A Korean Verbal Noun in Copular Structure

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1 Introduction

There have been debates about what syntactic category Korean 'verbal nouns' (VNs, Martin 1992) fall into in the literature, as summarized in (1).

(1)   a.   VN-as-a-N approach: VNs are treated as nouns (Chae 1997, Jung 2016, Jun 2003, Yoon and Park 2003, Sato 1993),
       b.   VN-as-a-V approach: VNs are treated as verbs (Ahn 1991, Han 1988, Park 1992), and
       c.   VN-as-an-un(der)specified-category approach: VNs are treated as underspecified (or unspecified) categories that are realized as either verbs or nouns depending on where they appear (Manning 1993, Choi & Wechsler 2002, Pak 2001).

These debates are strongly related to the existence of sentences in which a VN appears to license its arguments with clausal cases (or verbal cases, Iida 1987, e.g., nominative, accusative) alone, as shown in (2). (the VNs or nouns in question are highlighted in capitals.)

(2) *[Kim-paksa-ka   wencahayk-ul   YENKWU-cwung]-ey cencayng-i*
     Kim-doctor-Nm atom.nucleus-Ac   research-midst-in   war-Nm
     ilena-ss-ta.[1]
     break.out-Pst-Dc
     'The war broke out while Dr. Kim was doing research on atom nu-
     cleus.' (Yoon & Park 2008: 234, (9))

The VN *yenkwu* 'study' in (2) co-occurs with its theme in the accusa-
tive case *wencahayk-ul* 'atom.nucleus-Ac', but it is not followed by any
overt verbal morpheme within the clause it appears in. This appears to
show that the VN can license accusative case by itself. This along with
other linguistic behaviors gave rise to the VN-as-a-V approach (1b).

The problem with this approach (1b), among others, however, is that
VNs alone do not always co-occur with arguments in clausal cases. Ob-
serve the contrast between the two examples in (3). The VN in subject
position in (3a), co-occurring with its arguments in the genitive case and
adnominal form, is grammatical, whereas the VN in the same subject posi-
tion in (3b), co-occurring with its arguments with clausal cases, is com-
pletely out.

(3) a. *Kyengchal-ey uyhan   pemin(-uy) CHEYPHO-ka cwumintul-ul*
         police-by   culprit-Gen arrest-Nm   residents-Ac
         ansin-sikhyess-ta.
         relieved-Dc
         'The arrest of the offender by the police relieved the residents.'
     b. **Kyengchal-i   pemin-ul   CHEYPHO-ka   cwumintul-ul*
         police-Nm   culprit-Ac   arrest-Nm   residents-Ac
         ansin-sikhyess-ta.
         relieved-Dc
         'The arrest of the offender by the police relieved the residents.'

The examples in (3) contrast sharply with the example in (2). The data
given above show that VNs alone appear to function like verbs in certain
syntactic contexts, e.g., when followed by *-cwung* as in (2). But they do
not behave like verbs in other contexts, e.g., in subject position as in (3).
This has ushered in the *VN-as-an-un(der)specified-category* position (1c).

This position (1c) basically divides syntactic contexts into two types:
(i) a VN is realized as a noun when it is preceded by arguments in the gen-
itive and/or modifiers in adnominal forms and followed by certain types of

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[1] Ac: accusative case, Cp: copula, Dc: declarative, Gen: genitive case, Nm: nominative case,
Pol: polite, Pred: the head of a Predicational Phrase, Prs: present tense, Pst: past tense, Q: ques-
tion marker, Rel: relative clause linking, Top: topic marker.

elements, e.g., a case marker as in (3a), and (ii) a VN is realized as a verb when it is preceded by arguments in clausal cases and/or adverbial modifiers and followed by another type of elements, e.g., -*cwung* as in (2) or *hata* 'to do'. There is, however, also a problem with this approach, which has (to date) not been noted in the literature. That is, the syntactic contexts where VNs are realized as 'verbs' are not uniform, that is, they behave differently depending on what follows them. There are, in fact, two types of syntactic contexts where VNs appear to be realized as 'verbs'. An example (Type A) is the construction with a VN followed by -*cwung* 'middle'. Another example (Type B) is the construction with a VN followed by *hata*.

   Type A: A first characteristic of Type A is that a transitive VN (which will be defined shortly) may appear with its theme in the nominative as well as in the accusative. The transitive VN *yenkwu* in the VN-*cwung* construction appears as transitive in (4) co-occurring with an accusative theme. It appears in passive voice in (5) co-occurring with a nominative theme.

(4) *Chelswu-ka   cwungsey hankuke-lul* YENKWU-*cwung-i-ta*.
    Chelswu-Nm   middle   Korean-Ac   study-middle-Cp-Dc
    'Chelswu is in the middle of studying Middle Korean.'

(5) *Pwulmyencung-ul wanhwa-ha-nun chilyopep-ul   kaypal-ha-ki*
    insomnia-Ac   mitigate-Rel   treatment-Ac   develop-in
    wihayse   Sewul uytay-thim-ey-uyhay pwulmyencung haykyelchayk-i
    order-to   Seoul Med-Univ-team-by   insomnia   solution-Nm
    YENKWU-*cwung-i-pni-ta*.
    study-middle-Cp-Pol-Dc
    'In order to develop a treatment that will mitigate insomnia, a solution for insomnia has been studied by the Seoul Medical University team.' (Sato & Cho 2013: 814 (14))

   Sato and Cho (2013) concluded, based on an Internet search and the results of a completed questionnaire, that the VN-*cwung* construction allows alternation between transitive and passive, as shown in (4) and (5).

   A second characteristic of Type A is that it allows a noneventive noun to appear in place of a VN to function as a nominal predicate, as in (6), where the noneventive noun *cangma* 'rainy spell' appears before -*cwung*.

(6) *Nalssi-ka*   *cangma-cwung-ey*   *hay-ka*   *nass-nuntey*
     weather-Nm   rainy-season-middle-at sun-Nm came-out-then
     hayssal-i   *ttakap-kwun-yo.*
     sunlight-Nm   hot-Exc-Pol
     'When it was in the rainy season, the sun came out and shined
     scorching hot.'[2]

   Type B: In contrast, Type B exhibits neither characteristic. Type B
neither allows alternation between transitive and passive nor does it allow
a VN to be replaced by a noneventive noun. The transitive VN *yenkwu*
'study' in the VN-*hata* construction co-occurs with an accusative case
marked theme in (7a), but it can never co-occur with a nominative case
marked theme as in (7b) to render the same English translation as below.

(7) a. *Chelswu-ka*   *cwungsey hankwuke-lul*   *YENKWU-ha-n-ta.*
        Chelswu-Nm   middle   Korean-Ac   study-do-Prs-Dc
        'Chelswu is studying Middle Korean.'
     b. **Cwungsey*   *hankwuke-ka*   *YENKWU-ha-n-ta.*
         middle   Korean-Nm   study-do-Prs-Dc
        'Middle Korean is being studied.'

VNs in the VN-*hata* construction that can co-occur with their theme in the
accusative but not in the nominative are referred to as transitive VNs.
    In addition, a noneventive noun cannot replace a VN in the VN-*hata*
construction, as shown in (8), where the noneventive noun *haksayng* 'stu-
dent' appears before *hata*. It is a little surprising, at least to a second lan-
guage learner of Korean, in the face of sentences with an adjectival noun
(Martin 1992) followed by *hata*, as in (9).

(8) *Chelswu-ka*   *haksayng-*ha/i-ta.*
     Chelswu-Nm   student-do/Cp-Dc
     'Chelswu is a student.'

(9) *Chelswu-ka*   *wuswu-ha-ta.*
     Chelswu-Nm   excellent-do-Dc
     'Chelswu is excellent.'

   Having shown the difference between Type A and Type B, I will add
more examples of these two types. Another example of a Type A construc-
tion is Japanese transitive VNs followed by a copula, i.e., the VN-*da* con-

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[2] https://parkbongsooo.tistory.com/290, accessed July 14, 2019.

struction. Sato (2008, 2014, 2017) has demonstrated that transitive VNs appear either as transitive or passive when followed by a copula.[3]

Through the Internet, Sato (2014) has examined 461 Japanese transitive VNs to see if they would appear before the copula *-da*. He found 386 (84%) VNs (followed by *-da*) co-occurring with an accusative theme, as in (10a), and 68 (15%) VNs co-occurring with a nominative theme (i.e., in passive voice), as in (10b), (Sato 2014: 310-311).

(10) a. *Keisatu-ga   hannin-o   TAIHO-da.*
        police-Nm   offender-Ac   arrest-Cp
        'The police arrested the offender.' (Sato 2014: 308 (4))
     b. *Hannin-ga   (keisatu-ni-yotte)   TAIHO-da.*
        offender-Nm   police-by   arrest-Cp
        'The offender was arrested by the police.' (Sato 2014: 308 (5))

A typical Japanese sentence with a copula has a noneventive nominal predicate, as in (11), where *gakusei* 'student' appears in place of a VN.

(11)   *Tarō-ga   gakusei-da*.
        Taro-Nm   student-Cp
        'Taro is a student.'

Another example of Type B is the Korean multiple VN construction in (12).[4] This construction does not allow passivization of transitive VNs. The theme argument *tampay* 'tobacco' of the VN *swuip* 'import' in (12b) can never appear in the nominative.

(12) Multiple VN[5] Construction
a. *Hankwuk-i tampay-lul SWUIP-ul KAYPANG(-ul) ha-yess-ta*.
   Korea-Nm   tobacco-Ac   import-Ac opening-Ac   do-Pst-Dc
   'Korea opened the tobacco market for imported tobaccos.' (Chae 1997: 583 (3)) (27))
b. **Hankwuk-i tampay-ka   SWUIP-ul   KAYPANG(-ul)   ha-yess-ta*.
   Korea-Nm   tobacco-Nm   import-Ac opening-Ac   do-Pst-Dc
   'The government permitted tobaccos to be imported.'

The multiple VN construction (Type B) does not allow its VN to be replaced by a noneventive noun as shown in (13).

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[3] Japanese also has the VN-*tyū* construction (the equivalent of the VN-*cwung* construction) and passivization is also possible there (Sato 2008). In addition, the VN *mo* construction discussed in Sato (2017) is also of Type A. It exhibits both properties.

[4] The Japanese purposive construction discussed by Sato (2008) is another example of Type B and does not allow a passive reading.

[5] Although it is here called the multiple VN construction, the number of VNs seems to be limited to two (see Pak 2001: 69-70).

(13) *_Hankwuki-i tampay-ka_ KIHOPHWUM-_ul_ KAYPANG-_ha-yess-ta_.
　　　Korea-Nm　tobacco-Nm　luxury.goods-Ac　opening-do-Pst-Dc
　　　'Korea opened itself to tobaccos for luxury goods.'

　　I have shown above that the VN-_cwung_ construction is similar to the Japanese VN-_da_ construction (Type A). Both allow (i) transitive VNs to appear in passive voice and (ii) its VN to be replaced by a noneventive noun appearing as a nominal predicate and differs from Type B (the VN-_hata_ construction and the multiple VN construction). The purpose of this paper is to argue that Korean has constructions with VNs that exhibit Type A behaviors and that such constructions all have copular structure. An analysis of those constructions in terms of the Distributed Morphology is presented.

2　Data

This section presents data that show that the VN-c_wung_ construction has a copular structure. VN-_cwung_ is usually presented as heading an adverbial clause ending with -_ey_ in the examples that appear in the literature of Korean linguistics, as in (2), but the VN-_cwung_ construction is more commonly found being followed by a copula elsewhere (Sato 2004). It was examined how transitive VNs followed by -_cwung_ appear in the KAIST corpus or, particularly, what elements follow VN-_cwung_ when co-occurring with a theme argument in the accusative or nominative. The 255 most frequent transitive VNs in the Yonsei corpus (Han 2001) were examined to find out (i) what elements follow VN-_cwung_ and (ii) if some of those transitive VNs co-occur with a theme in the nominative (i.e., passive voice) as well as a theme in the accusative (i.e., active voice) in the KAIST corpus.

　　The result is that 47 of the 255 transitive VNs co-occurred with a theme in the accusative and/or nominative in the VN-_cwung_ construction in the KAIST corpus. 41 of the 255 transitive VNs appeared with a theme in the accusative in 422 instances of the VN-_cwung_ construction. Of those 422, VN-_cwung_ was followed by a copula (-_i_-) in 373 (88.3%) instances, by -_ey iss_- in 44 (10.4%) instances, and by a period (.) in only 5 (0.01%) instances, as shown in Table 1. 12 of the 255 transitive VNs appeared with a theme in the nominative case, i.e., in passive voice, in 23 instances of the VN-_cwung_ construction. Of those 23 instances, VN-_cwung_ was followed by a copula (-_i_-) in 16 instances and by -_ey iss_- in 7 instances. (Of the twelve transitive VNs that appeared with a nominative case marked theme, six also were preceded by an accusative case marked theme.)

Table 1. Elements following VN-*cwung* in the KAIST corpus

Case on Theme	Followed by	Frequency
ACCUSATIVE THEME, 41 VNs	copula (-*i*-)	373
(Of those 41, six VNs also co-occurred with a theme in the nominative.)	-*ey iss*-	44
	period (.)	5
NOMINATIVE THEME (passive voice), 12 VNs	copula (-*i*-)	16
	-*ey iss*-	7

It is clear from Table 1 that (i) VN-*cwung* co-occurring with a theme in clausal case was in most cases followed by a copula (87.4%, 389 out of 445) and occasionally by -*ey iss*- (11.5%, 51 out of 445) and that (ii) there are some transitive VNs in the VN-*cwung* construction that co-occurred with a theme in the nominative, i.e., in passive voice—a characteristic of Type A. Examples are shown below in (14)-(17): VN-*cwung* is followed by the copula -*i*- in (14) and (15) and by -*ey iss*- in (16) and (17); (14) and (16) are in active voice, and (15) and (17) are in passive voice.

(14) *hayoy-chaip   kyengwu cengpu-ka cikup-ul   pocung-ha-nun*
     overseas-loan case   gov't-Nm pay-Ac   compensate-Rel
     pangan-ul   CHWUCIN-cwung-i-ta.
     policy-Ac   promotion-middle-Cp-Dc
     'in case of overseas loans, the government is promoting a policy to compensate for payment.'[6]

(15) *pangyeng-sikan-uy   chwukso-ka   KEMTHO-cwung-i-la-ko*
     broadcast-hour-Gn   reduction-Nm   discussion-middle-Cp-Dc-Quo
     palphyo-toy-ess-ta.
     announced-become-Pst-Dc
     'It was announced that the reduction of broadcasting hours is being discussed.'[7]

(16) *Thaipheyi cwucay Hankwuk tayphyopu-uy   han   kwankyeyca-nun*
     Taipei   residing Korea   delegate-Gen one   official-Top
     poto-nayyong-uy sasil-yepu-lul   HWAKIN-cwung-ey   iss-una …
     report-content-Gen   fact-or-not-Ac   confirm-
ing-middle-in be-but
     'An official in the Korean delegation in Taipei is now confirming whether or not what was reported is true, but ...'[8]

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[6] kaistcorpus_written_raw_or_mass-media_newspaper_chosun12-2_2.txt(377).

[7] kaistcorpus_written_raw_or_academic_paper96_cu.txt(2086).

[8] kaistcorpus_written_raw_or_mass-media_news_mbc9701.txt(22969).

(17) *hyencay-to Cennam   Poseng-ey Cwuam tamokcektaym-kwa*
     now-also   Jeol-Nam Boseong-in Juam   multi-purpose-dam-and
     Antong-ey Imha tamokcektaym-i   KENSEL-cwung-ey
     Andong-in Imha multipurpose-dam-Nom   construting-middle-in
     iss-ta.
     be-Dc
     'even now the Juam multi-purpose dam (is being constructed) in Bo-
     seong in South Jeolla Province and the Imha multi-purpose dam are
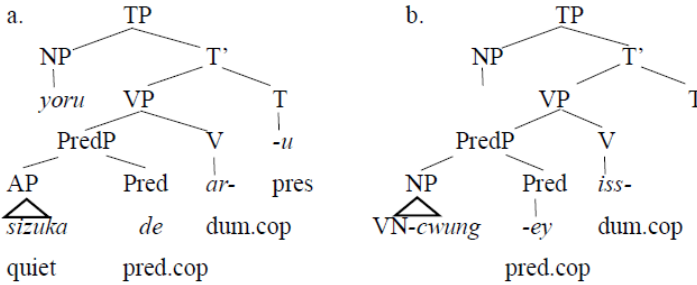   under construction in Andong.'[9]

The results of the search show that a position before a copula is the most typical syntactic context where VN-*cwung* with clausal case marked arguments appear. VN-*cwung* in such a context can be considered forming a nominal predicate with a copula licensing the arguments of VN to be realized with clausal cases.

A question arises as to how we can interpret a string with VN-*cwung* followed by -*ey iss*- in the KAIST corpus. What structure is it? I argue here that -*ey iss*- can also be considered as forming copular structure, or as consisting of a Predicational Phrase (PredP) headed by -*ey* followed by a dummy copulative verb *iss*- (Nishiyama 1999).

Some researchers postulate that a locative marker, -*ni* 'at', and a verb for existence, *ar*- 'to exist', in Old Japanese had assumed the function of a copula and were realized as -*ni ar*- or its fused form -*n-ar*- , meaning 'to be' as well as 'to be (located) in ....' (Kasuga 1968). The copula -*n(i) ar*- later developed into -*ni-te ar*- and further into -*de ar*- in Modern Japanese (Naraha 2002: 134), to which Nishiyama (1999: 189) assigned a structure (18a) in the framework of Distributed Morphology. Following Nishiyama (1999) the postulated Korean copula consisting of -*ey* and *iss*- can be considered having the structure in (18b).

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[9] kaistcorpus_written_raw_or_generality_explanation95_mh2-0605.txt(106).

(18) Copular structure with a predicative copula (pred.Cp) and a dummy copula (dum.Cp)

a.
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              TP
         ┌────────┴─────┐
        NP              T'
         |          ┌────┴────┐
       yoru        VP         T
              ┌─────┴───┐      |
            PredP       V     -u
          ┌───┴──┐      |
         AP      Pred  ar-    pres
       sizuka    de   dum.cop
       quiet   pred.cop
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b.
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              TP
         ┌────────┴─────┐
        NP              T'
         |          ┌────┴────┐
                   VP         T
              ┌─────┴───┐
            PredP       V
          ┌───┴──┐      |
         NP      Pred  iss-
       VN-cwung  -ey   dum.cop
              pred.cop
```

(Nishiyama 1999: 189 (14))

   I am arguing here that *iss-* in VN-*cwung-ey iss-* is a functional category (a stative little v, as will be discussed later) distinct from the verb of existence *iss-*, which is a lexical category with the argument structure (Location, Theme). A first piece of evidence comes from the fact that the types and number of arguments and the case array for VN-*cwung-ey iss-* are always determined by the first component of VN-*cwung* and never by *iss-*. For example, in (19) (see below) an agent (*uylyo-thim-i*) 'medical team-Nm' and a theme (*i chilyo-pep-ul*) 'this treatment-Ac' appear as arguments and a location as an adjunct (*yenkwuk-eyse*) 'in England' as expected from the argument structure of the VN *yenkwu* 'study' (Agent, Theme). The appearance of the agent in (19) does not match the argument structure of the lexical category *iss-*. The theme in (19) does not appear in the nominative case as expected from the normal case array exhibited by the theme arguments of lexical *iss-*, but it appears in the accusative. Moreover, the locative expression in (19) is an adjunct and hence is followed by the postposition *-eyse*, as expected from *yenkwu*, but not by the locative postposition *-ey*, which is expected from lexical *iss-*.

(19) *Yengkwuk-eyse/*-ey   uylyo-thim-i   i   chilyo-pep-ul*
      England-in   medical-team-Nom   this   treatment-Ac

      YENKWU-cwung-ey   iss-ta.
      study-middle-at   be-Dc
   'A medical team is studying a treatment for this in England.'

   Treating *-ey* attached to *-cwung* as the locative marker for *iss-* does not work, either, because questions still remain as to why the NP in the nomi-

native is an agent and the NP in the accusative a theme, and why another locative marked with -*eyse* appears in addition to -*ey*.

Secondly, -*ey* (which is considered as the predicative copula) can be replaced by -*ulo* in the VN-*cwung* construction when the dummy copula *iss*- appears, as shown in (20) and (21)—the latter is an instance of a transitive VN appearing in passive voice.

(20) *kumnyen-tayhoy-ey wusung-thim-in ...[GS]-ye-ko-thim-ul*
    this-year-to winning-team-Rel ...GS-girl-high-team-Ac
    chocheng-ha-ye haptong-hwunlyen-ul KYEYHOYK-cwung-ulo iss-ta.
    invite-and joint-training-Ac planning-middle-at be-Dc
    '... (they) have invited the winning team, the GS [Gyeongbuk Sangji] Girls High School team, to this year's tournament and are planning a joint training session.'[10]

(21) *Namkang-uy Cincwu-si-to ha-pyeyswu-choli-lul-wihan*
    Namgang-Gen Jinju-city-also sewage-wastewater-treatment-for
    haswu-cholicang-i KENSEL-cwung-ulo iss-ta.
    sewage-treatment-plant-Nom construction-middle-at be-Dc
    'Also, in Jinju City in Namgang a sewage treatment plant to process sewage and wastewater is being constructed.'[11]

The occurrence of -*ulo* in place of -*ey* is totally unexpected from lexical *iss*-. This expression -*ulo iss*- following VN-*cwung* as shown above is similar to that used as a copula following a noneventive noun as shown in (22). Such a copula denotes the role that the referent of the subject performs or a stage level situation it is in. This further supports the idea that -*ey iss*-, interchangeable with -*ulo iss*-, is used as a copula.

(22) *TTAL-lo iss-ul ttay-nun 5-wel-uy kkoch-phi-l ttay kath-ciman...*
    daughter be-Rel time-Top May-Gen flower-blooming time-like-but
    '...when (she) is a daughter, (it is) like while (she) is in flower-blooming May, but ...'[12]

If -*ey iss*- is a variant of the copula, just as -*ulo iss*- is, as has been argued above, all the instances of the VN-*cwung* construction (with 47 of the top 255 VNs in the Yonsei Corpus) found in the KAIST corpus were followed by a copula except for five cases which ended with nothing but a period. It is therefore not unfair to assume that the VN-*cwung* construction

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[10] http://www.2000news.co.kr/news/articleView.html?idxno=12820, accessed August 2, 2019.
[11] http://www.codil.or.kr/filebank/original/RK/OTMCRK501186//OTMCRK501186.xml, accessed August 2, 2019.
[12] kaistcorpus_written_raw_or_generality_etc95_mh2-0449.txt(64)

exhibiting Type A properties has a copular structure. The type of the VN-*cwung* construction appearing as an adverbial clause as in (2) can be considered on par with an adverbial clause ending with VN-*ulo*.

In addition to the VN-*cwung* construction, VNs directly followed by -*ita*, although usually judged as very unnatural, can be verified through the Internet (Sato 2018). The 10 most frequently used transitive VNs found in the Yonsei corpus wordlist (Han 2001) followed by a copula (-*ita* or -*ipnita*) were examined to determine if they would co-occur with an accusative theme argument (-*lul* or -*ul*) or appear passivized (co-occurring with a nominative theme argument) within the first 20 results of each query. The Google Advanced Search function *this exact word or phrase* (https://www.google.co.kr/) was used to collect data between December 16 and 27, 2017. All of the 10 transitive VNs were found occurring with an accusative theme on an average of 14.7 times within 80 results (four queries per VN). Eight of the 10 VNs were found to appear passivized on an average of 4.9 times among 80 results (four queries per VN). An example of a transitive VN followed by a copula in active voice is shown in (23) and that in passive voice in (24).

(23) *koki-uy   sinsento-lul   ywuciha-ki-wihay elum-ul* CWUNPI-*O-ta*.
meat-Gn   freshness-Ac keep-for   ice-Ac preparing-Cp-Dc
'to keep the meat fresh, ice has been prepared.'[13]

(24) *Kanglung, Mukho-chwulpal Wullungto-payphyen   wunhang-*
Gangneung Mukho-departing Ulleungdo-boat   plying-
kyeyhoyk-i   PALPHYO-i-pni-ta.
schedule-Nm announcing-Cp-Pol-Dc
'The plying schedule of boats departing from Gangneung and Mukho for Ullengdo has been announced.'[14]

Data like (23) and (24) are rated as marginal at best by Korean native speakers. If VN-*ita* constructions like these exists in Korean, it can be considered as another example of Type A, as there is no problem for this construction to have a nonevent noun, like *haksayng* 'student', in place of a VN.

3 Analysis

Below I present an analysis in the framework of Distributed Morphology (Halle and Marantz 1993, Marantz 1997). I particularly follow Jung's

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[13] http://m.blog.daum.net/dong2013/8926988?np_nil_b=2.
[14] https://m.blog.naver.com/PostView.nhn?blogId=cjh61092&logNo=220604464430&proxyReferer=https%3A%2F%2Fwww.google.com%2F.

(2016) analysis of Korean constructions with VNs, in which she assumes that different 'flavors' of a little v (Folli and Harley 2005, 2007) are realized as a light verb. In addition to the mechanisms postulated by Jung (2016) for the constructions with a VN followed by *hata*, the Vocabulary Insertion operations in (25) are postulated to account for the above data.

(25) a. v_{BE} ↔   *-i-* / [Pred ø ___]
     b. v_{BE} ↔   *iss-*   / [Pred *-ey/-ulo* ___]

The dummy copulas are realized as stative little v's taking a PredP as their complement—the head of a PredP is null for *-i-* and *-ey* for *iss-*, as shown in the figures in (27a,b), which are the structures for the following sentences.

(26) a. *Cengpu-ka phuloceykthu-lul*   CHWUCIN-*(cwung-)ey iss-ta.*
       gov't-Nm   project-Ac   promoting-middle-at   be-Dc
       'The government is promoting the project.'[15]
    b. *Phuloceykthu-ka (cengpu-ey-uyhay) chwucin-(cwung-)ey*   *iss-ta.*
       project-Nm   gov't-by   promoting-middle-at   be-Dc
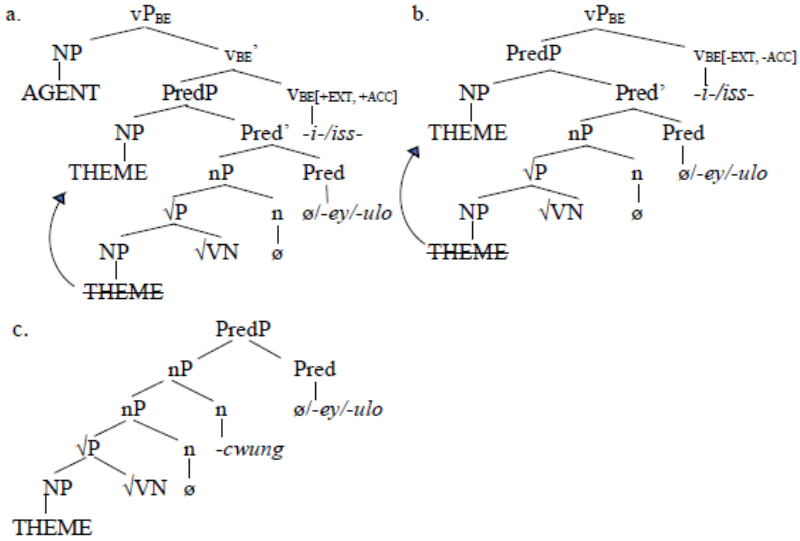   'The project is being promoted (by the government).'

The stative little v merges with a PredP as its complement, Pred (or a dummy copula) merges with a category defining nP (headed by a null head), which merges with a root Phrase headed by a VN (The structure of VN-*cwung* is shown in (27c)).

I assume different varieties of a stative little v, following Myler (2016): one (subscripted with [+Ext, +Acc]) that takes an external argument and licenses accusative case and another (subscripted with [-Ext, -Acc]) that does neither. Dynamic flavors of little v are postulated here to select a specific type of subject (e.g., v_{DO} selecting an agent), following Grimshaw (1990) and Ramchand (2008). A stative little v ([-dynamic], [-change of state], [-cause], Harley 2009), in contrast, needs to depend on thematic prominence (Grimshaw 1990) for subject selection. I assume, following and adapting Kelly (2013), that the transitive VN *chwucin* 'promotion', for example, has a root entry in the Encyclopedia as taking one theme argument and having the event features [+dynamic][-change of state][-cause]. Kelly (2013) postulated that the transitive verb *break* has only one theme argument in its root entry. I extended his idea to other

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[15] The examples in (26) without *cwung* are degraded grammaticality (particularly when the theme is in the nominative as in (26b)), but similar examples can be found on the internet, e.g., ... *ceypan celcha-lul* CHWUCIN-*ey issta* '... (they are) carrying out various measures' http://blog.daum.net/bang4776/18154, accessed January 13, 2020.

transitive verbs, assuming, as proposed by Kratzer (1996), that an external argument is the argument of Voice (here it is a little v as Korean vP is considered Voice-bundling following Jung 2016). The argument information in the root entry of a root VN like *chwucin* 'promoting' in Encyclopedia, in effect, requires that it takes a theme argument in its event information implies that it takes an external argument.

(27)

a.

```
                vP_BE
          /            \
        NP             V_BE'
        |            /      \
      AGENT      PredP     V_BE[+EXT, +ACC]
                /    \
              NP    Pred'  -i-/iss-
              |    /     \
           THEME  nP     Pred
                 /  \      |
               √P    n   ø/-ey/-ulo
              /  \
            NP   √VN   ø
            |
          THEME
```

b.

```
                vP_BE
          /            \
       PredP          V_BE[-EXT, -ACC]
      /      \            |
    NP      Pred'       -i-/iss-
    |      /     \
  THEME   nP    Pred
         /  \
       √P    n   ø/-ey/-ulo
      /  \
    NP   √VN   ø
    |
  THEME
```

c.

```
                PredP
              /      \
            nP      Pred
          /    \      |
        nP     n    ø/-ey/-ulo
       /  \    |
     √P    n  -cwung
    /  \
  NP   √VN  ø
  |
THEME
```

The derivational steps for (27) include the following: in both (27a,b), a root VN merges with its theme to yield √P, (ii) category-defining n merges with √P to yield nP, (iii) Pred merges with nP to yield Pred', and (iv) Pred projects a specifier to host the theme, which is raised from below to satisfy the EPP condition, yielding PredP. After this, in (27a), (v) V_BE[+EXT, +ACC] merges with PredP, projects a specifier for an external argument and licenses accusative case on the theme argument in the specifier of PredP. In (27b), (v) V_BE[-EXT, -ACC] merges with PredP, and (iv) the theme NP further moves to Spec,TP for case-checking. At the semantics-syntax interface, the arguments of a VN are checked with its Encyclopedia entry. A theme argument required by the argument information in the entry of the VN *chwucin* in Encyclopedia is satisfied in both (27a) and (27b). The external argument implied by its event structure is realized in (27a) and it is not realized in (27b). Having no external argument in (27b) is not inconsistent with the information in its Encyclopedia entry because the existence of an agent is just implied by its event structure. An agent, actually, can be real-

ized as a *by*-phrase, or an argument adjunct (Grimshaw 1990), in (27b) as well.

4 Conclusion

On the basis of the above, there are two syntactic contexts where VNs behave like 'verbs', Type A and Type B. In Type A constructions, transitive VNs may appear as transitive or passive and a noneventive noun appear in the position where a VN is, while Type B constructions exhibit neither behavior. The VN-*cwung* construction, which exhibit both behaviors of Type A, is argued to appear in copular structure based on how they appear in the KAIST corpus. The VN-*cwung* appear when followed by a copula (an inflected form of *-i(ta)* 'to be') in all cases except VN-*cwung* is followed by none if we treat *-ey iss-* as consisting of a predicative copula and a dummy copula. I have presented arguments that *-ey iss-* in such a construction indeed is likely to be functioning as a copula. An analysis of those Type A constructions in the framework of Distributed Morphology was presented. It was discussed how alternation between active and passive is possible in such a construction.

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