ON HISTORICAL SEMANTIC CHANGES 
OF THE THAI MORPHEME HÂJ

Kiyoko Takahashi
Kanda University of International Studies
<kiyoko@kanda.kuis.ac.jp>

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 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 (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.

Key words: multifunctional morpheme, historical semantics, epigraphy.
ISO 639-3 language codes: tha

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)). 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).

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

An earlier version of this paper was presented at the 138th General Meeting of the Linguistic Society of Japan (LSJ138), Chiba, June 20–21, 2009. I am grateful to the audience for their useful comments. I would like to thank Heiko Narrog and two anonymous reviewers for the Journal of the Southeast Asian Linguistics Society (JSEALS) for critical comments that helped improve the paper. I am indebted to Akrachai Mongkholchaisri for his assistance in composing example sentences. Thanks are also due to Mathias Jenny for his advice and encouragement.

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, Na 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 jáːk ‘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 túkkataː dèk dèk
PRON transfer/give doll children
‘He transferred a doll to the children.’ / ‘He gave the children a doll.’

b. kháw mâj hâj túkkataː 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 túkkataː 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 túkkataː 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 túkkataː kɛ̀ː 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 túkkataː kɛ̀ː 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 (túkkataː ‘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)’; 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). 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).

---

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), inductive 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 inductive, 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.

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 ?ɒːhǎːn hâj mɛ ́ː 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)

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 mɑː ‘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.

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 Ɂoːj 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 kԑ̀ԑ plus a recipient noun phrase, conveys the sense of transferring/giving something to someone.

(i) Ɂoːj thaːn hâj kԑː thân offer transfer/give DAT PRON ‘(He) offered (them) as a gift to him.’ [2] (1341–1367)

(ii) ?aw chɯ̂ː ton hâj kԑː phräʔsahʔaɲ take name self transfer/give DAT ally ‘(He) took (his) own name and gave it to (his) ally.’ [2] (1341–1367)

(8)  **khāw tham ʔahǎːn ʰâj**
PRON make dishes BEN
‘He cooked for (me).’

(9)  **chán dāː 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 khāw maː**
PRON CAUS PRON come
‘I made him come.’

b. **chán ʰâj khāw 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)  **nxn ʰâj sabaj**
lie.down IND be.comfortable
‘Lie down comfortably!’

(14)  **chán cǎː ḱaj māj ʰâj lɯ̌a**
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 khāw maː**
PRON want DES PRON come
‘I wanted to make him come.’
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 thɔ̂ːt nɯ́a hâj sùk
PRON fry beef PURP be.cooked
‘I fried the beef for it to become well done.’

(19) chán pìt pratuː mâj hâj kháw khâw maː
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., thɔ̂ːt ‘fry’ in (18), pìt ‘close’ in (19)) involves the event participant’s volition, whereas that in the desiderative construction (e.g., jàːk ‘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 maː ‘come in’ in (19), maː ‘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 complementizer:
[human-NP volitional-V hâj human-NP volitional-VP], e.g., (21), (22)

(21) a. chán jɔːm hâj kháw maː
PRON allow PER PRON come
‘I allowed him to come.’

b. chán jɔːm mâj hâj kháw maː
PRON allow NEG PER PRON come
‘I allowed not to make him come.’ / ‘I allowed him not to come.’

As I was told by a reviewer that the serial order of the two lexical items jàːk ‘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 jàːk mâj … ‘want not to…’ like those below:

(i) jàːk mâj bɔ̀ːk khwaːm ciŋ
want NEG tell truth
‘(He) wants not to tell the truth.’

(ii) jàːk mâj jùt
want NEG halt
‘(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 hɯ̂ɯ 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., Pâmûjâat ‘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 Thepkanjan a 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 volitional act and the Permissive function of ‘give’ retains this volitionality 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 the act of giving and causation.”

(c) Regarding the purposive marker hâj in the expression kin hâj Ɂìm ‘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 in order that the action/event of the second clause [Ɂìm ‘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 the purpose of a given action 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 purposive meaning 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) mahâː mêːk tâŋ khɯ ̂n hâj t h ɛ ̌w thaːn nám tòk loŋ   maː
clouds  stand ascend induce rain  fall descend come

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...
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 kuː Ɂaːrâːtthanaː
PRON induce PRON invite
‘They asked me to invite (the relics).’ [2] (1367)

b. mîʔ ʰâj phón Ɂàːtjaː Ɂəːn 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) hɔːm mîʔ ʰâj khǎːj
prohibit NEG induce/DIR sell
‘(He) forbade (them) to sell.’ [13] (1510)

(26) chán chûaj kháw ʰâj taːj
PRON help PRON 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 ʰaj ‘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 (maː ‘come’), whereas that of ʰâj in (27b) is a clause (phɔː maː ‘his father comes’).

(27) a. chán bɔ ːk kháw ʰâj maː
PRON tell PRON induce/PURP come
after ‘give’ [ʰâj].’ According to them, the expression, ʰâj kâwɁîː jùː 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 phx̱: ma:
   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 kháw mîːt 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 inductive, 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.

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

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 inducement 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 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.

| (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) Inductive (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+) |

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  ᵃn  ma:
       transfer silver come
       ‘(She) sent silver (toward a reference point).’ [101] (1497)

(33)  hâj  bun  paj  kɛ ̀ː phɔ ̂ː mɛ̂ː phîː nɔ́ːŋ phûak phɔ́ːŋ 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
       Inductive:  [(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)
The verb \textit{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 \textit{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, \textit{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 \textit{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 \textit{hâj} in (39) and the purposive complementizer \textit{hâj} in (42) precede a non-volitional verb (than ‘be in time’, \textit{dàp} ‘extinguish’). By contrast, the same complementizers in (40) and (43) precede a volitional action verb (\textit{sàj} ‘put in’, \textit{tham} ‘do’).

(38) Desiderative:

\[(\text{human-NP}) \text{desiderative-VP} \text{hâj (NP) VP}, \text{e.g., (39), (40)}\]

(39) \textit{khɔ̌ː hâj than phráʔphúthasǐːʔarijámaːjtriː} 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) \textit{khɔ̌ː phráʔ mahāthēn câw hûʊ hûʊ sàj carrûk} beg senior.priest induce/DES put.in inscription

‘(He) asked the senior priest to construct the inscription.’ [306] (1466)

(41) Purposive:

\[(\text{human-NP}) \text{volitional-VP} \text{hâj (NP) VP}, \text{e.g., (42), (43)}\]

(42) \textit{phajaːjaːm hâj thûk nân dàp paj} make.an.effort induce/PURP sufferings that extinguish go

\textit{doj lumdàp} in.orderly.sequence

‘(They) made an effort so that the sufferings would extinguish in orderly sequence.’ [255] (1925–1978)

(43) \textit{sadeŋ khɔ̌ː pratibāt hâj sàt tham tam} 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) + co-head verb + realis complement clause]
   b. [matrix verb (+ NP) + [complementizer + 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) jɔɔm hâj mɔ̄ː 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)

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’.
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.

References
Evans, Nicholas and David Wilkins. 2000. In the mind’s year: The semantic extensions of perception verbs in Australian languages. Language 76.1: 546-592.


**Corpus data**

The Prime Minister’s Secretariat, Thailand. 1924/1978. *Corpus of Thai Inscriptions, Installment 1*. Bangkok, The Prime Minister’s Secretariat.

The Prime Minister’s Secretariat, Thailand. 1965. *Corpus of Thai Inscriptions, Installment 3*. Bangkok, The Prime Minister’s Secretariat.


The Prime Minister’s Secretariat, Thailand. 1978. *Corpus of Thai Inscriptions, Installment 6.2*. Bangkok, The Prime Minister’s Secretariat.