object (e.g., Thai and French) view the same event from the perspective of object manipulation (Newman 2002). Accordingly, these two language types differ in the basic meaning of the verb of transferring/giving. For instance, the English verb *give* represents 'transfer of control over a thing (transfer of possession)',[5] whereas the Thai verb *hâj* represents 'transfer of the position of a thing'. In other words, broadly, *hâj* is basically a verb of change of location (i.e., caused motion).[6] This paper will show that, as of several hundred years ago, the verb *hâj* has been used to express the sense of 'change of location (caused motion)' as well as its metaphorically extended sense of 'change of state (induced situation)'. Moreover, serial verb constructions including *hâj* with the meaning 'change of state (induced situation)' were syntactically reanalyzed such that *hâj* was reinterpreted to function as an irrealis complementizer (see Section 3).[7]

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5   More specifically, "a Giver volitionally causes a movement or transfer of control or ownership to a Recipient, resulting in benefit to the Recipient" (Lord, Yap, and Iwasaki 2002: 233).

6   Similarly, Thepkanjana (2010) explains the event type of the Double Object Construction in Thai (e.g., (2)) as follows. The construction expresses such an event that 'an agent does something which results in the change of position or condition of an entity' (p. 418). This event consists of the following two facets of a single objective event: (a) An agent does something that physically or abstractly moves an entity, and (b) the motion of that entity proceeds towards a target (or 'goal' in my term). Therefore, the verbs appearing in the construction inherently require a theme and a target (goal). The notion of recipient, on the other hand, is derived pragmatically from the interaction between the two event facets. In other words, the event of transferring an entity to a recipient is pragmatically interpreted from the event of causing an entity to move towards a target (goal).

7   A reviewer was not convinced by my argument in an earlier version of this paper and maintained that the basic lexical meaning of *hâj* is 'transfer of control' and this meaning has triggered functional uses of *hâj*. This is the same view as the existing studies on grammaticalization pathways of *hâj* (see Section 2). The reviewer commented that the earliest inscription contain instances of *hâj* that are not compatible with the meaning of caused motion, and that

In contemporary Thai, *hâj* is considered to serve as a wide range of functional markers (to be precise, it is used as a constituent of a wide range of grammatical constructions): benefactive marker (5), sentence modal benefactive or malefactive marker (7), causative marker (10), inducive marker (12), desiderative marker (15), purposive marker (17), and permissive or directive/coercive marker (20). This paper focuses on historical changes of the verb *hâj* into the irrealis complementizer (i.e., the inducive, desiderative, purposive, permissive, or directive/coercive marker); it will not investigate the verb's historical change into the benefactive/malefactive marker. My analysis of the inscription data shows that constructions with *hâj* as an irrealis complementizer were not directly related to constructions with *hâj* as a benefactive/malefactive marker.[8]

The structure of constructions with benefactive case marker *hâj* is shown in (5), and an example is provided in (6). In this usage, *hâj* is preceded by a volitional action verb and followed by a noun phrase that specifies the person benefited by the action.

(5)   Benefactive case marker:
        [human-NP volitional-VP **hâj** human-NP], e.g., (6)

(6)   *kháw   tham   ʔaːhǎːn   **hâj**   mêː*
        PRON   make   dishes   BEN   mother
        'He cooked for his mother.'

Hâj is called the sentence modal benefactive or malefactive marker when it is not followed by a noun phrase (see (7)). Examples (8) and (9) exemplify this usage.

(7)   Sentence modal benefactive or malefactive marker:
        [human-NP volitional-VP **hâj**], e.g., (8), (9)

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the purported caused motion expressions with *hâj* do not evidently indicate a change of location. In my view, even if many instances of the verb *hâj* found in discourses of early Thai inscriptions seem to represent 'transfer of control' or 'transfer of possession' because the subject and object noun phrases of *hâj* refer, respectively, to a person transferring/giving a thing (agent) and to either the thing transferred/given (theme) or a person receiving the thing (recipient), actually these instances are compatible with the meaning of 'change of location (caused motion)' (cf. footnote 6). There is good evidence in favor of this view. A deictic motion verb (*paj* 'go' or *maː* 'come') is allowed to follow *hâj* to specify the direction of a caused motion represented by *hâj*, if necessary. Both contemporary and older Thai expressions attest possible co-occurrence of the verb *hâj* and a deictic motion verb (e.g., (3), (32), and (33)). From my perspective, it is fairly natural to assume that the abstract concept of 'transfer of the control over a thing (transfer of possession)' was derived from the concrete concept of 'transfer of the location of a thing (change of location)' and that the latter concrete concept of 'change of location (caused motion)' also gave rise to the rather abstract concept of 'change of state (induced situation)' (see Section 3). Given the limited availability of relevant linguistic data, however, it is difficult to find decisive evidence to fully support any hypothesis concerning the original meaning and early semantic changes of *hâj*. In this paper, I will attempt to show that my hypothesis is plausible, based on a close examination and interpretation of the surviving diachronic corpus data.

[8]   Iwasaki and Yap (2000: 378) and Lord, Yap, and Iwasaki (2002: 223) mention that the morpheme *hâj* has been used as benefactive marker since the thirteenth century. However, I could not find tokens of *hâj* functioning as a benefactive marker in the inscriptions produced before the twentieth century (see Table 2 in Section 3). A reviewer took example (i) as the benefactive use of *hâj* in the fourteenth century. However, I consider that in example (i), three synonymous verbs are concatenated; the first two verbs *ʔoːj* and *thaːn* in combination mean 'offer (something as a gift),' and the last verb *hâj*, just like the second verb *hâj* in (ii), when combined with the dative case marker *kɛ̀ɛ* plus a recipient noun phrase, conveys the sense of transferring/giving something to someone.

    (i)   *ʔoːj thaːn   hâj   kɛ̀ː   thân*
          offer   transfer/give   DAT   PRON
          '(He) offered (them) as a gift to him.' [2] (1341–1367)

    (ii) *ʔaw chûː ton   hâj   kɛ̀ː   phráʔsahǎːj*
          take name self   transfer/give   DAT   ally
          '(He) took (his) own name and gave it to (his) ally.' [2] (1341–1367)

(8)   *kháw*   *tham*   *ʔaːhǎːn*   **hâj**
        PRON   make   dishes   BEN
        'He cooked for (me).'

(9)   *chán*   *dàː*   **hâj**
        PRON   abuse   MAL
        'I spoke ill of (him).'

The structure of expressions with causative marker *hâj* is shown in (10), and example is provided in (11). *Hâj* in such expressions is labeled as the causative marker because this usage apparently corresponds to the causative usage of the English verb *make*; that is, no verb precedes it, and the following verb denotes a volitional action.

(10)   Causative marker:
        [human-NP **hâj** human-NP volitional-VP], e.g., (11)

(11) a. *chán*   **hâj**   *kháw*   *maː*
        PRON   CAUS   PRON   come
        'I made him come.'

    b. *chán*   *mâj*   **hâj**   *kháw*   *maː*
        PRON   NEG   CAUS   PRON   come
        'I did not make him come.'

Hâj is called an inducive complementizer when the complement verb following it describes a non-volitional state or change that characterizes the manner or result of a less purposeful action represented by the matrix verb preceding *hâj*. The structure of such constructions is shown in (12) and illustrated by example in (13) and (14). Sometimes this usage is called adverbial marking.

(12)   Inducive complementizer (adverbial marker):
        [human-NP VP **hâj** non-volitional-VP], e.g., (13), (14)

(13)   *nɔːn*   **hâj**   *sabaːj*
        lie.down   IND   be.comfortable
        'Lie down comfortably!'

(14)   *chán*   *càʔ*   *cháj*   *man*   *mâj*   **hâj**   *lʉ̌a*
        PRON   IRR   use   PRON   NEG   IND   be.left
        'I will use it not to make (it) be left over.' / 'I will use it so (it) is not left over.'

Additionally, *hâj* may be used as a desiderative complementizer (see (15) and (16)), where the matrix verb is desiderative and its complement expresses a desired, non-factual situation.

(15)   Desiderative complementizer:
        [human-NP desiderative-V **hâj** NP VP], e.g., (16)

(16) a. *chán*   *jàːk*   **hâj**   *kháw*   *maː*
        PRON   want   DES   PRON   come
        'I wanted to make him come.'

b. *chán   jà:k   mâj   **hâj**   kháw   ma:*
   PRON   want   NEG   DES   PRON   come
   'I wanted not to make him come.' / 'I wanted to make him not come.' [9]

When the matrix verb designates a volitional action with a clear purpose and the complement verb specifies an expected resultant situation, as in (18) and (19), *hâj* is called the purposive complementizer. The purposive event comprises a concrete cause activity in tandem with a supposed result situation. See (17) for the structure of constructions with purposive complementizer *hâj*.

(17)   Purposive complementizer:
        [human-NP volitional-VP **hâj** NP VP], e.g., (18), (19)

(18)   *chán   thɔ̂:t   nɯ́a   **hâj**   sùk*
        PRON   fry   beef   PURP   be.cooked
        'I fried the beef for it to become well done.'

(19)   *chán   pìt   pratu: mâj   **hâj**   kháw   khâw   ma:*
        PRON   close   door   NEG   PURP   PRON   enter   come
        'I closed the door not to make him come in.' / 'I closed the door to make him not come in.'

Both desiderative and purposive constructions, (15) and (17) respectively, consist of two verbal units that express a factual cause event and a non-factual result event. *Hâj* appearing between the two verbal units is regarded as an irrealis complementizer. However, these constructions differ with regard to the volitional sense of the matrix verb before *hâj*. The matrix verb in the purposive construction (e.g., *thɔ̂:t* 'fry' in (18), *pìt* 'close' in (19)) involves the event participant's volition, whereas that in the desiderative construction (e.g. *jà:k* 'want' in (16)) does not. On the other hand, the complement verb after *hâj* in the two constructions (e.g., *sùk* 'be cooked' in (18), *khâw ma:* 'come in' in (19), *ma:* 'come' in (16)) may or may not involve it. If the verbs before and after *hâj* both denote a volitional action, then *hâj* is specifically regarded as a permissive or directive/coercive complementizer (see (20)). Expressions of permissive causation, such as in (21), express that the causer does not prevent the causee from doing (or not doing) something, and those of directive/coercive causation, such as in (22), represent that the causer peremptorily makes the causee do (or not do) something.

(20)   Permissive or directive/coercive comlementizer:
        [human-NP volitional-V **hâj** human-NP volitional-VP], e.g., (21), (22)

(21) a. *chán   jɔ:m   **hâj**   kháw   ma:*
        PRON   allow   PER   PRON   come
        'I allowed him to come.'

b. *chán   jɔ:m   mâj   **hâj**   kháw   ma:*
   PRON   allow   NEG   PER   PRON   come
   'I allowed not to make him come.' / 'I allowed him not to come.'

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9   As I was told by a reviewer that the serial order of the two lexical items *jà:k* 'want' and *mâj* 'NEG' in (16b) is at best marginally grammatical in Thai, I searched for samples with this collocation pattern in the Thai National Corpus [http://www.arts.chula.ac.th/tnc2/] and found a number of expressions containing the phrase *jà:k mâj* … 'want not to…' like those below:

(i)   *jà:k   mâj   bɔ̀:k   khwa:m ciŋ*   (ii)   *jà:k   mâj   jùt*
       want   NEG   tell   truth   want   NEG   halt
       '(He) wants not to tell the truth.'   '(They) want not to halt.'

(22) a.   *chán*   *sàŋ*   ***hâj***   *kháw*   *maː*
          PRON   order   DIR   PRON   come
          'I ordered him to come.'

    b.   *chán*   *sàŋ*   *mâj*   ***hâj***   *kháw*   *maː*
          PRON   order   NEG   DIR   PRON   come
          'I ordered not to make him come.' / 'I ordered him not to come.'

The above examples of various *hâj* constructions demonstrate that *hâj* is possibly negated, except for when it is used as benefactive/malefactive marker. Verbs in Thai are simply defined as 'morphemes that occur immediately after the negative marker *mâj*' (Prasithrathsint 2010: 46) or, simply, morphemes that can be directly negated. Therefore, we may say that the benefactive/malefactive marker *hâj* (i.e., *hâj* in constructions (5) and (7)), which cannot be negated, has lost its fundamental verbal characteristic and now is a full-fledged functional morpheme. However, the causative-marker-like *hâj* (i.e., *hâj* in construction (10)) and the complementizer-like *hâj* (i.e., *hâj* in constructions (12), (15), (17), and (20)), which can be negated, still retain the verbal characteristic. In this respect, Bisang (1996) correctly regards the causative-marker-like *hâj* and the complementizer-like *hâj* not as functional morpheme proper but as causative verb and conjunctional verb, respectively (see Section 2). My claim is that it is adequate to treat the complementizer-like *hâj* following and preceding a verbal unit (so-called inducive, desiderative, purposive, and permissive or directive/coercive complementizer in this paper) as the hybrid between a verb for change of state (induced-situation verb) and an irrealis complementizer (see Section 3).

Thus far, a number of studies have examined the grammaticalization of the morpheme *hâj* (viz., the process by which functional morphemes such as the case marker and complementizer develop out of the verb *hâj*) and posited several different grammaticalization pathways (see Section 2). However, they did not provide sufficient empirical evidence in support of their hypotheses. Therefore, opinions are still divergent as to exactly what changes *hâj* constructions have undergone. To tackle the controversial issue of historical semantic changes of the verb *hâj* into irrealis complementizers, this study uses a corpus-driven approach. I collected a total of 1,129 tokens of expressions with *hâj* and its variant *hûɯ* from Thai inscriptions (Takahashi 2009). It should be noted, however, that the inscription data have limitations in terms of quantity and variety of genre. Only a few hundred inscriptions have survived, and most of them are short. In addition, their contents are largely about matters related to Buddhism and/or royal politics. Nevertheless, they are useful for the purpose of this study. As their estimated production years range over seven hundred years, we can detect a relatively long-range change occurring in the use of a certain lexical item or construction.

The remainder of this paper is organized as follows. In Section 2, I will review previous studies on grammaticalization pathways of *hâj*. In Section 3, I will present my hypothesis on the grammaticalization pathway of *hâj* into the irrealis complementizer, referring to historical changes of *hâj* constructions observable in the inscription corpus data. Finally, Section 4 summarizes the main points of the study findings.

2. Existing hypotheses on grammaticalization pathways of *hâj*

A number of previous studies have presented hypotheses regarding grammaticalization pathways of *hâj*, though their hypotheses are not fully based on diachronic language data. The main arguments of their representatives are summarized below.

Bisang (1996), Iwasaki and Yap (2000), and Iwasaki (2004) consider that there are two different grammaticalization pathways, one of which involves the causative or purposive marker and another that involves the benefactive marker. I concur with this view; therefore, in this study, I will not deal with the latter grammaticalization pathway leading to the benefactive marker.

According to Bisang (1996), the irrealis complementizer *hâj* ('conjunctional verb' in his words), which is preceded by a desiderative or volitional action verb, derived from the causative marker *hâj* ('causative verb' in his words), which is not preceded by a verb. Likewise, Thepkanjana and Uehara (2008) suggest that the purposive marker *hâj*, which is preceded by a volitional action verb, is derived from the

causative marker *hâj*. Iwasaki and Yap (2000) and Iwasaki (2004), on the other hand, argue for the opposite derivational direction, namely, from the purposive marker *hâj* to the causative marker *hâj*. Lord, Yap, and Iwasaki (2002) provide yet another hypothesis that the permissive marker *hâj*, which can be preceded by a permissive verb (e.g., *ʔànújâat* 'permit'), gave rise to both the directive/coercive marker *hâj* and purposive marker *hâj*.

Regarding the derivation of the inducive marker *hâj*, all the studies mentioning it—Song (1997), Iwasaki and Yap (2000), Iwasaki (2004), and Thepkanjana and Uehara (2008)—posit the same directionality of the derivation: from the causative or purposive marker *hâj* to the inducive marker *hâj*. In other words, they commonly assume the derivation from the volitional to the non-volitional marking. This is because they believe that the notion of volition was key to the historical semantic extension of *hâj*. Many scholars who have examined the grammaticalization of *hâj* have implied their belief that the sense of volition or purpose inherently resides in the original verb *hâj* and that it was gradually bleached in the process of grammaticalization. Their opinions are summarized in (a) to (e):

(a) With respect to the assumed semantic shift of *hâj* from the verb to the permissive marker, Lord, Yap, and Iwasaki (2002: 225) state that "the core meaning of 'give' involves a <u>volitional act</u> and the Permissive function of 'give' retains this <u>volitionality</u> in Thai."

(b) Assuming the development of *hâj* from the purposive marker to the causative marker, Iwasaki and Yap (2000: 378) comment that "this development must have also been assisted by the cognitive affinity between <u>the act of giving</u> and <u>causation</u>."

(c) Regarding the purposive marker *hâj* in the expression *kin hâj ʔìm* 'Eat you fill!', which is assumed to directly derive from the verb of transferring/giving, Newman (1996: 180) writes that "[*hâj* in this example] serves to connect two clausal structures with the meaning that the action of the first clause [*kin* 'eat'] is done <u>in order</u> that the action/event of the second clause [*ʔìm* 'be sated'] may take place."

(d) In the explanation of the cognitive mechanism underlying the assumed shift of *hâj* from the verb to the adverb-formation morpheme (inducive marker), Song (1997: 338) argues that "from <u>the purpose of a given action</u> one can implicate the manner."

(e) On the assumed shift of *hâj* from the purposive marker to the inducive marker, Iwasaki (2004: 351) says, "when the lexical meaning of *hâj* [i.e., giving some object to someone] gets weakened, the <u>purposive meaning</u> also gets weakened, and in some cases *hâj* can be also interpreted as the inducive sense."

However, I do not share these views, as the inscription corpus data include impersonal *hâj* expressions irrelative to an agent's volition. See example (23).[10]

(23) mahǎ: mê:k   tâŋ   khûun   **hâj**   thěw tha:n nám   tòk   loŋ   ma:
      clouds   stand   ascend   induce   rain   fall   descend   come
      'The clouds appeared, which induced a rainfall.' [155] (1782–1925)[11]

The situation described in (23) does not involve a human being. Thus, we can see that neither the matrix verb nor complement verb of old *hâj* expressions required agency-related semantic features such as volition and control. Though the impersonal usage of *hâj* is not allowed in modern Thai,[12] it was not ungrammatical up to

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[10] *Hâj* expressions cited from the inscriptions are transcribed in their phonetic equivalents in modern Thai. The author has translated them into English.

[11] The bracketed number is the source inscription's ID number, and the parenthesized number indicates its estimated production year.

[12] The referent of the clausal subject of *hâj* expressions in contemporary Thai seems restricted to a human being in the semantic role of agent or experiencer. Rangkupan (2007: 230) mentions, "*hâj* requires an animate subject with an intent towards an action of another participant." Yap and Iwasaki (1998: 432) comment, "[the causative marker] *hâj* requires a volitional causer and a volitional causee." In a similar vein, Iwasaki and Yap (2000: 375) state, "the peculiar semantic restriction imposed on the *hâj* causative in Thai [is that] both causer and causee be agentive and volitional." Lord, Yap, and Iwasaki (2002: 224) point out, "in Thai, inanimate NPs are only marginally acceptable

around the nineteenth century. Given that uses of *hâj* in the past were not necessarily associated with agency-related concepts such as volition and control, it is reasonable to assume that those concepts were not the motivating factor for *hâj*'s early change from a lexical verb to functional morpheme.

Let us consider *hâj* expressions in (24) which are from inscriptions engraved before the fifteenth century.

(24) a. | *kháw* | ***hâj*** | *ku:* | *ʔa:râ:tthana:* |
|---|---|---|---|
| PRON | induce | PRON | invite |

'They asked me to invite (the relics).' [2] (1367)

b. | *míʔ* | ***hâj*** | *phón* | *ʔà:tja:* | *thân* | *nán* |
|---|---|---|---|---|---|
| NEG | induce | be.beyond | crime | authority | that |

'(They) did not let (him) out of the crime.' [38] (1313–1433)

From the perspective of those who study contemporary Thai, *hâj* in these examples functions as causative marker. However, it is doubtful whether *hâj* truly acts as a full-fledged causative marker. Crucially, old *hâj* expressions like those in (24) do not necessarily involve the event participant's volition, as the English translations in (24) allude to. I would rather assume that, in former days, when *hâj* expressions did or did not involve the meaning of volition, *hâj* was basically a verb for a change of state (induced situation) rather than a causative marker.

In addition to the causative-marker-like *hâj* of old and present-day Thai (e.g., (24) and (11), respectively), the complementizer-like *hâj* of old and present-day Thai, for example (25) and (26), also holds a verb-specific characteristic; in other words, it can be negated.

(25) | *hâ:m* | *míʔ* | ***hâj*** | *khǎ:j* |
|---|---|---|---|
| prohibit | NEG | induce/DIR | sell |

'(He) forbade (them) to sell.' [13] (1510)

(26) | *chán* | *chûaj* | *kháw* | *mâj* | ***hâj*** | *ta:j* |
|---|---|---|---|---|---|
| PRON | help | PRON | NEG | induce/PURP | die |

'I helped him and did not induce the situation that (he) died.' / 'I helped him not die.'

Given that the causative-marker-like or complementizer-like *hâj* thus preserves its verbiness, it is fair to say that it has not completely lost its verbal sense 'to cause a change of state (to induce a situation)'. It follows that the status of the lexical item *hâj* in a serial verb construction is always possibly equivocal between a verb and a functional morpheme. Consider *hâj* in (26), for example. We may take it as a verb meaning 'to cause a change of state (to induce a situation)', which is followed by its complement verb *ta:j* 'die'. In this case, we interpret (26) as having the meaning, 'I helped him and did not induce the situation that he died; I helped him and did not make him dead.' At the same time, we may regard *hâj* in (26) as a complementizer introducing the preceding verb phrase's complement, and render (26) that 'I helped him in order for him not to die; I helped him not die.' (For further details of the ambiguous nature of *hâj*, see Section 3.)

The verb *hâj* that means 'to cause a change of state (to induce a situation)' may be followed by either a verb or clause (i.e., a verb plus its nominal arguments, or a series of verbs plus their nominal arguments). For example, see (27a) and (27b). The complement of *hâj* in (27a) is a verb (*ma:* 'come'), whereas that of *hâj* in (27b) is a clause (*phɔ̂: ma:* 'his father comes').

(27) a. | *chán* | *bɔ̀:k* | *kháw* | ***hâj*** | *ma:* |
|---|---|---|---|---|
| PRON | tell | PRON | induce/PURP | come |

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after 'give' [*hâj*]." According to them, the expression, *hâj kâwʔî: jù: troŋ nán* 'Let the chair stay there' is marginally acceptable in some contexts.

'I told him and made (him) come.' / 'I told him to come.'

b. *chán*   *bɔ̀ːk*   *kháw*   **hâj**   *phɔ̂ː*   *maː*
   PRON   tell   PRON   induce/PURP   father   come
   'I told him and made (his) father come.' / 'I told him to make (his) father come.'

Here, it is worth noting that some other verbs exhibit similar syntactic behavior. For instance, the perception verb *hěn* 'see', the communication verb *rîak* 'call', and the action verb *tham* 'do' are not only followed by an object noun phrase but also by a clause, as illustrated in (28) to (30).

(28) a. *chán*   *hěn*   *kháw*
     PRON   see   PRON
     'I saw him.'

b. *chán*   *hěn*   *kháw*   *wîŋ*   *nǐi*   *paj*
   PRON   see   PRON   run   flee   go
   'I saw him running away.'

(29) a. *chán*   *rîak*   *kháw*
     PRON   call   PRON
     'I called him.'

b. *chán*   *rîak*   *kháw*   *khâw*   *maː*
   PRON   call   PRON   enter   come
   'I called him to come in.'

(30) a. *chán*   *tham*   *kaːn bâːn*
     PRON   do   homework
     'I did (my) homework.'

b. *chán*   *tham*   *mîːt*   *bàːt*   *nǐw*
   PRON   do   knife   cut   finger
   'I moved the knife, which cut (my) finger.'

Thus, it is clear that in Thai, it is not exclusively a syntactic property of complementizers to precede a clause.

3. *Hâj*'s grammaticalization pathway into irrealis complementizers

Based on my analysis of the inscription corpus data, I posit the historical process of grammaticalization of the lexical verb *hâj* into irrealis complementizers as the following. Formerly, the inducive, desiderative, and purposive complementizers formed an inclusive category of non-specific (volition-neutral) irrealis complementizer that co-occurred with a volitional or non-volitional matrix verb and volitional or non-volitional complement verb. The important point is that this category could subsume specific (volition-involving) irrealis complementizers that co-occurred with a volitional matrix verb and volitional complement verb. Furthermore, I posit that those irrealis complementizers were all derived from the versatile verb *hâj* meaning 'to cause a change of state (to induce a situation)' (in short, an 'induced-situation verb'), which, in turn, was derived from the original verb *hâj* meaning 'to cause a change of location (to transfer the position of a thing)' (in short, a 'caused-motion verb').

     Table 1 lists the main clausal patterns of *hâj* expressions gathered from the inscription data that are classified and aligned on the basis of the expressions' syntactic and semantic properties as well as the patterns' varying use frequency, in particular, gradual increase or decrease in the occurrence of each pattern.

Table 1. Main clausal patterns of *hâj* expressions in Thai inscriptions.

Pattern A
hâj as a verb for change of location (caused-motion verb)
[(NP) **hâj** (theme-NP) (deictic-V) ((dative-P) human-NP)], for example, (32), (33)
Pattern B
hâj as a verb for change of state (induced-situation verb)
[(NP) (VP) **hâj** (NP) VP], for example, (23) to (25), (35) to (37)
Pattern B+
hâj as an inducive complementizer (or induced-situation verb followed or preceded by non-volitional verb)
[(NP) VP **hâj** non-volitional-VP], for example, (36)
[(NP) non-volitional-VP **hâj** VP], for example, (37)
Pattern B++
hâj as an apparent causative marker (or induced-situation verb preceded by no verb)
[(human-NP) **hâj** (human-NP) volitional-VP], for example, (24), (25)
Pattern C
hâj as a desiderative complementizer (or induced-situation verb preceded by desiderative verb)
[(human-NP) desiderative-VP **hâj** (NP) VP], for example, (39), (40)
Pattern D
hâj as a purposive complementizer (or induced-situation verb preceded by volitional action verb)
[(human-NP) volitional-VP **hâj** (NP) VP], for example, (42), (43), (46), (48)
Pattern D+
hâj as a permissive or directive/coercive complementizer (or induced-situation verb preceded by permissive or directive verb)
[(human-NP) permissive/directive-V **hâj** (human-NP) volitional-VP], for example, (46), (48)
Pattern E
hâj as a benefactive case marker
[(human-NP) volitional-VP **hâj** human-NP]
Pattern F
hâj as a sentence modal benefactive or malefactive marker
[(human-NP) volitional-VP **hâj**]

Note that within the overall set of examples in Patterns B and D, there are particular subsets of more specific cases: Pattern B+, Pattern B++, and Pattern D+. Specifically, Pattern B+, which includes *hâj* as an inducive complementizer (or *hâj* as an induced-situation verb followed or preceded by a non-volitional verb), and Pattern B++, which includes *hâj* as an apparent causative marker (or *hâj* as an induced-situation verb unpreceded by a verb), are sub-patterns of Pattern B, which includes *hâj* as an induced-situation verb, and Pattern D+, which includes *hâj* as a permissive or directive/coercive complementizer (or *hâj* as an induced-situation verb preceded by a permissive verb or directive verb), is a sub-pattern of Pattern D, which includes *hâj* as a purposive complementizer (or *hâj* as an induced-situation verb preceded by a volitional action verb).

    In what follows, I will account for my hypothesis on the grammaticalization pathway of the verb *hâj* into the complementizer-like *hâj* (i.e., *hâj* in Pattern A > *hâj* in Pattern B > *hâj* in Pattern C > *hâj* in Pattern D), referring to the use rate of each pattern of *hâj* expressions found in Thai inscriptions. Table 2 shows the number of occurrences of Patterns A to F in the inscriptions. The conventional division of time periods of the production of the inscriptions (Periods I to IV) are indicated at the top of Table 2.

       (I)   Sukhothai dynasty (1292–1438)
       (II)   Ayuttaya and Thonburi dynasties (1438–1782)
       (III)   First half of the Rattanakosin dynasty (1782–1925)
       (IV)   Latter half of the Rattanakosin dynasty (1925–1978)

Table 2. Occurrences of clausal patterns of *hâj* expressions in Thai inscriptions.

	I Sukhothai 1292–1438	II Ayutthaya- Thonburi 1438–1782	III Rattanakosin King Rama 1–6 1782–1925	IV Rattanakosin King Rama 7–9 1925–1978
A: Verb of change of location (caused motion)	61 (25.6%)	51 (18.2%)	17 (6.8%)	43 (11.9%)
B: Verb of change of state (induced situation) B+: Inducive	106 (44.5%)	135 (48.2%)	114 (45.4%)	102 (28.3%)
B++: Apparent causative	73 (30.7%)	89 (31.8%)	60 (23.9%)	44 (12.2%)
C: Desiderative	23 (9.7%)	47 (16.8%)	49 (19.5%)	54 (15.0%)
D: Purposive	31 (13.0%)	39 (13.9%)	70 (27.9%)	157 (43.6%)
D+: Permissive or directive/coercive	18 (7.6%)	24 (8.6%)	34 (13.5%)	92 (25.6%)
E: Benefactive	0	0	0	2 (0.6%)
F: Sentence modal benefactive/malefactive	0	2 (0.7%)	0	2 (0.6%)
undecodable	17 (7.1%)	6 (2.1%)	1 (0.4%)	0
Total 1,129	238 (100%)	280 (100%)	251 (100%)	360 (100%)

Table 2 illustrates the following. First, Patterns A to D were used while Patterns E and F were not used before the fifteenth century (Period I) (cf. footnote 8). As Patterns A to D are all attested in the oldest period of the documented history of Thai (Period I) and there existed no documents written in Thai before that period, it is impossible to obtain direct evidence for determining which pattern is older than the other among the four patterns. For that purpose, we must seek indirect, circumstantial evidence instead.

Second, before the twentieth century (Periods I to III) the use rate of Pattern B (induced-situation verb) was highest: (I) 44.5%, (II) 48.2%, and (III) 45.4%. After the twentieth century (Period IV), however, the use rate of Pattern D (purposive) came to be the highest at 43.6%.

Third, before the twentieth century (Periods I to III) *hâj* was more commonly used as a lexical verb than as a complementizer (or complementizer-like verb). The use rates of Patterns A and B (caused-motion verb, induced-situation verb) in Periods I to III are as follows: (I) [25.6+44.5=] 70.1%, (II) [18.2+48.2=] 66.4%, and (III) [6.8+45.4=] 52.2%. On the other hand, the use rates of Patterns C and D (desiderative and purposive, respectively) in the same periods are the following: (I) [9.7+13.0=] 22.7%, (II) [16.8+13.9=] 30.7%, and (III) [19.5+27.9=] 47.4%. However, in the twentieth century (Period IV), *hâj* came to be used as a complementizer (or complementizer-like verb) more frequently than as a verb: the use rate of the verb *hâj* is [11.9+28.3=] 40.2%, while that of the complementizer *hâj* is [15.0+43.6=] 58.6%.

Fourth, before the twentieth century (Periods I to III), Pattern C (desiderative) occurred more frequently than Pattern D+ (permissive or directive/coercive). The use rates of Pattern C (desiderative) in Periods I to III are as follows: (I) 9.7%, (II) 16.7%, and (III) 19.5%. The use rates of Pattern D+ (permissive or directive/coercive) in the same periods are as follows: (I) 7.6%, (II) 8.6%, and (III) 13.5%. After the twentieth century (Period IV), however, the use rate of Pattern D+ (permissive or directive/coercive) came to be higher than that of Pattern C (desiderative): the use rate of Pattern C (desiderative) is 15.0%, while that of Pattern D+ (permissive or directive/coercive) is 25.6%.

Figure 1 shows an overview of the historical semantic changes of *hâj* from the original lexical verb to the complementizer (or complementizer-like verb) that I hypothesize based on the result of my corpus survey of each usage's rise and fall, as explained above.

Figure 1. *Hâj*'s grammaticalization pathway into irrealis complementizers.

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(a) Verb for change of location (caused-motion verb) (hâj in Pattern A)
      > (b) Verb for change of state (induced-situation verb) (hâj in Pattern B)
                    > Complementizer for irrealis situation which may or may not involve volition
            (c) Inducive (hâj in Pattern B+)
            (d) Desiderative (hâj in Pattern C)
            (e) Purposive (hâj in Pattern D)
                        > Complementizer for irrealis situation which involves volition
                  (f) Permissive (hâj in Pattern D+)
                  (g) Directive/coercive (hâj in Pattern D+)
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The most important differences between the previous studies' hypotheses and my hypotheses are as follows. The previous studies take it for granted that the original lexical meaning of *hâj* was 'transfer of control over a thing (transfer of possession),' which is the same as that of the present-day English verb *give*. Furthermore, with the exception of Song (1997), they assume that the causative marker and/or the purposive marker directly derived from this original lexical verb. In contrast, I hypothesize that the original meaning of *hâj* was 'transfer of the position of a thing' or 'change of location (caused motion),' as in (32) and (33).

(31)   Verb for change of location (caused-motion verb):
        [(NP) **hâj** (theme-NP) (deictic-V) ((dative-P) human-NP)], for example, (32), (33)

(32)   *hâj   ŋən   ma:*
        transfer   silver   come
        '(She) sent silver (toward a reference point).' [101] (1497)

(33)   *hâj   bun   paj   kɛ̀:   phɔ̂: mɛ̂: phî: nɔ́:ŋ phûak phɔ́:ŋ phàw phan*
        transfer   merits   go   DAT   relatives
        '(He) transferred the merit to (his) relatives.' [106] (1384)

In examples (32) and (33), the verb *hâj* co-occurs with the deictic motion verb *paj* 'go' or *ma:* 'come'. It is known that Thai motion expressions normally specify the direction of motion by means of a deictic motion verb and/or other directional verbs. Notice that example (33) does not depict a physical motion event; the merit named by the primary object of the verb *hâj* is not a concrete entity moving in the physical world. The basic meaning of the verb *hâj* is 'transfer of the position of a thing (caused motion),' but it may also express a metaphorical meaning: transfer of the abstract location or ownership of an intangible entity, such as merits (cf. footnotes 6 and 7).

I further hypothesize that *hâj* first extended its meaning from 'change of location (caused motion)' to 'change of state (induced situation).' In other words, the verb *hâj* became polysemous in that it could express both 'change of location (caused motion)' and 'change of state (induced situation).' Whether *hâj* is considered as a caused-motion verb or an induced-situation verb depends on its collocational and contextual environments. In a single clause, the induced-situation verb *hâj* is followed by another verb (cf. (34)), but the caused-motion verb *hâj* cannot be followed by any verb other than a deictic motion verb (cf. (31)). The syntactic structure in which the induced-situation verb *hâj* occurs is shown in (34).

(34)   Verb for change of state (induced-situation verb):
        [(NP) (VP) **hâj** (NP) VP], for example, (23) to (25), (35) to (37)
        which includes
        Inducive: [(NP) VP **hâj** non-volitional-VP], for example, (36)
                                 [(NP) non-volitional-VP **hâj** VP], for example, (37)
        Apparent causative: [(human-NP) **hâj** (human-NP) volitional-VP],
                                 for example, (24), (25)

(35) bɔ̀ː **hâj**   chìp   **hâj**   hǎːj   sàk   hèŋ
      NEG induce   lose   induce disappear   just   CLF
      '(He) prevented (Buddhism) from falling into ruin anywhere.' [2] (1367)

(36) phasǒm bun   **hâj**   mâːk
      add   merits induce/IND   be.much
      '(He) has stored up the merit in abundance.' [106] (1384)

(37) miː   ŋaːn   lakhɔːn pen tôn **hâj**   khon   duː   lên
      exist festival drama   etc.   induce/IND   people see   for.joy
      'There was a festival of dramas and the like for people to see for joy.' (Bradley 1873: 752)

The verb *hâj*'s semantic extension from 'change of location (caused motion)' to 'change of state (induced situation)' appears to be motivated by a general, simple metaphor that (TEMPORAL) CHANGE IS (SPATIAL) MOVEMENT (cf. Lakoff 1993: 219–229, Lakoff and Johnson 1999: 178–194) which is in line with the general ontological metaphor that abstract entities are understood in terms of concrete entities. Lakoff (1993: 216), for example, states, "time in English is conceptualized in terms of space [i.e., in terms of things (entities and locations) and motion]." In the case of semantic extension of *hâj*, the rather abstract notion of 'change of state (induced situation)' in the domain of time is mapped onto the concrete notion of 'change of location (caused motion)' in the domain of space.

Then, *hâj* came to be often preceded by a desiderative verb or volitional action verb and to express an expected resultant change of state. It is at this stage that *hâj* seemingly gained the function of the non-specific (volition-neutral) type of irrealis complementizer, which is compatible with both volitional and non-volitional complement verbs. The desiderative complementizer *hâj* in (39) and the purposive complementizer *hâj* in (42) precede a non-volitional verb (*than* 'be in time', *dàp* 'extinguish'). By contrast, the same complementizers in (40) and (43) precede a volitional action verb (*sàj* 'put in', *tham* 'do').

(38) Desiderative:
      [(human-NP) desiderative-VP **hâj** (NP) VP], e.g., (39), (40)

(39) khɔ̌ː   **hâj**   than   phráʔphúthasǐːʔaːrijámajtriː
      beg   induce/DES   be.in.time   the.next.Bodhisattva
      'May we be in time for the next Bodhisattva (who will turn the world into Utopia)!' [48] (1308)

(40) khɔ̌ː   phráʔ mahǎːthěːn câw   **hɯ̂ɯ**   sàj   caːrúk
      beg   senior.priest   induce/DES   put.in   inscription
      '(He) asked the senior priest to construct the inscription.' [306] (1466)

(41) Purposive:
      [(human-NP) volitional-VP **hâj** (NP) VP], e.g., (42), (43)

(42) phajaːjaːm   **hâj**   thúk   nán   dàp   paj
      make.an.effort   induce/PURP   sufferings that   extinguish go
      doːj lamdàp
      in.orderly.sequence
      '(They) made an effort so that the sufferings would extinguish in orderly sequence.' [255] (1925–1978)

(43) sadɛːŋ   khɔ̌ː   pratìbàt **hâj**   sàt   tham   taːm
      explain   matters practice induce/PURP   sentient.beings   do   follow

'(He) explained (Buddhist) practices for sentient beings to act in conformity with them.' [148] (1782–1925)

Recall that before the twentieth century, a desiderative verb was often combined with *hâj* to express the desire for a change of state and, in contrast, the combination of a permissive or directive verb and *hâj* was less common (cf. Table 2). In contemporary Thai, however, *hâj* expressions with a permissive or directive verb seem dominant, and thus, they are considered as the prototypical *hâj* expressions. In contrast, *hâj* expressions with a desiderative verb tend to be regarded as a peripheral type and, indeed, they are disregarded by most previous studies on the grammaticalization of *hâj*.

One may say, however, that *hâj* in examples (36), (37), (39), (40), (42), and (43) is not a functional morpheme proper (complementizer) but a verb with a substantial meaning (serial verb). I admit that the status of *hâj* in these examples is actually ambiguous. Those examples show so-called 'bridging contexts' (Evans and Wilkins 2000: 550) for two different, though contiguous, uses of *hâj*. That is to say, *hâj* in the examples can be considered as either a lexical verb (induced-situation verb) or an irrealis complementizer. The situation denoted by the verb following *hâj* can be ambiguously interpreted as either factual (verb-reading) or non-factual (complementizer-reading). In my opinion, both interpretations are possible without giving rise to a decisive difference in the sentence meaning.

Hâj's shift from a verb into a complementizer can be also explained by the process of syntactic reanalysis.[13] Specifically, the syntactic status of the verb *hâj* in a serial verb construction, which is the construction comprising *hâj* and its adjacent verb phrases, has changed from a serial verb (or co-head verb) preceded by a co-head verb and followed by a realis complement clause to a complementizer preceded by a matrix verb and followed by an irrealis complement clause, as diagramed in (44a) and (44b) respectively.

(44) a.   [co-head verb (+ NP) + <u>co-head verb</u> + realis complement clause]
      b.   [matrix verb (+ NP) + [<u>complementizer</u> + irrealis complement clause]]

In contemporary Thai, it seems more likely for *hâj* in a serial verb construction to be analyzed as a complementizer (44b) than as a verb (44a). However, the fact that the complementizer-like *hâj* can be still unconditionally negated (e.g., (14), (16b), (19), (21b), and (22b)) tells us that it has not lost its verbiness.

Relatively recently—around the twentieth century—*hâj* came to be frequently followed by a complement clause that particularly expresses an instigated volitional action, forming the permissive construction (45) or the directive/coercive construction (47) (cf. Table 2). The increase of such an indirect-causation usage led to a new category of a specific (volition-involving) irrealis complementizer, which links two verbal units entailing a volitional sense. Newly derived specific irrealis complementizers include the permissive one preceded by a permissive verb (e.g., *jɔɔm* 'allow' in (46)) and the directive/coercive one preceded by a directive verb (e.g., *sàŋ* 'order' in (48)).

(45)   Permissive:
        [(human-NP) permissive-V **hâj** (human-NP) volitional-VP], for example, (46)

(46)   *jɔːm*   **hâj**   *mɔ̌ː*   *nán*   *ráksǎː*
        allow   induce/PER   doctor   that   remedy
        '(He) allowed the doctor to treat (him).' [152] (1782–1925)

(47)   Directive/coercive:
        [(human-NP) directive-V **hâj** (human-NP) volitional-VP], for example, (48)

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[13] Langacker (1977: 58) defined syntactic reanalysis as a 'change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation'.

(48) sàŋ   *hâj*   sěːnaːbɔːdiː krasuaŋ kralaːhǒːm   ʔɔ̀ːk prakàːt
      order   induce/DIR   Minister.of.Defense   declare
      '(He) ordered the Minister of Defense to declare (it).' [283] (1925–1978)

The directionality of semantic extension of the irrealis complementizer *hâj* that this study has shown, namely from the inducive and desiderative (volition-neutral complementizers) to the permissive and directive/coercive (volition-involving ones), is the opposite of the hitherto commonly assumed directionality, namely from the purposive and causative (volition-involving complementizer and causative marker) to the inducive (volition-neutral complementizer).' The latter assumption (viz., from volitional to non-volitional) presumably comes from the ubiquitous idea that in human conceptualization, a volitional interpretation of a state of affairs—that a human agent acts with the intention of bringing about some situation or, inversely, that the situation arises from the human agent's purposeful act—is the most basic; and therefore, semantic changes of a linguistic element must occur in the direction of volitional to non-volitional (cf. 'attenuation' Langacker 1999: 297, 299–315). Having analyzed the pathway of historical semantic changes of the Thai morpheme *hâj*, however, I doubt the validity of this idea.

4. Conclusion

In this paper I have accounted for my hypothesis on *hâj*'s original meaning and historical semantic extension, which is supported by historical facts. The point is two-fold. First, *hâj* was originally a lexical verb with the meaning 'change of location (caused motion)'. Second, this original verb *hâj* first acquired the versatile verb meaning 'change of state (induced situation)' and then shifted to a variety of irrealis complementizers, including the non-volitional desiderative and volitional directive/coercive. This study has also revealed that the lexical item *hâj* is ambiguous between a verb and an irrealis complementizer interpretation (i.e., between a factual and non-factual reading). Disambiguation hinges on the context. *Hâj* can be considered the syncretism between a verb of change of state (induced-situation verb) and an irrealis complementizer.

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