Bare objects in Korean: (pseudo-)incorporation and (in)definitenessⁱ

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Abstract

This paper proposes a descriptive study of Korean 'bare' objects, which we define as those which fail to be suffixed by the object marker (*l*)eul, commonly glossed as an accusative case marker. A systematic survey of LEUL-marked and bare objects reveals that the latter verify two properties currently regarded as characteristic of semantic incorporation. It however appears that although they are semantically incorporated, Korean bare objects may be fully referential. To solve this apparent paradox, we are led to assume that the interpretive effect(s) known as semantic incorporation or 'pseudo-incorporation' may derive either from referential or from informational deficiency, and that these two types of deficiency are quite independent from each other. It follows that semantic incorporation cannot be regarded as a subtheory of indefiniteness, as proposed by Van Geenhoven (1998).

1. Introduction

This study will focus on the relation between two semantic concepts:

- the concept of *semantic incorporation* (also called *pseudo-incorporation*, in contradistinction with morphological incorporation);
 - the concept of weak indefiniteness.

We take weak indefinite objects as those which are scopally inert with respect to their predicates and thus exhibit strict 'narrow scope' effects. Basing ourselves on some data from Korean, we shall question a current assumption according to which those objects which undergo semantic incorporation necessarily exhibit weak indefinite readings. We shall show that those Korean objects which fail to support the object particle LEUL are construed as semantically incorporated, but may nevertheless stand as fully referential. We shall argue that the key to this apparent paradox lies in the linguistic nature of the morpheme LEUL, which crucially serves to mark the object as an independent constituent at f-structure (focus structure), as analysed by Erteschik-Shir (1997). Under our descriptive assumption, objects which fail to bear the LEUL marker fail to be identified as f-structure constituents and must consequently incorporate into larger constituents. The Korean data thus lead us to conclude that the phenomenon known as semantic incorporation may a priori result from two independent types of semantic deficiency: referential deficiency, and informational deficiency, each of which correlates with morphosyntactic deficiency. Our leading descriptive assumption is that being an effect of informational, rather than referential, deficiency, object incorporation in Korean is quite independent from (in)definiteness.

Object Incorporation is originally understood as a phenomenon whereby an internal argument forms a single morphological unit with its verb, as exemplified in (1a). The term incorporation was however extended in recent years to describe cases such as (1b) — an English translation of (1a) — where the object is also scopally inert:

- (1) a. *Niviarsiagga-t* **mamaluiguttu**-si -pp -ut. girl ABS.PL candy-buy IND [-tr] 3PL
 - b. The girls bought candy.

[West Greenlandic example (1a) and gloss from van Geenhoven (1998: 24); highlighting ours]

(1b) illustrates what Massam (2001) and Dayal (2003) call *pseudo-incorporation* and Farkas & De Swart (2003), *semantic incorporation*, because the result is a verb phrase rather than a verb head. The motivations for treating (1a) and (1b) as two cases of object incorporation are summarized in (2):

(2) Properties shared by (1a) and (1b) and characterizing object incorporation a. *Morphosyntactic deficiency*The object in (1) is morphosyntactically deficient — a mere N-stem in (1a), an unsaturated noun phrase in (1b).

b. Semantic deficiency

Correlatively, the object in (1) is semantically deficient – unsaturated or incomplete — so that it only achieves 'completeness' or 'saturation' once it is merged with the verb.

Interpreting semantic incompleteness in the sense of, e.g., van Geenhoven (1995, 1998, 2001), Dobrovie-Sorin & Laca (2003), Chung & Ladusaw (2004), we may say that in both (1a) and (1b) the object is property-denoting, rather than entity-denoting or universally quantified, hence its strict narrow scope with respect to the verb. The object in (1) only acquires referentiality when it is existentially quantified by the verb. The correlation between syntactic and semantic deficiency, as phrased in (2), is consistent with Longobardi's generalization in (3), which expresses the same general idea:

(3) "DPs can be arguments, NPs cannot." (Longobardi 2000: 581)

Van Geenhoven, quoted in (4a), explicitly relates semantic incorporation, which in her terms covers both (1a) and (1b), to *indefiniteness*. In (4b), she also emphasizes that incorporation is not a homogeneous phenomenon:

- (4) a. "Semantic incorporation is a subtheory of a more global approach to indefinites." (van Geenhoven 1998: 8)
 - b. "Noun incorporation is a cover term for a wide variety of constructions across languages which all seem to have in common that a close morphosyntactic/ semantic relationship exists between a verbal element and a nominal element that specifies one of the verb's arguments. In the majority of cases, this is the theme argument." (van Geenhoven 2001: 261)

A survey of available linguistic studies on object incorporation indeed reveals a heterogeneous picture of properties:

- The incorporated object may be an N-stem, as in West Greenlandic (Sadock 1991, van Geenhoven 1995, 1998, Bittner 2004), Hindi (Mohanan 1995, Dayal 2003), and the languages considered by Mithun (1984); or a noun phrase smaller than DP, as in Germanic objects (van Geenhoven 1995, 1998), Hungarian (Farkas & De Swart 2003, Creissels 2004),

Niuean (Massam 2001), Chamorro (Chung & Ladusaw 2004). Incorporated noun phrases may be morphologically case-marked, while incorporated nouns may not.

- Incorporated objects may be pluralized in some languages (e.g. Hindi, Germanic, Hungarian, Chamorro); but not in others (e.g., West Greenlandic, Niuean).
- Nonpluralized incorporated objects are read as number-neutral in some languages (e.g., West Greenlandic, Hindi, Hungarian, Niuean), but not in others (Chamorro).
- The [Verb+Object] string resulting from incorporation must form in some languages (West Greenlandic, Hindi, Chamorro) but not in others (Germanic, Hungarian, Niuean) a semantic unit denoting a 'unitary concept' (Mithun 1984) or 'nameworthy activity' (Mohanan 1995).
- The [Verb+Object] string resulting from incorporation must form, in some languages (West Greenlandic, Hindi, Hungarian, Chamorro) but not in others (Germanic, Niuean), a prosodic unit.
- The incorporated object is described as licensing a dynamic discourse referent in some languages (West Greenlandic, Germanic, Hungarian [especially if plural], Niuean, Chamorro) but not in others (Hindi and the languages considered by Mithun 1984).

Beyond these differences, what brings together all incorporated objects is the pair of properties in (2) — their morphosyntactic deficiency, and semantic incompleteness.

With these preliminaries in mind, we shall now consider the data of Korean. We shall argue that objects which exhibit both the morphosyntactic deficiency and the semantic incompleteness given in (2) as characteristic of semantic incorporation productively occur in this language. We shall however show that object incorporation in Korean differs from all cases of noun incorporation documented so far in the linguistic literature, in that it does not involve referential deficiency, and is thus quite independent from the issue of weak indefiniteness.

2. Preliminaries

2.1 Subject and object marking in Korean

Korean is an SOV agglutinative language whose subject and object arguments are identified by suffixes which carry information regarding both syntactic function and information structure. As in Japanese, subjects may bear a topic marker (NEUN), or they may bear a so-called 'nominative' marker (*ga* after vowel, *i* after consonant), hereunder designated as GA. Korean subjects may also occur as bare, i.e. without a functional suffix, as will be the case in some of our examples (e.g. (16)), but we shall keep this issue out of the present study.

NEUN-subjects, exemplified in (6), instantiate what Kuroda (1972) named *categorical subjects*: they denote a given 'substance' about which the predicate provides new information. The NEUN suffix is thus glossed as a *topic* marker:

```
-da. <sup>iii</sup>
(6) Nam-nyeo
                                             benchi -e
                      han
                              ssang
                                      -i
                                                            anj
                                                                    -a -iss
                                                                            -eoss
     man woman
                      one
                                             bench
                                                    LOC
                                                            sit
                                                                     RESULT PST
    'A couple [man+woman] were sitting on a bench.'
                                             syeocheu
                      /#-ga} ppalga -n
    Namja{-neun
                                                            -leul
                                                                    ih
                                                                         -go iss
     man
               TOP
                              red
                                             shirt
                                                            LEUL
                                      REL
                                                                    wear PROG
               -da.
     -eoss
     PST
               DEC
     'The man was wearing a red shirt.'
```

DEC

GA-subjects, on the other hand, crucially fail to be construed as topical with respect to their associated predicate: as far as we know, they may be interpreted either as thetic subjects, as in (7), or as restrictive foci, as in (8):

```
(7) Nam-nyeo han
                              -i
                                      benchi -e
                                                     anj
                                                             -a -iss
                                                                    -eoss
                                                                            -da.
    man woman one
                      CL
                              NOM
                                      bench
                                             LOC
                                                     sit
                                                             RESULT PST
                                                                            DEC
    'A couple [man+woman] were sitting on a bench.']
                                               nolae -leul buleugi sijagha -yeoss-da.
     Namja {#-neun/-ga}
                              gabiagi
                TOP GA
                              suddenly
                                             song LEUL blow
                                                                    start
                                                                             PST
      man
     'All of a sudden, the man started singing.'
(8)a. [Nu
                      meonjeo
                                      nolae
                                             -leul
                                                     bul
                                                                    -ni?
               -ga
                                                             -eoss
     who
               GA
                       first
                                      song
                                              LEUL
                                                     blow
                                                             PST
                                                                     O
   'Who sang first?']
                                                                            -eo.iv
    namja{#-neun/-ga}
                              meonjeo
                                             nolae
                                                     -leul
                                                             bul
                                                                    -eoss
                                                                            DEC<sup>-H</sup>
               TOP GA
                              first
                                                      LEUL blow
    man
                                             song
                                                                     PST
    'The one who sang first was: THE MAN.'
    'It was THE MAN who sang first.'
  b [ modu
               -deul
                      Kallaseu -leul deuleul-lyeogo gwi-leul giluli
                                                                     -eoss- da.
                       Callas
       all
                PL
                                 LEUL hear
                                              GOAL ear LEULincline
                                                                      PST DEC
     Lit. 'Everyone had inclined their ears to hear Callas.'
      = 'Everyone had expected to hear Callas.']
                      neudaseobsi namja{#-neun/-ga}
    Geuleonde
    but
                      unexpectedly man
                                                TOP GA
    nolae
                -leul buleugi sijagha
                                              -veoss -da.
                LEUL blow start
    song
                                              PST
                                                     DEC
    'But the one who unexpectedly started singing was: A MAN.'
    'But it was A MAN who unexpectedly started singing.'
```

In (7), the entire predication 'The man started singing' conveys new information, and is construed semantically under the scope of tense (cf. Kaneko 2002). In (8a) and (8b), the subject is construed as what Erteschik-Shir (1997) calls a restrictive focus, a reading which may be triggered in English by clefting, as hinted by our double translations. Under Erteschik-Shir's analysis, which we shall adopt here, restrictive focus is a complex interpretation which combines focality and topicality: more precisely, a restrictive focus selects (focality effect) one entity, or a subset of entities, out of a topical set: thus (8a), construed as a sequel to the discourse context provided for (7), means that as regards the preidentified couple, only one member of the set (the man) qualifies as a felicitous answer to the wh-question.

As illustrated by the above examples, Korean objects are commonly suffixed by the particle LEUL, often glossed as an accusative marker in the syntactic literature, but which we shall refrain from glossing this way for reasons which will appear below.

2.2 Focus structure

In what follows, we shall use the theory of focus structure (f-structure) developed by Erteschik-Shir (1997), in order to bring out the semantic properties characteristic of Korean bare objects. The term *f-structure* identifies a level of grammatical representation where the output of syntax is annotated for information packaging. Every constituent instantiating new information (focus) is assumed to be related to a topic by the general rule of Predication. Every string of words conveying given information does not necessarily instantiate a topic: following Reinhart (1981), Erteschik-Shir (1997) defines the topic as 'what the sentence is *about*'. A topic may be of two sorts: an *individual* topic denotes an entity or a set of entities, while a *stage* topic denotes a spatio-temporal locus: stage topics are characteristic of thetic clauses. In (9) below, we illustrate by some English examples how we are planning to represent f-structure in the next sections:

(9) a. topical subject

[Tell me about John./What is John doing?]

 $[John]_{TOP}$ [is eating an apple] $_{FOC}$

b. thetic subject

[What is going on?]

 $_{\rm S}[\emptyset]_{\rm TOP}$ [John is eating an apple] $_{\rm FOC}$

- c. restrictive-focus subject
 - (i) [Are your neighbours (John and Mary) eating apples?]

No. Only $[< John >_{FOC}]_{TOP}$ is eating an apple.

(ii) [As for your neighbours (John and Mary), are they both eating apples?]

No. It is $[<John>_{FOC}]_{TOP}$ who is eating an apple.

(10) a. focal object

[What is John eating?]

He is eating {an apple/apples}.

[John]_{TOP} he is eating [an apple/apples]_{FOC}

b. restrictive-focus object

[I had left an apple and a pear on the counter. Did John eat them?]

No. John only ate [$\langle the apple \rangle_{FOC}$]_{TOP}

c. topical object

[What happened to the apple I had left on the counter?]

 $[\emptyset_z]_{TOP}$ [John ate [the apple_z]]_{FOC}

In (9a) we illustrate a simple predication involving a topical subject, i.e. a categorical subject, in Kuroda's sense. (9b) exemplifies a thetic clause, whose subject lies inside the focus constituent, and whose topic is assumed to be of a spatio-temporal nature ('stage topic'). In (9c), the subject exhibits the complex reading tagged restrictive focus (hereunder: *r-focus*), which combines focality and topicality. The r-focus reading could also be represented as in (11), where *John* is shown to be an embedded focus linked to the matrix topic:

(11) (= (9c) As regards [the neighbours_{z+k}]_{TOP}¹, [[the one who is eating an apple]_{TOP}² is: [**John**_z]_{FOC}²]_{FOC}¹.

In (10a) and (10b) we use the same notation as in (9) to represent the simple-focus (10a) and r-focus (10b) readings of the object. In (10c), the object construed as topical is represented as bound by an empty nominal in clause-peripheral position.

2.3 F-structure marking in Korean

A striking characteristic of Korean (as well as Japanese) is that f-structure is overtly signalled by morphology. A well-known illustration is the contrast between NEUN and GA subject marking, briefly introduced above: NEUN-marking and GA-marking respectively indicate that the subject must and must not be construed as the matrix topic.

The above examples lead us to distinguish three possible semantic construals for the subject, each of which corresponds to a different f-structure representation:

We shall now turn to object marking and the lack of it, namely, bare objects.

3. Bare objects, incorporation and referentiality

3.1 LEUL *objects and bare objects*

In all the above examples, direct objects are suffixed by LEUL. However, Korean objects may also fail to support this particle, as noted by a number of authors (e.g. Ramstedt 1939, Sin 1982, Lyu 1986, 2001, I 1993, Mok 1998, Go 2000, Hong 2004): vi calling these *bare objects*, we shall show that they exhibit semantic incompleteness and undergo a form of semantic incorporation.

A very small number of OV combinations involving bare objects may be described as lexicalized, i.e., as forming verbal compounds treated as word entries by dictionaries. Three such examples are given in (13):

```
(13) Lexicalized verbs of the form [v]N+V]

jang -boda = lit. 'to take a look at the market' = 'to shop at the market'

market + see

son -boda = lit. 'to look at one's hand' = 'to fix (an object)'

hand + see 'to straighten up (a person)' > 'to slap'

geob -meogda = lit. 'to eat fear' = 'to be afraid'

fear + eat
```

Lexicalized OVs are rather exceptional. On the other hand, bare objects productively occur under transitive verbs. Some OV combinations intuitively involve an especially tight selectional link, as in (14), or an idiomatic metaphorical reading, as in (15):

```
tight selectional link between O and V
(14)
       telebi
                     boda
                                   = 'to watch TV'
       TV
                     see
                                   = lit. 'to blow song' = 'to sing'
       nolae
                     buleuda
       song
                     blow
       babsang
                     chalida
                                   = 'to lay the table'
       dinner table
                     lay
                                   = lit. 'to do study' = 'to study'
       gongbu
                     hada
       study
                     do
```

```
idiomatic metaphorical reading for O+V

miyeoggug meogda = lit. 'to eat seaweed soup' = 'to flunk an exam'

seaweed soup eat

kongbab meogda = lit. 'to eat bean-&-rice' = 'to do time in jail'

bean rice eat
```

The syntactic productivity of bare objects is confirmed by (16), where the OV combination clearly involves no idiomaticity:

```
(16) a. Eomeomeo,
                               ai
                                       hwibalyu
                                                                              -ne!
                                                       masi
                                                              -go
                                                                      iss
        oh dear
                               child petrol
                                                       drink
                       DM
                                                                 PROG
                                                                              EXCL
        Lit. 'Oh dear, S[\emptyset]_{TOP} [this child is petrol-drinking]FOC!'
     b. Speaker A:
                       -Neo
                                       oseuteulalya -eseo mweo ha
                                                                              -ni?
                                       Australia
                                                              what
                           2SG
                                                       LOC
                                                                      do
                                                                               Q
                           'What do you do in Australia?'
        Speaker B:
                       — ø
                               kaengeolu
                                               gileu
                                                      -go
                                                              iss
                                                                      -eo.
                                                                      DEC<sup>-H</sup>
                                               raise
                          1sg kangoroo
                                                         PROG
                          _{\rm S}[\emptyset]_{\rm TOP} [I'm (doing) kangoroo-raising]_{\rm FOC}
```

The italicized bare objects in (14), (15) and (16) exhibit the two properties taken in (2) as characteristic of object incorporation: (i) They are morphosyntactically deficient since they fail to be suffixed by LEUL (property (2a)); (ii) They cannot take wide scope over their predicate, and hence seem to verify property (2b).

We shall now show that Korean bare objects must undergo semantic incorporation.

3.2 Correlates of object bareness

What we call here bare objects, i.e. objects which fail to support the functional particle commonly glossed as accusative, have been noticed and discussed in both Japanese and Korean by various scholars (see section 3.1 and fn. 6). Available empirical results drawn from corpus studies show that the acceptability of bare objects is favoured by a set of factors which crucially include the ones listed in (17), most of which were brought out for Japanese:

(17) Factors favouring object bareness in Korean-Japanese

- a. MORPHOPHONOLOGICAL WEIGHT:
 Objects occur more frequently as bare when they are morphophonologically
 (Tsutsui 1984, Mori & Givón 1987) or syntactically (Abeillé & Godard 2004)
 light;
- b. OV ADJACENCY: objects occur more frequently as bare when they are strictly adjacent to the verb (Tsutsui 1984, Saito 1985, Watanabe 1986);
- c. INANIMACY: objects occur more frequently as bare when they are low on the Animacy scale (Minashima 2001);
- d. NONTOPICALITY, NONDEFINITENESS: objects occur more frequently as bare when they do not identify a given, discourse-linked referent (Ramstedt 1939, Niwa 1989, Fuji & Ono 2000, Minashima 2001);
- e. NONFOCALITY: objects occur more frequently as bare when they do not identify new (focused) information (Masunaga 1988);
- f. INFORMAL STYLE: objects occur more frequently as bare in informal conversation, and in short utterances (Alfonso 1966, Sakuma & Motofuji 1980, Tsutsui 1984, Matsuda 1996, Hong 2004).

Properties (17c) and (17d) are in keeping with Aissen's (2003) theory of markedness, which predicts that all other things being equal, +animate and +definite are *marked* values for objects, hence tend to call for overt morphological marking. vii

Our own results however show that, save for topicality (mentioned in (17d)) and focality (17e), the factors listed in (17) do not define strong linguistic constraints: in

particular, although heavy objects occur more frequently as LEUL-marked than as bare, it is not ungrammatical for a 'heavy' object to be bare, as also observed by Abeillé & Godard (2004); similarly, bare objects may be +human and construed as definite, as shown below. We shall nevertheless argue that there is no major inconsistency between our own findings and the observations summarized in (17).

3.3 Bare objects and semantic incorporation

As hinted above, any object may occur as bare in Korean under proper conditions which, we believe, boil down to the generalization in (18):

(18) Korean bare objects do not instantiate independent constituents at f-structure.

This means that an object which fails to be LEUL-marked can be construed neither as the topic of its clause, nor as its focus: as a consequence, it must incorporate at f-structure into a larger constituent, which minimally includes the verb.

A first set of data illustrative of (18) is given in (19) and (20), which involve question-answer pairs containing a *wh*-object:

In (19), the *wh*-question bears on the object and calls for an answer whose object provides the information focus: correlatively, LEUL- marking is optimally present both on the *wh*-word in (19a), and on the object in (19b). In (20), on the other hand, the *wh*-question bears on the entire predicate rather than on the object, and the expected answer identifies the activity which Minsu is presently engaged in: correlatively, both the *wh*-word in (20a) and the object in (20b) optimally fail to be LEUL-marked.

It turns out that the bare-object construction exemplified by (20b), which involves a NEUN-subject, is optimally felicitous with some strongly selectional verbs, such as *meogda* 'eat', *piuda* 'smoke', *sseuda* 'write' — verbs whose English analogues license object deletion: *John is eating*, *smoking*, *writing*. With other classes of transitive verbs, bare objects are however freely licensed in combination with a GA-subject; this is exemplified in (21), where the verb is *chajda* 'look for':

- b. *Minsu-neun* **gawi -leul** chaj -go iss -da.

 Minsu TOP scissors LEUL look for PROG DEC
 - (i) [Minsu]_{TOP} he is looking for [scissors]_{FOC}
 - (ii) It is [<the scissors>_{FOC}]_{TOP} that Minsu is looking for.
- (22) Minsu -ga **gawi** chaj -go iss -da.

 Minsu NOM scissors look for PROG DEC
 - (i) $S[\emptyset]_{TOP}$ [there's Minsu looking for scissors]_{FOC} [thetic subject]
 - (ii) It is $[<Minsu>_{FOC}]_{TOP}$ who is looking for scissors. [r-focus subject]

The contrast between the two pairs of examples (19)-(20) and (21)-(22) comes in support of the descriptive generalization in (18): the problem in (21a) is that the bare object *gawi* 'scissors' cannot be construed as a constituent of its own at f-structure, and must therefore incorporate into a larger constituent in order to be interpreted. The NEUN-marked subject must form its own topic constituent at f-structure, so that the object can only combine with the verb to form a complex OV constituent, read as focused. However, since <scissor-searching> does not identify a nameworthy human activity, the VP *gawi chaj* 'scissors+search' does not provide an optimally felicitous f-structure constituent. The problem disappears in (21b), where LEUL-marking allows the object *gawi* 'scissors' to be read as focused. The problem also disappears in (22), where GA-marking triggers a thetic or r-focused reading for the subject, each of these options leading us to construe TP (including the object) as a single f-structure constituent (cf. (11)). The only case which appears to be problematic is, therefore, that exemplified in (21a), where OV incorporation conflicts with our mental file of nameworthy activities. Bare objects are thus globally more optimal with GA-subjects than with NEUN-subjects.

Bare-objects also freely occur in nominalizations which turn OV strings into names of activities. This is illustrated by the contrast between (23a) and (23b):

(23) a. ?Minsu-neun sae -soli deud -go iss -da. bird Minsu TOP singing listen **PROG** DEC [Minsu]_{TOP}, he is (engaged in) [bird-listening]_{FOC} -deud -neun -geos -i Minsu -ui *-da*. jigeob bird singing listen REL Minsu GEN DN NOM occupation COP DEC [Minsu's occupation]_{TOP} is [bird-listening]_{FOC}

(23a) is deviant for the same reason as (21a). (23b) shows how nominalization productively allows OV strings to denote nameworthy activities: *sae-soli-deud-neun-geos* 'the bird-listening activity' — the occupation of a 'bird-listener'.

Korean bare objects exhibit the syntactic and semantic properties taken in (2) as characteristic of semantic incorporation. This is confirmed by their strict narrow scope reading with respect to their including predicate and to any scope-taking item above VP, for example sentence negation, as shown by the neat semantic contrast between (24a) and (24b):

- (24) a. *Minsu -neun* sagwa -leul meog-ji anh -ass -da.

 Minsu TOP apple LEUL eat+JI NEG PST DEC

 It is not the case that

 (i) [Minsu]_{TOP} he ate [apple(s)]_{FOC}
 - (ii) it was [<the apple>_{FOC}]_{TOP} that Minsu ate
 - b. Minsu -neun sagwa meog-ji anh -ass -da.

Minsu TOP apple eat+JI NEG PST DEC It is not the case that [Minsu]_{TOP} he carried out [apple-eating]_{FOC}

In (24a), the LEUL-marked object may take wide scope over negation, in which case it is construed as definite (24a-ii); the bare object of (24b) is on the other hand restricted to a narrow-scope, hence indefinite, reading.

Another interesting illustration of the narrow scope reading of Korean bare objects is given in (25): (25a) and (25b) minimally contrast in that the nominalized complement clause of the verb *alda*, glossed by 'think', is bare in (25b) and LEUL-marked in (25a); in this case we observe that LEUL-marking on the object triggers a factive interpretation — a special effect of wide-scope construal:

(25) a. gae -ga juin -i o -n-jul -eul al -go jij-eoss-da.

dog NOM master NOM come REL DN LEUL think COM bark PST DEC

The dog_z barked,

 $[\emptyset_k]_{TOP}$ $[\emptyset_z$ knowing [that his master had arrived]_k]_{FOC}

b. gae -ga **juin -i o -n -jul** al -go jij-eoss-da. dog NOM master NOM come REL DN think COM bark PST DEC The dog_z barked,

 $[\varnothing_z]_{\text{TOP}}$ [thinking that his master had arrived] $_{\text{FOC}}$

These two examples contain the same verb of mental attitude, al(da), translated as 'know' in (25a) and 'think' in (25b) to help bring out the factivity contrast. In (25a), the LEUL-marked complement clause 'that his master had arrived' is construed at f-structure as an independent constituent, construed as an embedded topic; in (25b), due to the absence of LEUL-marking, the complement clause cannot be read as an f-structure constituent of its own, and is thus construed as crucially nonfactive.

This last example already suggests that although Korean bare objects show signs of semantic incorporation, they are not necessarily read as *weak indefinites*.

3.4 Bare objects and referentiality

We shall now provide empirical evidence that although bare objects show signs of semantic incorporation, as illustrated above, there is no restriction as to their internal make-up: in particular, bare objects may be strongly referential nominals. This descriptive result echoes the syntactic distinction drawn by Abeillé & Godard (2004) between external and internal lightness: under their analysis, Korean bare objects are 'externally light' (more restricted in their distribution than LEUL-objects) in the sense that they must remain close to the V head and cannot undergo extraction; but they may be internally heavy, namely, contain more than one constituent. We reach a similar conclusion regarding interpretation: bare objects exhibit an external deficiency which forces them to incorporate into larger constituents; but they may host strongly referential expressions, including rigid designators, a seemingly paradoxical assumption.

3.4.1 Korean bare objects may be proper names, as exemplified by (26b):

(26) a. neo eotteohge Minsu -leul johaha -ni?

2SG how Minsu LEUL like Q

'How can you possibly like Minsu?'

= How can [your liking]_{TOP} apply to [Minsu]_{FOC}?

```
b. neo eotteohge Minsu johaha -ni?

2sG how Minsu like Q

'How much do you like Minsu?'

= How<sub>z</sub> is [your liking of Minsu]<sub>TOP</sub> [[DEG t<sub>z</sub>] big]<sub>FOC</sub>?
```

In (26a) the LEUL-marked object is under focus while the rest of the clause is not, triggering a 'rhetorical question' effect. In (26b), the predicate containing the degree phrase is under focus, while the SOV string is construed as given. Correlatively, unlike the LEUL-object of (26a), the bare object of (26b) does not form its own constituent at f-structure, but is incorporated into a larger clausal constituent construed as topical. This assumption is supported by the following contrasts:

```
(27) a. Minsu-leul
                    neo
                           eotteohge
                                        iohaha-ni?
      Minsu LEUL
                    2SG
                           how
                                        like
      'How can you possibly like MINSU?'
    b. *Minsu
                    neo
                           eotteohge
                                        johaha-ni?
        Minsu
                                        like
                    2sg
                           how
                                                Q
(28) a. Neo
                           dongsaeng
             eotteohge
                                               -i
      2sg
             how
                           younger brother
                                               GA
                    silheoha
                                 -neun Minsu-leul johaha-ni?
      gajang
                    hate
                                   REL Minsu LEUL like
      most
      'How can you possibly like Minsu, the person your younger
      brother hates most?'
    b. *Neo eotteohge
                           dongsaeng
                                               -i
       2sg
             how
                           younger brother
                                  -neun Minsu
                                                      johaha -ni?
      gajang
                    silheoha
                                        Minsu
                                                      like
      most
                    hate
                                   REL
                                                             Q
```

These examples show that unlike the saturated object *Minsu-leul*, the bare object *Minsu* can neither be moved away from the verb (27b) (cf. Abeillé & Godard 2004), nor support an appositive relative clause (28b). These restrictions could be derived from the assumption that objects which are moved away from their verb or support an appositive relative clause must be able to form independent constituents at f-structure.

3.4.2 Bare objects may contain a referential genitive modifier triggering a specificity (spatio-temporal anchoring) effect, as witnessed by (29b) below:

```
(29) a. Minsu -ga
                           Minna-ui
                                              chima -leul
                                                                dali
                                                                           -go iss
                                                                                           \mathrm{DEC}^{\text{-H}}
                                              skirt LEUL
         Minsu NOM Minna GEN
                                                                iron
                                                                            PROG
         'Minsu is ironing Minna's skirt.'
    (i) [\emptyset_z]_{TOP} [Minsu is ironing [Minna's skirt]<sub>z</sub>]<sub>FOC</sub>
         (As regards Minna's skirt, Minsu is ironing it.)
    (ii) _{S}[\emptyset]_{TOP}^{-1} [there's [Minsu]_{TOP}^{-2} ironing [Minna's skirt]_{FOC}^{-2}]_{FOC}^{-1}
         (Hey, look! There's Minsu ironing Minna's skirt!)
    (iii) [\varnothing_z]_{TOP}^{-1} [it is [<Minsu>_{FOC}^{-2}]_{TOP}^{-2} who is ironing [Minna's skirt]_z]_{FOC}^{-1}
         (As regards Minna's skirt, it is Minsu who is ironing it.)
b.
         Minsu -ga
                           Minna-ui
                                              chima
                                                                dali
                                                                           -go iss
                                                                                           -eo.
                                                                                           DEC<sup>-H</sup>
         Minsu NOM Minna GEN
                                              skirt
                                                                iron
                                                                            PROG
         = it is [<Minsu><sub>FOC</sub>]<sub>TOP</sub> who is ironing Minna's skirt
```

[the one ironing Minna's skirt]_{TOP} is [Minsu]_{FOC}

In (29a), the LEUL-marked object may be construed as the matrix topic ((i), (iii)) or as an embedded focus (ii). In (29b), on the other hand, the bare object may stand neither as a topic nor as a focus of its own; it is semantically incorporated into a larger clausal constituent, read here as topical.

3.4.3 Bare objects may be made specific by a demonstrative, as witnessed by (30b):

```
(30) a. Aa!
                           geu
                                    dodug -eul
                                                     jab
                                                               -ass
                                                                        -ni?
         Oh
                  2SG
                                    thief
                                             LEUL catch
                           DM
                                                                 PST
                                                                         O
         'And did you ever catch that thief?'
         = [\emptyset_z]_{TOP} [did you catch [that thief<sub>z</sub>]]<sub>FOC</sub>
         (As regards that thief, did you ever CATCH him?)
                           dodug
      b. ø
                  geu
                                             jab
                                                      -ass
                                                               -ni?
         2sg
                           thief
                  DM
                                             catch
                                                       PST
         = [\emptyset_Z]_{TOP} [is it true that [you caught that thief]<sub>z</sub>]<sub>FOC</sub>
```

Due to the demonstrative *geu*, the thief referent is construed as given information in both (30a) and (30b). In (30a), however, LEUL-marking on the object leads us to understand it as a topic constituent of its own, whereas in (30b), the bare object *geu dodug* 'that thief' must be semantically incorporated into the (topical) clausal constituent 'you caught that thief'.

3.4.4 Bare objects may be made specific by an anchoring restrictive relative clause, as witnessed by (31b):

```
(31) a. neo
                samchon
                                -i
                                                 sa
                                        2sg
        2sg
                uncle
                                NOM
                                                         give
                                                                 HON<sup>+</sup> REL
                                                 buy
        baji
                        -leul
                                ib
                                        -eoss
                                                 -ne!
                        LEUL put on PST
        trousers
                                                 EXC
        '(Hey, look!) You've put on the trousers which Uncle bought you!'
        = [what you have put on]<sub>TOP</sub> is [the trousers which Uncle bought you]<sub>FOC</sub>
     b. neo
                samchon
                                -i
                                                                 -si
                                                 sa
                                                         -ju
                                                                         -n
                                                                 HON<sup>+</sup>
                uncle
        2sg
                                NOM
                                        2sg
                                                         give
                                                                         REL
                                                 buy
        baii
                                ib
                                        -eoss
                                                -ne!
        trousers
                                put on PST
                                                 EXC
        '(Hey, look!) You've put on the trousers which Uncle bought you!'
        = {}_{S}[\emptyset]_{TOP} [you've put on the trousers which Uncle bought you]<sub>FOC</sub>
```

In (31a), the LEUL-marked relativized object is construed as its own (focused) constituent, whereas in (31b), the bare relativized object is incorporated into a larger clausal constituent, predicated of a here-and-now stage topic.

3.4.5 Bare objects may be quantized, pluralized, and universally quantified. In the following pair of examples, the object quantized by the cardinal du 'two' occurs as LEUL-marked in (32a) and as bare in (32b):

```
(32) a. ø
               nolae -leul
                              du
                                      gog
                                             buleu -n
                                                            daeum
                                             blow REL
                                                            after
       1s<sub>G</sub>
               song
                      LEUL
                              two
                                     CL
                                             -da.
       Ø
              jib
                              ga
                                      -gess
```

```
1s<sub>G</sub>
           home LOC
                             go
                                      FUT
                                              DEC
  'After singing two songs, I shall go home.'
  = after [my singing]<sub>TOP</sub> has produced [two songs]<sub>FOC</sub>
b. ø
           nolae
                             du
                                     gog
                                              buleu -n
                                                                daeum
  1s<sub>G</sub>
                                              blow
                                                                after
           song
                             two
                                      CL
                                                       REL
           jib
                                              doe
                                                       -navo?
                                      -do
  Ø
                             ga
                    -е
  1s<sub>G</sub>
           home LOC
                             go
                                      PERMISSION
                                                        Q+PERMISSION
  'After singing two songs, shall I be allowed to go home?'
  = [\emptyset_z]_{TOP} [after [my singing of two songs]<sub>z</sub>]<sub>FOC</sub>
```

Capturing the f-structure of these complex sentences is a tricky issue which we essentially leave open, only suggesting tentative representations. The crucial contrast between (32a) and (32b) is that the LEUL-marked object is construed under focus in (32a), while the bare object in (32b) is incorporated into the nominalized clause 'my singing of two songs'. These two sentences are thus licensed in different discourse contexts: (32a) is felicitous in a karaoke context, where the speaker is expected to perform some singing; (32b), on the other hand, is felicitous in a context where the speaker, held up as hostage by a Mean Witch, has been informed that the key to his/her freedom is the singing of two songs.

Bare objects may also include the plural marker *deul*, as witnessed by (33b):

```
(33) a.ø
                dodug -deul -eul
                                         da
                                                  jab
                                                          -eul
                                                                   -ttae -kkaji
       1<sub>PL</sub>
                thief
                          PL
                                 LEUL every catch REL/FUT moment until
                                 sileoju -se
       i
                -geul
                         -eul
                                                  -yo.
                message LEUL display HON<sup>+</sup>
       DM
                                                  INJ
       'Please display this message until we have caught all the thieves.'x
       [\emptyset_z]_{TOP} [we have caught all [the thieves]<sub>z</sub>]<sub>FOC</sub>
                dodug -deul
                                                 jab
                                                                             -kkaji
     b. ø
                                         da
                                                          -eul
                                                                   -ttae
                thief
       1<sub>PL</sub>
                          PL
                                         every catch REL/FUT moment until
                         -eul
                                 sileoju -se
       i
                -geul
                                                  -yo.
                message LEUL display HON<sup>+1</sup> INJ
       'Please display this message until we are done with catching all the thieves.'
       = until
        [the moment]<sub>TOP</sub> when [we have caught all the thieves]<sub>FOC</sub>
```

As argued in Kwon & Zribi-Hertz (2004, to appear), a Korean nominal pluralized by *deul*—unlike English-type plurals — must be either existentially quantified (strong-indefiniteness effect) or anchored to a preidentified discourse referent (definiteness effect). Korean *deul* is in this respect similar to wide-scope quantity markers, and distinct from Indo-European-style plural inflection. We see in (33b) that DEUL-marked objects may fail to be LEUL-marked. In this case *deul*-marking is combined with the universal quantifier *da*, glossed by 'every'. The semantic contrast between (33a) and (33b) follows a pattern which is by now familiar: in (33a), the LEUL-marked pluralized object is construed under focus, whereas the bare pluralized object in (33b) is read as incorporated into the minimal clausal constituent, construed here as topical.

Bare objects may also be quantified by da without including the deul marker, as witnessed by (34b):

```
(34) a. tteona-gi -jeon -e modeun changmun -deul -eul leave N before LOC all window PL LEUL
```

```
dad
           -ala!
   close IMP
   'Close all the windows before you go out!'
   = [[\emptyset_z]_{TOP}] [(you) close all [the windows]<sub>z</sub> before you go out]<sub>FOC</sub>
   (As regards the windows, close all of them before you go out)
b. tteona -gi
                   -jeon -e
                                   changmun
                                                    da
                                                            dad
                   before LOC
   leave N
                                   window
                                                    every close
                                                                    IMP
   'Close every window before you go out!'
   =<sub>S</sub>[[before you go out]<sub>TOP</sub> [(you) close every window]<sub>FOC</sub>
   (What you have to do before you go out is: close every window)
```

The syntax and semantics of Korean (and Japanese) quantifiers is complex^{xi} and goes far beyond the issue of bare objects. As shown by (34), some universal quantifiers occur prenominally and others, postnominally. *Modeun* is only prenominal but has a postnominal counterpart, *modu* (restricted to +human referents), alternating with *jeonbu* (unrestricted for humanness). *Da*, on the other hand, is only postnominal (arguably 'floated', in Kobuchi-Philip's 2004 terms) and may, under certain conditions, combine with *modu* and *jeonbu*: *da* and *modu/jeonbu* thus clearly occupy two different structural positions. A crucially relevant property for our description is that *da* occurring on the right of an object phrase has scope over the object alone, unlike the adverb *wanjeonhi* ('entirely'), exemplified in (35b), which scopes over the whole VP:

```
(35) a. oneul -eun
                      Ø
                             sangja-deul-eul
                                                   jeonbu (da)
       today TOP
                      1PL
                             shutter PL LEUL
                                                           every
       chilha -yeoya ha
                                     -da.
                             -n
       paint
                   OBLIG
                             PRS
                                     DEC
       (i) 'Today (we) must paint all the shutters.'
       (ii) *'Today we must paint the shutters entirely.'
     b. oneul -eun
                     Ø
                             sangja-deul-eul
                                                   wanjeonhi
                             shutter PL LEUL
                                                   entirely
       today TOP
                      1<sub>PL</sub>
       chilha -yeoya ha
                                     -da.
                             -n
       paint
                OBLIG
                             PRS
                                     DEC
       (i) *'Today we must paint all the shutters.'
       (ii) 'Today (we) must paint the shutters entirely.'
     c. oneul -eun
                             sangja-deul-eul
                                                   wanjeonhi
                                                                  da
                     Ø
       today TOP
                      1<sub>PL</sub>
                             shutter PL LEUL
                                                   entirely
                                                                  every
       chilha -yeoya ha
                             -n
                                     -da.
       paint
                OBLIG
                             PRS
                                     DEC
       'Today we must paint every shutter entirely.'
```

The distributional and semantic contrast between *da* and *wanjeonhi* is confirmed by the following examples:

```
(36) a. Minna-neun
                    wanjeonhi
                                                      -da.
                                  sog
                                               -ass
      Minna TOP
                    entirely
                                  be mistaken
                                               PST
                                                      DEC
      'Minna was completely mistaken.'
    b. *Minna-neun (jeonbu)
                                  da
                                                             -da.
                                        sog
                                                      -ass
      Minna TOP
                     all
                                  every be mistaken
                                                      PST
                                                             DEC
(37) a. i
             baemjangeo -neun wanjeonhi
                                               jug
                                                             -janha!
                                                      -eoss
```

```
DM
         eel
                       TOP
                              entirely
                                            die
                                                   PST
                                                          EXC+FACT
  'But this eel is completely dead!'
         baemiangeo
b. *i
                       -neun (ieonbu)
                                            da
                                                   jug
                                                          -eoss
                                                                 -janha!
         ee1
                       TOP
                              all
                                            every die
                                                                 EXC+FACT
  DM
                                                          PST
```

We must therefore similarly analyze da in (34b) not as a VP adverb, but as a nominal quantifier which has scope over the bare object *changmun* 'window'. It follows that bare objects may include their own universal quantifier, which confirms that they may be self-referential. The semantic contrast between (34a) and (34b) follows the familiar pattern: the LEUL-marked object in (34a) is construed as an independent f-structure constituent read as topical, whereas in (34b) the bare object quantified by da is incorporated into the imperative clause read as focused — and predicated of the stage topic 'before you go out'.

4. Reconciling results

The Korean data presented above lead us to an apparently paradoxical conclusion:

- On the one hand, bare objects are syntactically productive in Korean and exhibit the diagnostic properties of object incorporation spelt out in (2).
- On the other hand, Korean bare objects may be fully referential, so that incorporation does not necessarily correlate with weak indefiniteness.

We assume that the key to this paradox lies in the fact that the linguistic deficiency identified in (2a) and (2b) is of a different nature for Korean bare objects and for the various other incorporated objects discussed in section 1 and in the previous linguistic literature on noun incorporation. Other incorporated objects are morphosyntactically deficient in that they fail to include functional categories expressing or triggering locative anchoring (deixis) and quantification. The deficiency of Korean bare objects lies in the absence of the LEUL marker, whose function is quite distinct from spatial anchoring and quantification. Although it is often glossed as an accusative Case marker, we believe its core function should be characterized in terms of information structure, as proposed in (38):

(38) The LEUL-marker in Korean closes the object phrase at f-structure.

LEUL-marking indicates that the object is saturated as an f-structure constituent. A LEUL-marked object is therefore construed as a topic or focus of its own. Recall that — contrary to what is assumed in some studies (e.g. Sin 1976, Sin 1982) — LEUL-objects may be construed either as topical or as focal, as witnessed by (39):

```
(39) a. [What's Minsu eating?]
        Minsu-neun sagwa-leul meog -go
                                                                  -da.
                                                          iss
        Minsu TOP
                        apple LEUL eat
                                                    PROG
                                                                  DEC
        [Minsu]_{TOP} he is eating [apple(s)]_{FOC}.
      b. [I had left an apple and a pear on the counter. Which one did Minsu eat?]
        Minsu -neun sagwa-leul meog -eoss -da
        Minsu TOP apple LEUL eat
        Minsu TOP apple LEUL eat PST DEC [Minsu]<sub>TOP</sub> [it was [<the apple>_{FOC}^2]<sub>TOP</sub> that he ate]<sub>FOC</sub>
      c. [I had left a beautiful apple on the table, planning to paint it; but it turns out
        it has disappeared]
        Minsu -ga
                         sagwa-leul meog -eoss
                                                                  -go.
        Minsu GA
                        apple LEUL eat
                                                    PST DEC
                                                                  QUOT
```

```
[\emptyset_z]_{TOP} [Minsu ate [the apple]<sub>z</sub>]<sub>FOC</sub> ('What? You are telling me MINSU ATE IT!')
```

Bare objects, on the other hand, are unsaturated at f-structure and must therefore be incorporated within larger constituents in order for information packaging to be possible. It however does not follow from (38) that bare objects should necessarily merge with just the verb to form an OV constituent at f-structure; (38) only predicts that bare objects must be incorporated into larger constituents. We indeed saw in some of our examples that, depending on various factors, the phrase which hosts the incorporated bare object may either be the minimal VP, or the minimal predication or TP. That Korean bare objects do not specifically target the verb for incorporation is confirmed by prosody: unlike the incorporated objects of Hindi (Mohanan 1995, Dayal 2003) or Hungarian (Farkas & De Swart 2003, Creissels 2004), those of Korean are not prosodically attached to the verb, as also noted by Abeillé & Godard (2004). This is confirmed by the fact that Korean bare objects, just like LEUL-marked objects, are separated from the verb at s-structure by manner adverbs, as shown by (40):

```
(40) a. ø
                 sagwa -leul masissge
                                                   meog -eoss
                                                                   -ni?
                 apple LEUL with pleasure eat
                                                            PST
                                                                    O
        'The apple(s), did you enjoy eating {it/them}?'
        = [\emptyset_z]_{TOP} [did you enjoy eating [the apple(s)]<sub>z</sub>]<sub>FOC</sub>
     b. ø
                 sagwa
                                  masissge
                                                   meog -eoss
                                                                   -ni?
                 apple
                                  with pleasure eat
        2sg
                                                            PST
                                                                    Q
        'Is it a fact that you enjoyed eating apple(s)?'
        = _{\rm S}[\emptyset]_{\rm TOP} [you enjoyed eating apple(s)]_{\rm FOC}
```

When bare object incorporation results in an OV constituent at f-structure, this correlates with a 'nameworthy activity' effect, which is however quite independent from weak indefiniteness: thus a nameworthy-activity-effect obtains in (34b), where the object includes a universal quantifier. In some cases, however, object incorporation does seem to correlate with a weak-indefinite reading while LEUL-marking allows a wide-scope interpretation. This is exemplified by (40) (above) and (41) (below):

```
(41) a. Minsu-neun
                                nyeon dongan
                                                         chaeg -eul
                                                                         ilg -eoya ha
        Minsu TOP
                                year
                                        during
                                                         book LEUL read OBLIG
                        two
        -yeoss -da.
        PST
               [Minsu]<sub>TOP</sub> what he had to read for two years was [books]<sub>FOC</sub>
        (ii) = [\emptyset_z]_{TOP} [Minsu had to read [the book]<sub>z</sub> for two years]<sub>FOC</sub>
                (The book, Minsu had to read it for two years)
     b. Minsu-neun
                                nyeon dongan
                                                        chaeg il -eoya ha
        Minsu TOP
                        two
                                year
                                        during
                                                        book read OBLIG
        -yeoss -da.
        PST
                DEC
        [Minsu]_{TOP}^{-1}, [what he had to do for two years was [< read books >_{FOC}^{-2}]_{TOP}^{-2}]_{FOC}^{-1}
```

In (41b), the bare object *chaeg* may only be given narrow scope, and only the LEUL-marked object (41a) may be associated with a given book referent, translated by 'the book' in English.

Our assumption that the key function of LEUL-marking pertains to information packaging, rather than to Case theory, is independently supported by the fact that LEUL does

not only attach to direct objects: it may also be stacked on the locative marker $e_{,}^{xii}$ as witnessed by (42):

```
-ni?
(42) a. neo-ui
                        jib
                                         -leul
                                                 eotteohge
                                 -e
                                                                  ga
                        house LOC
        2SG GEN
                                         LEUL
                                                 how
                                                                  go
        'How could we possibly go to your place (of all places)?!'
        how could [the place we go to]<sub>TOP</sub> be [your place]<sub>FOC</sub>
    b. neo-ui
                        iib
                                                 eotteohge
                                                                          -ni?
                                 -е
                                                                  ga
        2SG GEN
                        house. LOC
                                                 how
                                                                          Q
                                                                  go
        'How does one get to your place?'
        = how_z does [one get to your place]<sub>TOP</sub> [ t_z ]<sub>FOC</sub>
```

Korean bare objects share the impossibility of being construed as separate constituents at f-structure with many other documented cases of incorporated objects. This constraint does not obtain, however, for Romance bare objects (Dobrovie-Sorin & Laca 2003), English 'existential' bare objects (Carlson 1977), nor — it seems to us — Niuean incorporated objects (Massam 2001). As noted in section 1 and exemplified in (1), van Geenhoven (1998) analyzes Germanic 'existential' bare objects as semantically incorporated on a par with West Greenlandic incorporated objects. With respect to f-structure, however, English bare objects are similar to Korean LEUL-marked objects, rather than to Korean bare objects, as shown in (43) below:

```
(43)
       ENGLISH
                                                     KOREAN
               Speaker A:
       — What did John eat?
                                                                             meog-eoss-ni?
                                                     Minsu-neun mweol
                                                     Minsu TOP what+LEUL eat PST O
                                                      'What did Minsu eat?'
               Speaker B:
                                                            sagwa *(-leul) meog-eoss-eo.
                                                                     LEUL eat PST DEC<sup>-H</sup>
                                                     3SG
                                                            apple
                                                     'He ate apple(s).'xiii
       — He ate apples.
                      = [what he ate]<sub>TOP</sub> was [apple(s)]<sub>FOC</sub>
```

In English, the bare object *apples* is under focus in (43) (cf. Cohen & Erteschik-Shir 2002) and is therefore construed as a saturated constituent at f-structure. Korean bare objects cannot stand as topics or foci of their own, and hence sharply contrast with English bare objects in this respect.

We should therefore distinguish two different types of semantic incompleteness which both lead to semantic incorporation as characterized in (2): incompleteness with respect to *referentiality*, and incompleteness with respect to *information packaging*. Traditional cases of Noun Incorporation (as in West Greenlandic — van Geenhoven 1998, 2001), as well as Hindi as described by Mohanan (1995), happen to combine both types of semantic incompleteness. Germanic 'existential' bare objects and Romance bare objects are deficient with respect to referentiality but saturated with respect to information packaging. Korean bare objects, on the other hand, are deficient with respect to information packaging but they may be saturated with respect to referentiality. These properties are summarized in Table (44):

/ 4 4 \	. 1	
(AA)	types of comentie deticiones	I landing to comentie incorporation
(44)	TABLES OF SCHIMILIC DELICIONS	leading to semantic incorporation
()	types of semanae deficiency	reading to semantic interperation

OBJECTS EXHIBITING	SEMANTIC SATURATION		
SEMANTIC INCORPORATION EFFECTS	s-structure	f-structure	
morphological incorporation (W. Greenlandic, Hindi (Mohanan))	-	-	
Romance and Germanic 'existential' bare objects	-	+	
Korean bare objects	+	-	

Assumption (38) is globally consistent with the corpus-study observations listed above in (17). The correlation between object bareness and syntactic *lightness* is straightforwardly expected if lightness is defined as what Abeillé & Godard (2004) call external lightness: since bare objects do not stand as autonomous f-structure constituents, the fact that they cannot be extracted and tend to be adjacent to the verb is not unexpected; the adjacency requirement is not absolute, however, as illustrated by (40b). As shown by Abeillé & Godard (2004) and by our own examples, bare objects do not, on the other hand, necessarily exhibit internal lightness (cf. (29b), (30b), (31b), (32b), (33b), (34b)). The observation that attested bare objects are more frequently short than long (17a) could correlate with the fact that OV strings containing bare objects are a productive means of denoting nameworthy activities (cf. (23b)). Animacy may favour f-structure prominence, and correlatively disfavour object incorporation, hence object bareness (property (17c)). Topicality and focality ((17d, e)) straightforwardly conflict with object bareness under assumption (38), and so does 'definiteness', which involves topicality (cf. for instance (40)). The fact that bare objects are favoured by 'informal style', pointed out in (17f), seems confirmed by our own observations: under the above analysis, this result suggests that in written discourse, objects tend to be overtly specified as fstructure constituents. Why this should be remains an open issue at this stage.

This study of Korean bare objects thus teaches us that semantic deficiency — leading to semantic incorporation — may be independent from referentiality. It follows that semantic incorporation should not be regarded as a subtheory of indefiniteness, as proposed by van Geenhoven in (4a).

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ⁱⁱ Although GA is conventionally identified as a *nominative Case* marker in a number of generative works, e.g. Kuroda (1992), its properties and distribution are actually very different from those of nominative Case marking in Indo-European languages such as Latin or Slavic, as previously noted by Mok (1998), Go (2001), a.o. The cover term *GA-subject* will be used here to refer to subjects marked either by *-ga* or by *-i* (a strictly morphophonological variation sensitive to the consonant/vowel leftward context: *Minsu-ga/Insil-i*). Similarly, the cover term *NEUN-subject* will refer to subjects suffixed by *neun* or *eun* (*Minsu-neun/Insil-eun*).

Our transcription of Korean follows the recent *Revized Romanization of Korean* (National Academy of the Korean Language, Seoul: Ministry of Culture and Tourism, 2000. This is not a phonological transcription, but a Roman transposition of Korean spelling, which is officially recommended for academic uses (namely, linguistic works).

Abbreviations used in the glosses of the Korean examples: CL = classifier; COM = comitative; COP = copula; DEC = declarative; DM = demonstrative; DN = dependent noun (functional N used to fill an N-head supporting a clausal complement, for instance); DV = deverbal affix (verb nominalizer); EX = existential verb; EXC = exclamative; GA = -ga/-i subject marker; GEN = genitive; HON = honorific; H⁺, H⁻ = positive or negative honorific specification; INJ = injunctive; LEUL = -leul/-eul object marker; LOC = locative; NEG = negation; OBLIG = obligation; PL = plural; PROG = progressive; PRS = present; PST = past; Q = interrogative; QUOT = quotation (hearsay); REL = relative marker; RESULT = resultative; TOP = topic.

Hyphens in the examples indicate suffixation.

#: syntactically well-formed but infelicitous in the discourse context.

The suffix -eo which occurs in some of our examples is a colloquial (-honorific) declarative marker which seems optimal in conversation, while the declarative marker -da appears in descriptive utterances and may be regarded as neutral wrt. honorificity.

We freely adapt Erteschik-Shir's notation to represent f-structure. Category labels placed inside opening brackets indicate s-structure constituents, while labels placed outside brackets identify f-structure constituents. $s[J_{TOP}]$, as in (9b), designates a *stage topic*. When a sentence involves two or more levels of f-structure, we shall use superscripted digits to help the reader associate each focus with the appropriate topic, e.g.:

(i) $[\dots]_{TOP}^1$ $[\dots]_{TOP}^2$ $[\dots]_{FOC}^2$ $]_{FOC}^1$

vi A similar phenomenon, known as *accusative drop*, has been documented for the object particle -o in Japanese, cf. (a.o.) Alfonso (1966), Fuji & Ono (2000), Fukuda (1993), Kuno (1973), Masunaga (1988), Matsuda (1996), Minashima (2001), Mori & Givón (1987), Niwa (1989), Saito (1985), Watanabe (1986).

As rightly pointed out by Jin-Young Choi (p.c.), it is not ungrammatical to associate a bare-object reply with a LEUL-object question, or vice versa, since the properties of the reply are only pragmatically, not syntactically, constrained by those of the question; thus (i-b) is syntactically well-formed even as a sequel to (i-a):

```
a. Speaker A — Minsu-neun [mweo -l] meog -go iss -ni?

Minsu TOP what LEUL eat PROG Q

'As for Minsu, what is he eating?'

b. Speaker B — Minsu-neun sagwa meog -go iss -eo.

Minsu TOP apple eat PROG DEC-H

[Minsu]_TOP he is (engaged in) [apple-eating]_FOC
```

Unlike the LEUL-object in (19b), however, the bare object in (i-b) does not pair up with the LEUL-marked whword in (i-a). This discourse discrepancy is what the sign # is meant to indicate in (19-b).

vii Following a common terminology already mentioned above, Aissen identifies the object particle of Japanese as a *Case* marker, an assumption we wish to discard. If LEUL were an accusative Case marker, we would expect its occurrence to be obligatory, especially on V-governed arguments, and we would not expect it to occur over a locative particle, as it does in such Korean examples as (42a) below.

^{ix} The f-structure representations proposed for (25a) and (25b) are adapted from Erteschik-Shir's (1997: 231) analysis of factivity effects in English. Like definite objects, factive complement clauses are represented as topic-bound.

^x This attested example refers to a group of thieves operating on the Web.

xi Recent works touching on this issue include Gill (2001), Roger-Yun (2002), S.-Y. Kim (2004) on Korean; and Kobuchi-Philip (2003) on Japanese.

xii This fact has been observed by various scholars, cf. Mok (1998), Go (2001) for recent discussions.

xiii In (43B) as in (19b) and (24a), the object *sakwa-leul* could also be construed as definite ('the apple') if it were a topic ('As regards the apple, Minsu ate it') or a restrictive focus ('It was the apple that Minsu ate'). We

however ignore these interpretations here, since our purpose is to compare the Korean LEUL-object sagwa-leul with the English bare object apple(s).