

# Clausal Architecture of Auxiliary Verb and Periphrastic Causative Constructions in Korean\*

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**Choi, YoungSik. (2017). Clausal architecture of auxiliary verb and periphrastic causative constructions in Korean.** *The Linguistic Association of Korea Journal*, 25(2), 23-41. I show that auxiliary verb construction in Korean is mono-clausal, using negation, manner adverbial and argument projection, prosodic boundary of pause as valid tests. The present result is quite in agreement with the cross-linguistic observation in the literature (Anderson 2006), according to which the auxiliary verb construction is mono-clausal. I will also show that when the same sentence is construed as a non-auxiliary verb construction, it is a complex sentence with a non-complement subordinate clause. I will also argue that periphrastic causative construction is a non-auxiliary verb construction, too, a complex sentence with a complement clause. The present research will have a non-trivial implication on a better understanding of the auxiliary verb constructions in Korean in general.

**Key Words:** auxiliary, complement, periphrastic, complex

## 1. Introduction

The auxiliary verb construction is defined as a mono-clausal structure minimally consisting of a lexical verb element that contributes lexical content to the construction and an auxiliary verb element that contributes some grammatical or functional content to it (Anderson 2006: 7). The main verb and the auxiliary verb represent a single event and the latter is therefore

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defective in that it does not have a normal argument structure of its non-auxiliary usage.

- (1) a. John is reading a book.  
 b. John has given a book to Mary.

As one can see above in (1), the auxiliary verbs *is* and *has* together with their main verbs *read* and *give* represent a single event of ‘reading a book’ and ‘giving a book to Mary,’ with the auxiliary verbs expressing progressive and perfective aspects, respectively. Also, the auxiliary verbs do not have the argument structure which their non-auxiliary verb usage would have. Auxiliary verbs have certain properties as distinct from main verbs, varying cross-linguistically. In English, for example, the auxiliary verb and the subject are inversed to form a question, and it is very often the case that more than one auxiliary verb can appear in a single sentence next to each other as illustrated below in (2-3).

- (2) a. Is John reading a book?  
 b. Has John given a book to Mary?  
 (3) a. John will tear the paper.  
 b. The paper will be torn by John.  
 c. The paper will have been torn by John.

Auxiliary verbs have a distinctive phonological characteristic, as well. They can undergo contraction with the negation adjacent to them as shown below in (4).

- (4) a. John isn’t reading a book.  
 b. John hasn’t given a book to Mary.

When it comes to Korean, it belongs to a head final language typologically. It is thus very often the case that quite unlike head initial languages such as English more than one verb comes right next to each other at the end of the sentence, forming various constructions including the auxiliary verb

construction. So, the same sentence with the same sequence of verbs can be either an auxiliary verb construction or a non-auxiliary verb construction as respectively indicated by the glosses below in (5a) and (5b).

- (5) John-i            nonmwun-ul    ccic-e    pelyessta.  
 John-NOM    paper-ACC    tear    threw away  
 a. 'John tore up the paper.'  
 b. 'John tore the paper and threw it away.'

The ambiguity between the auxiliary verb construction and the non-auxiliary verb construction with the same sequence of verbs has always posed a non-trivial question of how to precisely identify the auxiliary verb construction since Choi (1935), leaving the auxiliary verb construction one of the most discussed and controversial topics in the literature (see Suh 1992 and 2013, among others).<sup>1)</sup> Before we further go on, it should be noted that in the auxiliary verb construction in Korean, the sequence of verbs at the end of the sentence commonly takes the form of *v-e v*, with the main verb followed by the auxiliary verb as above in (5) under the reading in (5a). The main verb *ccicta* 'tear' is in the form of *ccic-e*, a combination of the root *ccic* and the morpheme *e*, followed by the auxiliary verb *pelyessta*, which is the past tense form of *pelita* 'throw away.' The main verb and the auxiliary verb together represent a single event of 'tearing the paper,' the latter expressing the perfective aspect. The auxiliary verb in Korean is also defective in that it does not have a normal argument structure of its non-auxiliary verb usage. The non-auxiliary usage of the verb *pelita* 'throw away' has the argument structure of < agent, theme, locative>. Its argument structure, however, is not satisfied, which is still grammatical.<sup>2)</sup> Like

1) Choi (1935: 397) classifies thirteen types of auxiliary verbs in Korean as below:

(i) negation: *ani-hata* 'do not,' *mot hata* 'cannot,' causation: *hata* 'do,' *mantulta* 'make,' passivization: *cita* 'become,' *toyta* 'become,' progressive: *kata* 'go' *ota* 'come,' perfective: *nata* 'finish' *nayta* 'finish,' *perita* 'finish,' benefaction: *cxouta* 'give' *tulita* 'give,' *pachita* 'give' attempt: *pota* 'try,' emphasis: *ssahta* 'repeat' *tayta* 'repeat' obligation: *-ya hata* 'must,' concession: *-nun hata* 'do,' pretension: *chey hata* 'pretend,' *chek hata* 'pretend,' *yang hata* 'pretend,' unfulfilledness: *ppen hata* 'almost do,' possession: *nohta* 'put,' *twouta* 'put,' *kacita* 'have,' *takta* 'polish.'

English above in (3), more than one auxiliary verb can appear right next to each other in the same sentence in (6).

- (6) a. Nonmwun-i ccic-**e cye pelyessta**  
 paper-NOM tear became throw away  
 'The paper was torn up.'
- b. Nonmwun-i ccic-**e cye peli-ko malassta.**  
 paper-NOM tear become throw away stopped  
 'The paper was torn up.'

The sentence in (6a) has two auxiliary verbs right next to each other and the one in (6b) has three auxiliary verbs occurring adjacent to each other. Beside the auxiliary verb construction with the form of *v-e v* above in (5) under the reading in (5a), the sentence below in (7) where the sequence of verbs at the end of the sentence has the form of *v-key v*, although not as common as the one in the form of *v-e v* has been the topic of much controversy regarding whether it is an auxiliary verb construction since Choi (1935).

- (7) Mary-ka [John-i nonwun-ul ilk-**key**] hayssta  
 Mary-NOM John-NOM paper-ACC read did  
 'Mary made John read the paper.'

The construction above in (7) with the verb *v-key* followed by another verb *ha* 'do' is known as the periphrastic causative construction, one of the tree ways to express causation across languages, namely, the lexical causative construction as in (8), the periphrastic causative construction as in (9), and morphological causative construction as in (10).

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2) All auxiliary verbs have developed from the corresponding main verbs through syntactic and semantic changes, according to Sohn (1999: 262). The auxiliary *pelita* representing perfective is therefore from the main verb *pelita* 'throw away' (Sohn 1999: 262). Also note that the auxiliary verb is defective in that it does not have a normal argument structure expected of its non-auxiliary usage, that is, agent and theme.

(8) John fell the tree.

(9) Mary made John fix the car.

(10) John-i            phal-ul        ol-**li**-ess-ta  
       John-NOM     arm-ACC     rise-LI-PAST-IND  
       ‘John raised his arm.’

Of the three types of causative constructions, English does not have the morphological causative construction as above in (11) in Korean, where the suffix *li* changes the verb into its causative form. The periphrastic causative construction typically includes two verbs to express causation as illustrated by the Korean and English examples above in (7) and (9).

## 2. Clausal Architecture of Auxiliary Verb Construction

Before we start, recall that the same sentence in Korean can be either an auxiliary verb construction or a non-auxiliary verb construction. Below, I will try to determine the clausal architecture of the auxiliary verb construction above in (5) under the reading in (5a) as distinct from that of the non-auxiliary verb construction in (5) under the reading in (5b) as repeated below as (11).

(11) John-i            nonmwun-ul     ccic-**e**    pelyessta.  
       John-NOM     paper-ACC        tear        threw away  
       a. ‘John tore up the paper.’  
       b. ‘John tore the paper and threw it away.’

For this, I will use negation and manner adverbial and argument projection, and prosodic boundary of pause, among others, as tests for the clausal architecture of the auxiliary verb construction.

### 2.1. Scope of Negation and Manner Adverbial

It is a well-known fact that the scope of negation and manner adverbial

is confined to its immediate clause as shown below in (12-13).

- (12) a. John does not know that the earth is round.  
 b. John knows that the earth is not square.
- (13) a. John quickly realized that the earth is round.  
 b. John realized that the earth quickly moves around the sun.  
 (Choi 2016: 87)

With the scope fact of negation and manner adverbial in mind, one can test the clausal architecture of the auxiliary verb construction with negation and manner adverbial in the most effective way. For this, consider the following paradigm in (14-15):

- (14) a. John-i nonmwun-ul cayppalli ccic-e pelyessta.  
 John-NOM paper-ACC quickly tear threw away  
 'John quickly tore up the paper.'
- b. John-i nonmwun-ul an ccic-e pelyessta.  
 John-NOM paper-ACC NOT tear threw away  
 'John did not tear up the paper.'
- (15) a. John-i nonmwun-ul cayppalli ccic-e pelyessta.  
 John-NOM paper-ACC quickly tear threw away  
 'John quickly tore the paper, and threw it away.'
- b. John-i nonmwun-ul an ccic-e pelyessta.  
 John-NOM paper-ACC NOT tear threw away  
 'John did not tear the paper, and threw it away.'

The only reading available in (14) is where both negation and manner adverbial scope over the entire sequence of verbs, quite in contrast to (15), where their scope is just over the first verb. Given that the scope of negation and manner adverbial is typically confined to the immediate clause, the scope fact in (14-15) strongly suggests that the auxiliary verb constructions in (14) are mono-clausal in the clausal architecture, whereas the non-auxiliary verb constructions in (15) are bi-clausal with each verb belonging to a separate clause. One may still wonder what the scope fact is

in case negation and manner adverbial are interpolated between the two verbs in the auxiliary verb construction and the non-auxiliary verb construction, respectively. <sup>3)</sup>

- (16) a.\*John-i nonmwun-ul ccic-**e** cayppalli pelyessta.  
 John-NOM paper-ACC tear quickly threw away  
 'John tore the paper, and quickly threw it away.'  
 b.\*John-i nonmwun-ul ccic-**e** an pelyessta.  
 John-NOM paper-ACC tear NOT threw away  
 'John tore the paper, and did not throw it away.'
- (17) a. John-i nonmwun-ul ccic-**e** cayppalli pelyessta.  
 John-NOM paper-ACC tear quickly threw away  
 'John tore the paper, and quickly threw it away.'  
 b. John-i nonmwun-ul ccic-**e** an pelyessta.  
 John-NOM paper-ACC tear NOT threw away  
 'John tore the paper, and did not throw it away.'

As one can see above in (16-17), manner adverbial *cayppalli* 'quickly' and negation *an* 'not' cannot intervene between the two verbs in the auxiliary verb construction, quite in contrast to the non-auxiliary verb construction, a fact well observed in the literature as in Sohn (1994), Chai (1999), and Choi (2016) among others. The fact that manner adverbial and negation cannot intervene between the two verbs in the auxiliary verb construction suggests that the main verb and the auxiliary verb in the auxiliary verb construction above in (11) under the reading in (11a) repeated below as (18) form a single constituent of a predicate such that they cannot intervene between the two verbs as schematically represented in (19).

- (18) John-i nonmwun-ul ccic-**e** pelyessta.  
 John-NOM paper-ACC tear threw away  
 'John tore up the paper.'
- (19) [<sub>IP</sub> NP-NOM [<sub>VP</sub> NP-ACC [<sub>V</sub> V-**e** V]]]

3) It seems that the present judgement regarding (17b) is not shared by an anonymous reviewer who alludes it is rather deviant.

This state of affairs so far in Korean auxiliary verb construction with respect to its clausal architecture conforms to the cross-linguistic observation in the literature that the auxiliary verb construction is mono-clausal in clausal architecture (Anderson 2006: 7). In the meantime, as for the non-auxiliary verb construction above in (17), negation and manner adverbial can scope over only the second verb. The scope fact again suggests that it is bi-clausal, with the two verbs projecting a separate clause. Then, the question is: what is the precise nature of the non-auxiliary verb construction in (11) under the reading in (11b) as repeated below in (20)?

- (20) John-i            nonmwun-ul    ccic-*e*    pelyessta.  
       John-NOM    paper-ACC        tear        threw away  
       'John tore the paper and threw it away.'

As a matter of fact, the precise nature of the non-auxiliary verb construction above in (20) has been of much controversy. Some suggest that it is a serial verb construction (Lee 1992, Sohn 1999, among others), where the verbs signify a sequence of events and the verbs are equal in terms of semantics and syntax. Chung (1993) Kim (1993), and Choi (2004) claim that the sentence is a compound verb construction. Given these proposals, it follows that the sentence should be mono-clausal in structure, since it is a cross-linguistic generalization that both serial verb construction and compound verb construction are necessarily mono-clausal in clausal architecture (see Stewart 2001, Aikhenvald 2006, and Anderson 2006, among others). As we saw already, however, the scope fact in the examples above in (17) involving negation and manner adverbial strongly suggests that the non-auxiliary verb construction in (20) is bi-clausal in nature, thus immediately falsifying the claim that it is either a serial verb construction or a compound verb construction. In fact, Choi (2016) claims that it is a complex sentence containing a non-complement subordinate clause, where the morpheme *e* as the subordinate conjunction projects the subordinate clause. Choi (2016) thus claims that (20) has a structure more complex than meets the eyes, namely, the structure as below in (21), given the fact that Korean is a typical *pro* drop language (see Perlmutter 1971, Chomsky and



Lasnik 1977, Chomsky 1981, 1986, 1995, Jaeggli 1982, Borer 1983, Choi 2014, among others).<sup>4)</sup>

(21) [IP NP<sub>I</sub>-NOM [VP [CP pro<sub>i</sub> NP<sub>j</sub>-ACC V-*e*] [VP pro<sub>j</sub> V ]]]

In the structure above in (21), the morpheme *e* is a subordinate conjunction projecting CP, which in turn is adjoined to the matrix VP. Given (21), (20) will have the following structural representation in (22):

(22) [IP]John<sub>i</sub>-i [VP[CP pro<sub>i</sub> nonmwun<sub>j</sub>-ul ccic-*e*] [VP pro<sub>j</sub> pelyessta ]]]

Now with the structure in (21), it is quite well-expected that negation and manner adverbial can intervene between the two verbs in the non-auxiliary verb construction in (17) since the relevant structure will be the one as schematically given below in (23), with MA and NOT standing for manner adverbial, and negation, along with the assumption that the two are VP adverbs.<sup>5) 6)</sup>

(23) [IP NP<sub>I</sub>-NOM [VP[CP pro<sub>i</sub> NP<sub>j</sub>-ACC V-*e*] [VP NOT/ MA [VP pro<sub>j</sub> V ]]]]

4) An anonymous reviewer points out that the subordinate clause of CP in (22) should be adjoined to VP not IP given the ungrammaticality of the following example where the sentential adverbial intervenes the two verbs.

(i) \*John-i nonmwun-ul ccic-*e* pwulhaynghakeyto pelyessta.  
John-NOM paper-ACC tear unfortunately threw away  
'John tore the paper and unfortunately threw it away.'

5) I will assume the claim by Choi (2013), according to which negation *an* 'not' in the short form negation is a right-adjoined VP adverbial.

6) An anonymous reviewer wonders whether the proposed structure can account for the grammaticality of the sentence as in (1) with the null pronouns in the subject position of the embedded CP and in the matrix object position phonologically realized.

(i) ?John<sub>i</sub>-i ku<sub>i</sub>-ka nonmwun<sub>j</sub>-ul ccic-*e* ku kes<sub>j</sub>-ul pelyessta.  
John-NOM he-NOM paper-ACC tear that thing-ACC threw away  
'John tore the paper, and threw it away.'

The sentence above in (i) is acceptable, with its slight deviant status having to do with the proximity of the pronoun in the subject position of the embedded CP with the matrix subject *John*, which I suggest has to do with language processing but not grammar *per se*.

Before closing the section, with the apparent surface identity of the auxiliary verb construction in (18) and the non-auxiliary verb construction in (20), namely, the complex sentence with a non-complement subordinate clause, one may naturally wonder how they are related to each other although there is a big difference in actual structure between the two, depending on the interpretation. I propose that auxiliary verb construction is derived from the latter, with the morpheme *e* in the auxiliary verb construction losing its function as the subordinate conjunction, and being reduced to function as something of a morphological closure (see Kang 1988). This is in agreement with the cross-linguistic observation that auxiliary verb construction is a development from bi-clausal construction cross-linguistically (Anderson 2006: 4ff).

## 2.2. Argument Projection

We saw thus far that the auxiliary verb construction in (18) should be different in the clausal architecture from the non-auxiliary verb construction in (20). The former is mono-clausal whereas the latter is bi-clausal with their respective structures in (19) and (21). The prosed structures for the two constructions make an interesting prediction regarding argument projection as illustrated below in (24-25).

- (24) \*John-i nonmwun-ul ccic-**e** ku kes-ul pelyessta.  
 John-NOM paper-ACC tear that thing-ACC threw away  
 ‘John tore up the paper.’
- (25) John-i nonmwun-ul ccic-**e** ku kes-ul pelyessta.  
 John-NOM paper-ACC tear that thing-ACC threw away  
 ‘John tore the paper and threw it away.’  
 (Choi 2016: 92, 96)

As one can notice, in the auxiliary verb construction above in (24), the occurrence of the argument of the second predicate, *ku kes* ‘the thing’ is impossible in contrast to the non-auxiliary verb construction in (25). This state of affairs is quite well-expected. The auxiliary verb construction in (24) is a mono-clausal structure minimally consisting of a lexical verb element that

contributes lexical content to the construction and an auxiliary verb element that contributes some grammatical or functional content to the construction without its own argument structure. In the meantime, in the non-auxiliary verb construction in (25), *ku kes* ‘the thing’ is the overt realization of the unpronounced *pro* in the second clause headed by a separate main verb in the proposed structure in (21) for the non-auxiliary verb construction.

### 2.3. Prosodic Boundary of Pause

Korean auxiliary verb construction has a phonological property as distinct from non-auxiliary verb construction as shown below in (26-27).

- (26) \*John-i nonmwun-ul ccic-**e** # pelyessta.  
 John-NOM paper-ACC tear threw away  
 ‘John tore up the paper.’
- (27) John-i nonmwun-ul ccic-**e** # pelyessta.  
 John-NOM paper-ACC tear threw away  
 ‘John tore the paper and threw it away.’

As one can see, the auxiliary verb construction in (26) does not allow a prosodic boundary of pause whereas the non-auxiliary verb construction in (27) does. This is compatible with the difference in the clausal architecture between the auxiliary verb and non-auxiliary verb constructions indicating a major clausal boundary in (27) quite in contrast to (26).<sup>7)</sup>

## 3. Periphrastic Causative Construction

As we saw, in the auxiliary verb construction, the auxiliary verb

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7) An anonymous reviewer wonders whether the prosodic boundary of pause should be considered as a factor in the grammaticality judgement of the sentences as in (26-27). It is clearly the case, however, that the two sentences show a sharp contrast in the availability of the prosodic boundary of pause, which has to do with the syntactic information of a constituency.

expresses the fine distinctions of the action as denoted by the main verb such as completion and progress and modality. Now let us turn to the periphrastic causative construction in the form of *v-key* followed by *ha* 'do' above in (7) in section 1, repeated as (28).

- (28) Mary-ka [ John-i nonmwun-ul ilk-**key**] hayssta  
 Mary-NOM John-NOM paper-ACC read did  
 'Mary made John read the paper.'

It has been quite a controversy since Choi (1935) whether the periphrastic causative construction is an auxiliary verb construction (see Lee 1976, Yang 1976, Suh 1992, 2013, Kim 1992, Nam and Ko 1993, Sohn 1994, 1999, Chai 1999, among others). Some suggests verbal complex structure for the periphrastic causative construction (Bratt 1996 ). Some suggests that it is VP complementation (Chai 1999). Still others suggest bi-clausal structure for the construction (Kim 1992, and Um 2017). The controversy only merits more work to be done to have a better understanding of the nature of the construction. Below, it will be shown that the construction does not count as an auxiliary verb construction. I will show that the construction in question is not mono-clausal, thus falsifying the claim that it is an auxiliary verb construction, given that the auxiliary verb construction is necessarily mono-clausal (Anderson 2006: 7). The proposed structure of the periphrastic causative construction as bi-clausal also falsifies that it is verbal complex or VP complementation.

### 3.1. Scope of the Negation and Manner Adverbial

First, consider the following periphrastic causative construction with negation and manner adverbial, respectively in (29a) and (29b):

- (29) a. Mary-ka [John-i nonmwun-ul an ilk-**key**]  
 Mary-NOM John-NOM paper-ACC NOT read  
 hayssta.  
 did  
 'Mary made John not read the paper.'

- b. Mary-ka [John-i nonmwun-ul cayppalli  
 Mary-NOM John-NOM paper-ACC quickly  
 ilk-**key**] hayssta  
 read did  
 ‘Mary made John quickly read the paper.’

The sentence above in (29) does allow the manner adverbial and the negation to scope over only the first verb, namely, *v-key* as indicated in the glosses, strongly suggesting that the clausal architecture is bi-clausal, not mono-clausal. Moreover, the fact that negation and manner adverbial can scope over only the first *v* in *v-key* *v* suggests that the two verbs in *v-key* *v* represent two different events, meaning that both are main verbs. Next, consider the following with the negation and manner adverbial interpolating the two verbs in *v-key* *v*:<sup>8)</sup>

- (30) a. Mary-ka [John-i nonmwun-ul ilk-**key**] an  
 Mary-NOM John-NOM paper-ACC read NOT  
 hayssta  
 did  
 ‘Mary did not make John read the paper.’  
 b. Mary-ka [John-i nonmwun-ul ilk-**key**]  
 Mary-NOM John-NOM paper-ACC read  
 kanyohatacipi hayssta  
 almost forcefully did  
 ‘Mary almost forcefully made John read the paper.’

Both the manner adverbial and negation above in (30) can scope over only

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8) Only a few manner adverbs can intervene between the two verbs in the periphrastic causative construction. I suggest it has to do with a strong tendency for the periphrastic causative construction to be interpreted as purposive construction with the intervening manner adverbial as below in (i).

(i) Mary-ka [John-i nonmwun-ul ilk-**key**] coyonghi hayssta  
 Mary-NOM John-NOM paper-ACC read quiet did  
 ‘Mary remained quiet so that John could read the paper.’

the second verb in *v-key v* sequence, again suggesting the sentence is bi-clausal unlike the auxiliary verb construction. Moreover, the fact that negation and manner adverbial can scope over only the second *v* in *v-key v* further suggests that the two verbs represent separate events quite unlike the auxiliary verb construction where the main verb together with the auxiliary verb represents a single event.

### 3.2. Argument Projection

The paradigm involving negation and manner adverbial above in (29) and (30) strongly suggests that periphrastic causative construction is not an auxiliary verb construction. Then how about the following periphrastic causative construction where an argument intervenes between the two verbs in *v-key v*?<sup>9)</sup>

- (31) \*Mary-ka [ John-i nonmwun-ul ilk-**key**]  
 Mary-NOM John-NOM paper-ACC read  
 ku kes-ul hayssta  
 the thing-ACC did  
 'Mary made John read the paper.'

The sentence above in (31) is ungrammatical, quite unlike the other non-auxiliary verb construction as we saw above in (25), repeated below as (32).

- (32) John-i nonmwun-ul ccic-**e** ku kes-ul pelyessta.  
 John-NOM paper-ACC tear that thing-ACC threw away  
 'John tore the paper and Mary threw it away.'  
 (Choi 2016: 92)

I suggest that the periphrastic causative construction above in (28), repeated below as (33), is a complex sentence with a complement clause CP headed

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9) Although not acceptable under the periphrastic causative construction interpretation, it is acceptable under the purposive interpretation of 'Mary did something in order that John could read the paper.'

by *key*, namely, in a way similar to the complement clause construction in (34).

- (33) Mary-ka [John-i nonmwun-ul ilk-**key**] hayssta  
 Mary-NOM John-NOM paper-ACC read did  
 'Mary made John read the paper.'
- (34) Mary-ka [John-i nonmwun-ul ilkessta-**ko**]  
 Mary-NOM John-NOM paper-ACC read-COMP  
 malhayssta.  
 said  
 'Mary said that John read the paper.'

Dixon (2006: 15) presents the following criteria for clausal complementation:

- (35) a. It has the internal structure of a clause at least as far as core arguments are concerned. Core arguments, if not omitted by a grammatical rule associated with a particular complement clause construction, should be marked in the same way as in a main clause and have much the same grammatical properties.
- b. It functions as core argument of a higher clause.
- c. A complement clause will always describe a proposition; this can be a fact, an activity, or a potential state, etc.
- d. In every language which has complement clauses, they function as a core argument for verbs with meanings such as 'see,' 'hear,' 'know,' 'believe' and 'like'; and also for 'tell' if there is an indirect speech construction and for 'want' if this concept is realized as a lexical verb.

Given the criteria for the complement clause above in (35), it is obvious that the structure within the square bracket in (33) serves as the complement clause of the verb *hata* 'do' meaning 'command.' Thus, the periphrastic causative construction in (33) and the non-auxiliary verb construction in (20), repeated as (36), although both are non-auxiliary verb constructions, are different in nature.

- (36) John-i nonmwun-ul ccic-e pelyessta.  
 John-NOM paper-ACC tear threw away  
 'John tore the paper and threw it away.'

The former is a complex sentence with a complement clause in contrast to the latter, which is a complex sentence with a non-complement subordinate clause.<sup>10)</sup> The conclusion regarding the clausal architecture of the periphrastic causative construction agrees with the observation in the literature that the construction typically includes two verbs and two clauses to express causation across languages. With this in mind, one is ready to answer why the sentence above in (31) is ungrammatical. Once the argument *ku kes* 'the thing' projects, it destroys the argument structure of the verb *hata* 'do,' which as a main verb takes the clause within the square bracket as its argument. Before closing the section, note that the prosodic boundary of pause can intervene between the two verbs in the periphrastic causative construction as in (37), quite unlike the auxiliary verb construction above in (26) repeated below as (38).

- (37) Mary-ka [John-i nonmwun-ul ilk-**key**] # hayssta.  
 Mary-NOM John-NOM paper-ACC read did  
 'Mary quickly made John read the paper.'
- (38) \*John-i nonmwun-ul ccic-e # pelyessta.  
 John-NOM paper-ACC tear threw away  
 'John tore up the paper.'

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10) One may argue that the lack of tense in the embedded clause in (33) supports its status as a non-clausal expression. As observed by Sohn (1994: 355), and Choi (2016) among others, tense, however, cannot be a criterion for the clause-hood in Korean. Sohn (1994: 71) notes that certain subordinate clauses in Korean like the one below in (i) introduced by *myense* 'while' do not have tense marked.

- (i) a. John-i mwul-ul masi-**myense** hakkyo-ey kassta.  
 John-NOM water-ACC drink-while school-to went  
 'John went to school while drinking water.'
- b. \*John-i mwul-ul masi-ess-**myense** hakkyo-ey kassta.  
 John-NOM water-ACC drink-PAST-while school-to went  
 'John went to school while drinking water.'



The prosodic boundary of pause further confirms that it is bi-clausal, suggesting a major clausal boundary between the two verbs in the periphrastic causative construction. The conclusion so far is that the periphrastic causative construction is a non-auxiliary verb construction, namely, a complex sentence with a complement subordinate clause.

#### 4. Conclusion

Korean is typologically a head final language, very often with more than one verb coming adjacent to each other to form various constructions. The same sentence with an auxiliary verb construction interpretation can thus be construed as a non-auxiliary verb construction as well. Using negation, manner adverbial and argument projection, prosodic boundary of pause as tests for the auxiliary verb construction, I showed that the construction is mono-clausal, quite in agreement with the observation in the literature (Anderson 2006:7). In the mean time, when the same sentence is construed as a non-auxiliary verb construction, I showed that it is a complex sentence with a non-complement subordinate clause, à la Choi (2016). I also showed that the periphrastic causative construction is not an auxiliary verb construction. It is not mono-clausal, but a complex sentence with a complement clause. The present research, when applied to other auxiliary verb constructions in Korean, will have a non-trivial implication on a better understanding of the auxiliary verb constructions in general.

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