# A *truth-functional account of metalinguistic negation, with evidence from Korean*

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## 1 Introduction

The metalinguistic use of 'not' has been brought to prominence by the work of Laurence Horn (1985, 1989), who characterizes it as a marked, non-truth-functional use of negation, not reducible to the standard truth-functional operator. In this paper, we argue that the essential property of metalinguistic negation is that it involves the echoic use (in the sense of Sperber and Wilson (1986)) of material falling within the scope of the negation operator. An account in these terms dissolves the appearance of ambiguity in the negation operator itself. The negation operator is uniformly truth-functional in both its descriptive and metalinguistic (echoic) uses, and the two uses fall out from a quite general fact about language: it may be used to represent states of affairs or to represent other representations, including other utterances. This analysis receives support from an investigation of data from Korean, a language which is unrelated to English and in which sentence negation may take either of two distinct linguistic forms. It has been claimed that one of these forms is used exclusively for descriptive negation and that the other, though used for both, favours a metalinguistic interpretation. We show that the semantics of both forms is truth-functional, and that they may both be used to either descriptively or metalinguistically (echoically).

We work within the pragmatic theory provided by the relevance-theoretic framework of Sperber and Wilson (1986, forthcoming). We will not outline that theory here but wish to stress a general point about the view of verbal communication that the theory entails. The relevance-based pragmatic theory is embedded in a more general account of cognitive processing and, as a result, the emphasis is on the all-pervasive nature of the inferential processes involved in understanding utterances (and all instances of ostensive communication) rather than on linguistic decoding. This marks a shift in the relative weighting given to decoding and inferring; in most other pragmatic theories, including those that have come to be called neo-Gricean, the view has tended to be that pragmatic inference functions as a kind of minimal addition to a rich code, and is responsible just for the derivation of implicature. In relevance theory, on the other hand, the role of the linguistic system is to provide crucial, but often quite minimal, constraints on the inferential processes, which are independently and inevitably active as the cognitive system of the individual turns towards and

processes that information which is most likely to yield a high return in relevance (cognitive effects).

One of the consequences of this way of viewing utterance interpretation is the **strong underdeterminacy thesis:** there is extensive pragmatic enrichment of encoded semantic content at the level of the proposition expressed (or what is said). This extends way beyond the obvious processes of disambiguation and reference assignment, to processes of enriching and/or loosening the encoded lexical concepts and recovery of unencoded material, all of which contribute to the truth-conditional content of the utterance. In short, there is a substantial pragmatic contribution at the level of explicit content as well as at the level of implicature. This claim has been central to relevance-theory from its beginning (see Sperber & Wilson (1986, 176-193) and Carston (1988)) and is a background assumption of this paper.

The following example serves to sum up these few remarks and to provide an instance of the phenomenon which is the focus of this paper, so-called metalinguistic negation:

(1)      Utterance meaning is not an amalgam of linguistically encoded content and pragmatically inferred material; it is an amalgam of pragmatically inferred material and linguistically encoded content.

## 2 Metalinguistic negation: the standard picture

The distinction between descriptive and metalinguistic negation is exemplified in (2); when followed by (a), the negative sentence is taken to be descriptive, and when followed by (b), it is taken to be metalinguistic. Followed by (a) it makes a consistent statement about the world: that is, we didn't see one set of animals, we saw another distinct set. If (2) followed by (b) were interpreted descriptively, as making a statement about the world, it would be self-contradictory; it is, of course, taken rather as registering an objection to **an element of linguistic form**, the plural suffix of 'hippopotamus'. That is, it is taken metalinguistically rather than descriptively.

(2)      We didn't see the hippopotamuses.
    a.   We saw the rhinoceroses.     (not P; Q)
    b.   We saw the hippopotami.     (not P; P)

A sample of the standard sort of examples listed by Horn (1985, 1989) (and virtually everyone else who works in this area) is given in (3):

(3)  a.  Around here we don't eat tom[a:t uz], we eat tom[eiD uz].
  b.  It isn't WARM out there; it's HOT.
  c.  I haven't DEPRIVED you of my lecture on negation; I've SPARED you it.
  d.  She's not my MOTHer; she's my female progenitor.
  e.  The President of England ISn't foolish; there IS no President of England.

The negation is being used to object to a phonetic property in (a), to a scalar implicature in (b), to a conventional implicature in (c), to certain connotations or implications in (d), and to a presupposition in (e). (We will leave the presuppositional cases aside in this paper as there is much controversy surrounding them (see Carston forthcoming)). The general consensus about metalinguistic negation is that it is a device for objecting to a previous utterance on any grounds whatever, including all those just mentioned; however, the possible grounds for objection are usually taken to exclude truth-conditional content because that is dealt with by descriptive negation. So we seem to have two distinct ways of interpreting the negation operator. Horn (1985, 136) sums up the situation as follows, 'what I am claiming for negation, then, is a use distinction: it can be a descriptive truth-functional operator, taking a proposition *P* into a proposition *not-P*, or a metalinguistic [i.e. non-truth-functional] operator which can be glossed 'I object to *U*', where *U* is crucially a linguistic utterance rather than an abstract proposition.'

There is a constellation of properties that Horn (1985, 1989) and Burton-Roberts (1989), with varying degrees of emphasis, attribute to metalinguistic negation: **(1)** That it has to be a rejoinder to a previous utterance of the corresponding affirmative (e.g. A: It's warm out there; B: It isn't warm; it's hot). **(2)** That it is a truth-conditional contradiction (as we saw with example (2) followed by (b)). **(3)** That it tends to garden-path hearers, who first take it descriptively and then, having arrived at a contradiction, reanalyse it as metalinguistic. **(4)** That it has certain typical prosodic properties: the so-called 'contradiction' intonation contour (a final rise within the negative clause) and contrastive stress on the offending item and its replacement in the following correction clause (shown by upper case letters in some of the examples in (3)).

We have argued elsewhere that NONE of these is essential (see Carston 1994, 1995, Noh 1994). There are cases of metalinguistic negation that are not rejoinders to previous utterances; some, but not all, metalinguistic negations are logical contradictions; some, but not others, are garden-path utterances; the so-called correction clause may PRECEDE the metalinguistic negation, or follow it, or be absent altogether; and the prosodic properties are not inevitable. The tendency to concentrate on the rhetorically interesting examples, which usually have this set of standard properties, has distracted attention from the one property they do all have

and must have to qualify as metalinguistic; they must involve to some extent or other metarepresentation; that is, the representation of another representation. In fact, the reanalysis of metalinguistic negation within relevance theory, given in Carston (1994, 1995), is more specific than this: they all involve echoic use. This claim has been elaborated and motivated quite fully in the papers just cited but we give a brief resume of it now in order to provide the necessary background to the central claim of this paper which is, contra Horn, that the negation operator remains truth-functional across all cases.

## 3 Renalysis in terms of echoic use

The correct generalization about the metalinguistic cases is that the material in the scope of the negation operator, or some of it, at least, is echoically used, in the sense of Sperber & Wilson (1986), Wilson & Sperber (1988, 1992). As the term is employed in relevance theory, a speaker uses a representation echoically when she attributes it to someone (other than herself at the time of the current utterance) and expresses an attitude to it, an attitude which may fall anywhere in a range from full endorsement to complete dissociation. The representation being attributed may be an utterance (actual or potential) or a thought/opinion, that is, a mental representation (actual or potential). Some examples of possible echoic use are given in (4):

(4)     a.    The pompous old fool is my husband.
        b.    What a lovely day for a picnic.

The speaker of (4a) might be using the definite description truth-conditionally but is even more likely to be attributing it to someone else and expressing an attitude to it, conceivably one of endorsement, but more likely one of dissociation/rejection. This latter possibility contains the crucial ingredients of ironic utterances: the implicit attribution of an opinion and the implicit expression of an attitude of dissociation from that opinion. Similarly, (4b) might be a description of a state of affairs in the world, but in the appropriate context it could be used echoically to recall an earlier utterance or to attribute a thought or opinion to someone, and express one of a range of attitudes to it. When we have a case of echoing an utterance (as opposed to attributing an unuttered thought/opinion) there is a range of linguistic properties that might be the target of the echo: phonetic, grammatical or lexical properties, aspects of dialect, register or style, and paralinguistic features such as tone of voice, pitch or other gestures, audible or visible.

   The echoic use of a representation, then, is one subtype of a broader phenomenon of metarepresentation which includes mention, direct speech (quotation), and indirect speech/thought.  What all of these have in common is that a representation is being used not to represent an object or state of affairs in the world but to represent a representation.  In such cases the relationship between representation and that which is being represented is not the familiar truth-based descriptive sort but is one of resemblance (Sperber and Wilson (1986, 226-37); Wilson and Sperber (1988, 136-40)).  Consider the following:

(5)     X:  What did Susan say?
        Y:  I can't speak to you now.
        Z:  She couldn't speak to me then.

Both of Y's and Z's responses are representationally ambiguous;  they may represent a state of affairs or they may represent  another representation.  Y might be telling X that she (Y) cannot  speak to him at that moment, or she might be directly quoting Susan; on the first of these, Y is representing a state of affairs, while on the second, she is representing Susan's utterance by using a representation which is linguistically identical to it.  Z might be telling X that Susan wasn't available to talk to her at a certain time or she might be indirectly reporting what Susan herself had said; in the latter case, the representation Z is using resembles the one it represents (Susan's) without being fully identical to it.  This representational ambiguity has  to be resolved pragmatically in these cases, as also in (4), since the  speaker has not made it explicit which  way  she  is  using  the   representation.   This  is,  then,  a  special  case  of underdeterminacy at the level of the proposition expressed.  Compare the following examples where the fact that a stretch of the utterance is metarepresentational is encoded in another part of the utterance; that is, it is made explicit:

(6)     a.   She said 'I can't speak to you now'
        b.   She said she couldn't speak to me then.
        c.   I agree with you that it's a lovely day.
        d.   How idiotic of you to expect it to be a beautiful day.
        e.   It's not correct to say that we saw 'hippopotamuses'; you should say 'hippopotami'.

Furthermore, the speaker of (6c) or (6d) makes explicit her own attitude to the attributed representation, of endorsement in (6c) and scorn in (6d).  In (6e) we have one possible explicit rendering of the sort of proposition that may be expressed by the metalinguistic use of (2) plus (b).

So the crucial property of those cases of negation labelled metalinguistic is that the representation (or a part of it) falling within the scope of the negation operator is *implicitly* echoic, where the echoic use of a representation is one type of metarepresentational use. Two of the standard diagnostics for metalinguistic negation follow directly from this account: (a) the presence of positive rather than negative polarity items in the scope of a metalinguistic negation, and (b) the impossibility of a metalinguistic use of morphologically incorporated negation:

(7)  a.  Mary is sometimes late.
     b.  * Mary is ever late.
     c.  Mary isn't ever late.
     d.  Mary isn't sometimes late. (She's always late.)

(8)  a.  She's not happy; she's ecstatic.
     b.  * She's unhappy; she's ecstatic.

On the echoic account we would expect positive polarity items, like 'sometimes' in (7d) as opposed to 'ever' in (7c), precisely because of their presence in the corresponding positive representation which is being echoed, here (7a). The impossibility of interpreting (8b) as a metalinguistic negation follows from the general impossibility of adding a descriptively used prefix to an echoically used word. The relationship between the bound morpheme and the word it is bound to seems to preclude the sort of pragmatic enrichment that the free sentential negation operator allows.

The other properties (garden-pathing, etc), felt by many to be typical of metalinguistic negation, may follow in particular contexts; however, theorists have mistaken these tangential properties, that make for rhetorically effective instances, for the essence of the phenomenon. The upshot is that metalinguistic negation (or, rather, implicitly echoic negation) occurs much more widely than is usually recognized. There is, in fact, no reason to suppose that it is confined to non-truth-conditional properties of utterances either; in Carston (1995) it is argued that truth-conditional content may also be the target of metalinguistic negation, but we won't pursue that here.

## 4 The alleged ambiguity of the negation operator

According to Horn, we have two uses of the negation operator itself, of the lexical item 'not'; the question is whether the distinction between them is to be captured

pragmatically, or is a semantic matter. He insists that it does not amount to a semantic ambiguity, an ambiguity within the linguistic system itself, and calls it a pragmatic ambiguity, a 'built-in duality of use', **which extends to other linguistic operators such as 'if', 'or' and 'and'** (see Horn 1989, 379-382). However, in the absence of any further specification the concept of **'pragmatic ambiguity'** is, at best, hopelessly vague. A number of writers have puzzled over what it might be taken to mean (Burton-Roberts (1989), Foolen (1991), van der Sandt (1991), Carston (forthcoming)), without reaching any concrete conclusions.

Horn himself is inconsistent in his discussion, writing of 'an extended metalinguistic use of a basically truth-functional operator' (Horn 1985, 122), followed soon after by reference to 'this special or marked use of negation, **irreducible to** the ordinary internal truth-functional operator' (Horn 1985, 132). Despite his avowals to the contrary, it seems to us (and to van der Sandt (1991, 333)) that Horn is essentially holding a **semantic ambiguity position**. He does not offer any way of accounting for the derivation of the one operator from the other, an account which has to be given if one of the uses is supposed to be derived pragmatically from the other in particular contexts.

In fact his picture involves a **two-fold ambiguity**: (1) there is an ambiguity in the negation operator itself: the one is the logical, truth-value reversing, negation, the other is a non-truth-functional operator expressing objection, and (2) the further ambiguity lies with the nature of the material falling in the scope of the negation, whether it is **a proposition** or **an utterance**. This is unsatisfactory on at least two counts: first, intuitions are violated by the idea that 'not' itself is ambiguous, and second, there is an odd redundancy in this double ambiguity. Our view is that there is no ambiguity in the semantics of the negation operator, nor does this lexical item 'not' acquire some other meaning in use, via some pragmatic process. Our account in terms of echoically used material in the scope of the negation operator is in line with the second of these ambiguities that Horn proposes: the one that focuses on the nature of the material in the scope of the negation operator, though the distinction we advocate here is obviously broader than the one he proposes between propositions and utterances. This representational ambiguity is not a linguistic ambiguity nor even a pragmatic ambiguity, though it is a pervasive feature of language use. It is one manifestation of a perfectly general cognitive capacity of humans: the ability to metarepresent.

Our main concern here is to argue against the alleged ambiguity of the negative element itself, whether semantic OR pragmatic. There is a 'duality of use' involved in the metalinguistic examples, but it is not an ambiguity in the lexical item 'not'. It lies rather with the two ways in which material falling within the scope of 'not' can be used: either to represent a state of affairs in the world (i.e. truth-based representation)

or to represent another representation (i.e. resemblance-based representation, which includes echoic use). This particular duality of use is not in any way peculiar to negative utterances. On the basis of this, we are led to reassert a claim made some time ago in unpublished work (Carston 1985): that the negation operator itself is, in all instances, **just the standard truth-functional operator**. This view has, however, met with considerable scepticism; consider, for instance, the following quote from Horn (1989, 434), which has been endorsed by Foolen (1991, 228) and repeated by Horn (1992):

> We are now back to the ultimately incoherent view that negation is invariably a truth function - even when it takes as an argument the "echoic use of language". If there is no category mistake here, there is at the very least a good deal of explaining to do, since Carston is forced by her neomonoguism to propositionalize every target of metalinguistic negation, from grammatical usage to phonology, from register to musical technique. ... when we bear in mind what a truth function must be a function of, we recognize the implausibility in the view that negation is invariably truth-functional.

So the claim that the negation operator is truth-functional in all these cases, would seem to call for substantiation. Ideally, we would address this in tandem with the issue of the proposition expressed (what is said) in these echoic cases. This latter matter concerns how (if at all) the implicitly echoed/quoted material within the negation is pragmatically unpacked into an explicit representation by the hearer/reader. We do not have a full account to offer but there are some considerations which we think should serve to temper statements about category mistakes and extreme implausibility. First, consider the conjunctions in (9):

(9)   a.   She says we saw hippopotami and I say we saw hippopotamuses.
      b.   She saw hippopotami and I saw hippopotamuses.

Now, surely, however we might finally decide to represent the proposition expressed by (9a) we have no problem in saying what its truth-conditional content is; it is true if and only if she has uttered the sentence 'we saw hippopotami' and the speaker has uttered the sentence 'we saw hippopotamuses'. There is no temptation here to say that the conjunction operator is not its standard truth-functional self, even though parts of the representation falling in its scope represent an utterance, that is, another representation, including a particular morphophonemic property of that utterance. Of course, this metarepresentational use is **explicitly signalled** in (9a) by use of the verb

'say'. In (9b), on the other hand, there is **no linguistic encoding** of the fact that someone's pronunciation of a word is being echoed and contrasted with another pronunciation of the same word; that is, its metarepresentational nature is left implicit. However, this surely does not somehow render the conjunction operator **non**-truth-functional; in fact, it doesn't affect the conjunction operator at all.

Naturally, similar considerations can be brought to bear on cases of metalinguistic **disjunction** (the disjunction operator retaining its truth-functional character), metalinguistic **conditionals**, metalinguistic **questions**, metalinguistic **anything**. We are, of course, concerned here with cases of metalinguistic **negation**. Consider in this regard example (10), which comes from Noel Burton-Roberts:

(10)   It's not eSOTeric; it's esoTERic.
     a.   Is her dissertation terribly eSOTeric?
     b.   Is the correct pronunciation 'eSOTeric'?
     c.   Her dissertation is not eSOTeric; it's esoTERic.
     d.   The correct pronunciation of the word is not 'eSOTeric'; it's 'esoTERic'.

Taking (10) as a response either to (a) or (b), we get the two different possible assignments of reference to 'it' given in (c) and (d). The one interpretation involves an implicit echo (so-called metalinguistic negation), while the other makes it explicit that a stretch of phonetic representation falls in the scope of negation. There seems to be no difficulty in giving the truth-conditions of the latter and in maintaining the truth-functionality of the negation operator: the first clause of (d) is true if and only if it is false that the word in question is correctly pronounced [eSOTeric]. So, again, the question arises whether the 'meaning' of the negation operator is altered by the fact that the metarepresentational nature of some material in its scope is not explicitly signalled, as in (c). This implicitness does entail that there is some considerable pragmatic work for the hearer to do, since anyone who has fully understood the response with reference assigned as in (c) will have recovered, among other things, the information that one possible pronunciation of the word 'esoteric' is being rejected and another is being endorsed. This inference may constitute a pragmatic contribution (an enrichment) to the proposition expressed by the utterance, giving something like the representation in (11):

(11)   Not [the correct pronunciation of the word x in 'her dissertation is x' is 'eSOTeric']; the correct pronunciation of the word x in 'her dissertation is x' is 'esoTERic'.

Or, it may be better understood as an implicature triggered by the recognition that the proposition expressed by the utterance is echoing some aspect of the previous utterance and that an attitude of dissociation is being explicitly expressed to it via the negation:

(12)    Proposition expressed:
        Not ['her dissertation is eSOTeric']; 'her dissertation is
        Implicature:
        The word 'esoteric' is not pronounced 'eSOTeric' but rather 'esoTERic'.

It will take more careful thought and perhaps some experimental testing of people's processing of these sorts of utterances before this issue is resolved. Either way, though, there seems to be no reason at all to suppose that the negation operator somehow loses its truth-functionality and acquires a new meaning such as 'I object to U' or 'U is unassertable'. Rather, in all its uses, descriptive or metalinguistic, 'not' is the simple truth-functional operator.

## 5 Metalinguistic negation in Korean

### 5.1 Introduction

Now, of course, the view we are advocating here would be considerably undermined if we were to find a language which did, in fact, have two linguistic forms for sentence negation such that one was used exclusively for cases of descriptive negation, and so was truth-functional, and the other was inherently metalinguistic, translated literally as: 'I object to your utterance ... on such and such grounds'. We know of no language for which this has been claimed, at least not as straight-forwardly as this. However, when a language does have two ways of expressing negation it is often observed that one form is standardly used for descriptive negation and the other for metalinguistic (or, in our terms, echoic) negation. Korean is a case in point. Korean has two main ways of forming negative sentences: a short form and a long form, shown in (13) and exemplified in (14):[1]

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[1]In transcribing the Korean examples, we use the Yale Romanization system, with glosses based on Sohn (1994)'s approach. The abbreviations used in the glosses are explained as they arise.

(13)    Short form:   an(i)-verb
        Long form:   verb-ci an(i)-ha-suffixes

(14)    a.    tali-n-ta
              run-IN-DC
              '(He) runs'

        b.    **an**-tali-n-ta'
              not-run-IN-DC
              'He does not run'

        c.    tali-**ci ani-ha**-n-ta
              run-NOM not-do-IN-DC
              'He does not run'

[NOM: nominalizer, IN: indicative mood, DC: declarative]

In the short form, the negative particle 'an' or 'ani' is placed before the verbal element and in the long form, it is placed after the verbal stem which has been suffixed by the nominalizer '-ci' and is attached to the main verb 'ha', which can be translated as 'do, be in the state of'. Some authors (e.g. Choi (1985), (1989), Horn (1985), Kim (1991)) have claimed that the short form is exclusively used for descriptive negation and Horn (1985) has suggested that the long form, while able to occur in either descriptive or metalinguistic negation, tends to favour the metalinguistic (i.e. echoic use). We will consider these two points in turn.

## 5.2 The short form negation

The short form is said to be used descriptively and only descriptively. If this is right we need to find some explanation for it since according to our account a negation operator should be able to take either descriptive or echoed material in its scope. Yoon (1994) has claimed that the short form 'an' operates syntactically like a prefix on the verb. If he is right this would account for its restriction to descriptive use, since this would appear to be a perfectly general property of (bound) affixes (see (8b) above). They combine with word stems to form a new word which functions as a single unit at a particular representational level, either wholly descriptive or wholly metarepresentational, but not, as it were, split level.

Yoon has some evidence to support his morphological analysis. First, the short form cannot be used as the second occurrence of a negative in a double negation; there the long form MUST be used, as shown in (15). This is exactly parallel with the behaviour of prefixal as opposed to free form negation in English, exemplified in (16).

(15)  a.  Mina-nun pap-ul **an** mek-**ci ani-ha**-yss-ta.
          Mina-TOP meal-AC not eat-NOM not-do-PST-DC

      b.  Mina-nun pap-ul mek-**ci ani-ha**-**ci ani-ha**-yss-ta

      c.  * Mina-nun pap-ul **an an**  mek-ess-ta.

[TOP: topic marker;  AC: accusative particle;  PST: past tense marker]

(16)  a.  short long
          long long
          * short short

      b.  It isn't untrue ...
          It isn't not true ...
          * It's un-untrue ...

Second, he points out that while the long form negation licenses negative polarity items, as we would expect of a negation operator, the short form does not. This is shown in (17) where the negative polarity item 'yekan' gives an ungrammatical sentence. This, again, is just what we would expect if the short form 'an' is functioning like a prefix. Consider the comparable data from English in (18), where the NPI 'at all' is triggered by the negation operator 'not' but not by the negative prefix 'im-').

(17)  a.  * Swuni-nun **yekan an** yeypputa.
          Swuni-TOP ordinarily not pretty

      b.  Swuni-nun **yekan** yeypp-ci **an**-h-ta
          Swuni-TOP ordinarily pretty not-be-DC
          'Swuni is not ordinarily pretty'
          (examples from Yoon 1994)

(18)       * It is improbable **at all** that ...

It is not **at all** probable that ...

This looks like a neat explanation: the short form is a negative prefix, therefore it cannot take metarepresented material in its scope. However, we must take issue with both parts of this story: first, 'an' is not in fact a prefix, and, second, although there is a preference for descriptive use, we claim that the short form can, after all, be used for echoic negation. Yoon (1994) ignores the fact that 'an' is simply not a bound morpheme - it is free from the following verb. Furthermore, his apparent evidence for the prefix-like nature of 'an' is open to a different sort of interpretation. We would claim that the double negation example in (15c) is not in fact ungrammatical, but is stylistically extremely infelicitous and is avoided for that reason. The asterisk should be replaced by a milder indicator of unacceptability. The discomfort comes from the use of the identical forms side by side and arises to some extent in English too, unless one of the forms is given special emphasis and/or involves the echoic use of one of the repeated forms:

(19)        ? I do not not love you.

As for the claim that 'an' cannot license negative polarity items, it is just false, as the following examples from Sohn (1994, 134) show:

(20)   a.   na-nun **kyelkho** papo-ka **an** i-ta
            I-TOP by any means fool-NM not be-DC
            'I am by no means a fool'

       b.   na-nun Pwusan-ey **comchelem an** ka-n-ta
            I-TOP Pwusan-to often not go-IN-DC
            'I seldom go to Seoul'

[NM: nominative particle]

Both the negative polarity items 'kyelkho' and 'comchelem' are licensed here by the short form negation 'an' and, according to the intuitions of some native speakers of Korean whom we have consulted, (17a) is, contra Yoon, also acceptable, with the NPI 'yekan' licensed by 'an'. Some of them do feel that (17b) is marginally preferable; if this proves to be a robust intuition it does need to be explained and may be yet another case of a stylistic intuition being mistaken for a grammatical one.

Finally, there are cases where 'an' simply cannot be taken to be targeting the verb and must be given a wider scope interpretation:

(21)    X:    cha-ka kapcaki se-ss-ta
              'the car stopped suddenly'
        Y:    cha-ka kapcaki **an** se-ss-ta
              'the car didn't stop suddenly'

Here Y's response cannot be taken as a descriptive verbal negation since this would force the adverb to take scope over 'not stop' giving the very odd concept of 'suddenly not stopping'.  Now if 'an' were a prefix this example should simply be found unacceptable or very odd, but there is a perfectly acceptable interpretation whereby the 'an' is understood as having wider scope so that what is denied is that the stopping was sudden.  In sum, it seems pretty clear that there is no evidence that 'an' functions like a prefix, so that cannot be the explanation for the apparent restriction on the way 'an' is used. Instead of looking for some other explanation for the alleged inability of 'an' to function as metalinguistic or echoic negation, we take issue with this very point: there is no such restriction to be explained.  When provided with an appropriate context such as a preceding positive utterance which is apparently echoed within the following negative utterance, the short form negation can be understood as having scope over metarepresented material.  The example in (21) is such a case; as just mentioned, 'an' may be taken there as a wide scope descriptive negation but probably the most natural interpretation is that Y is echoing X's utterance and objecting to his use of the adverb 'kapcaki'.  This is made even clearer in (22)-(24), which are instances of the standard sort of metalinguistic cases cited by Horn; they are interpreted echoically and are perfectly acceptable cases of the short form negation:

(22)    X:    Ku-nun ku mwuncey-lul kyewu phwul-ess-tay
              he-TOP the problem-AC barely solve-PST-someone say
              '(I heard) he managed to solve the problem'

        Y:    Ku-nun ku mwuncey-lul kyewu **an** phwul-ess-e
              he-TOP the problem-AC barely not solve-PST
              Swiwe-ss ta-ko hay
              easy-PST-DC-QT-say
              'He didn't manage to solve the problem. He said it was easy'

(23)   X:   emma pap mek-ess-e?
             mum meal eat-PST-Q
             'Has mum had a meal?'

     Y:   pap **an** mek-ko, cinci tu-si-ess-ta
             meal not eat-and, meal(hon) eat(hon)-SH-PST-DC
             'She didn't have a meal, she ate dinner' (polite vocabulary)

(24)         wuli-nun aitul-ul **an** coaha-p-ni-ta;
             we-TOP children-AC not like-AH-ID-DC
             kutul-ul salangha-p-ni-ta
             they-AC love-AH-IN-DC
             'We don't like children, we love them'

[TOP: topic marker; PST: past tense; SH: subject honorific; AH: addressee honorific; QT: quotative particle; Q: interrogative marker]

(25)         * We dislike children, we love them.

Note the contrast between the acceptable noncontradictory short form negation in (24) and the contradictory example in (25) employing a negative prefix, further evidence if it were needed that 'an' is not a prefix. In most of these short form cases there is quite a strong garden-pathing effect: the first interpretation accessed would most likely be the descriptive understanding and then under the impact of the contradiction, derived after processing the follow-up clause, a reanalysis would result in the echoic/metalinguistic interpretation. So the use of the short form rather than the long form in these cases is probably more rhetorically effective; that is, it requires more processing effort and achieves a range of compensatory effects, as relevance theory would predict. It might be chosen on particular occasions for just this purpose.

   There is a final very strong piece of evidence we can bring to bear that short form negation can be metalinguistic/echoic. The copula in Korean, 'ita', can only be negated by the short form, so (26b) with the long form is ungrammatical:

(26)   a.   na-nun sensayng-i **an i-ta**
             I-TOP teacher-NM not-be-DC
             'I am not a teacher'

     b.   * na-nun sensayng-i-**ci an-h-ta**

However, the copular predicate may be interpreted as echoic, so the short form 'an' is functioning as a metalinguistic/echoic negation:

(27)   X:   Ku salam neui sensayng i-ci?
            that man your teacher be-Q
            'Is that man your teacher?'

       Y:   Ku salam-un naui sensayng-i **an-i-**ko, sensayngnim i-ta
            that man-TOP my teacher-NM not-be-QT, teacher(hon) be
            'That man is not my teacher, he is my teacher(hon)'

Here Y is objecting to X's use of one form and correcting it with the honorific form, which is truth-conditionally equivalent.


## 5.3 The long form negation

We believe then that we have made a very strong case against the short form being a verbal prefix and against it being restricted to descriptive use. Let us move now to the second main claim about Korean negation, which is the alleged preference for a metalinguistic understanding when the long form is used. There is no doubt that this form CAN take echoically used material in its scope; the examples of metalinguistic negation above in (21)-(24) could all certainly have been expressed using the long form negation, but, as Kim (1991) says, it is just as often used descriptively.

  Horn (1989, 441) makes the tentative suggestion that IF the choice to use the long form is often interpreted metalinguistically (rather than descriptively) in those contexts which would have also permitted a short form, this may be explainable pragmatically, in terms of 'least effort' factors. However, he gives no worked out account of the considerations involved. The idea translates nicely into relevance-theoretic terms in that when there are two semantically equivalent forms one of which demands more processing effort of a hearer, the speaker's choice of the more effort-demanding form carries with it a presumption of extra, or at least different, effects from those that would have been achieved by use of the more economical form. Well-known examples of this are the contrast between simple verbs and their causative equivalents, so, for example, 'John caused the car to stop' generally achieves some effects that the simpler 'John stopped the car' does not. It is, of course, the case that an echoic or metarepresentational use inevitably has effects that a descriptive use does not have. Other things being equal, the descriptive use is unmarked (more accessible) and the metarepresentational use is marked (less accessible), so that, other things

being equal again, we would expect the longer (linguistically more marked) form to be used for echoic/metalinguistic uses. Of course, in language use linguistic markedness interacts with pragmatic factors, such as the processing history of expressions, which affect the accessibility of interpretations and therefore the processing effort they require of the addressee. For instance, as remarked above, when the short form is used for metalinguistic cases, as in (22)-(24), garden-pathing is very likely and extra effects are achieved as a result; in other words, use of the short form is the more costly (effort-requiring) option in these cases.

With regard to this issue of the different pragmatic effects achieved by these truth-conditionally identical forms, it is of interest to note that some authors feel that when used descriptively the long form is more emphatic (Kuno 1980) or more formal (Sohn 1994). The very form of this longer expression makes for possibilities not available to the short form: because the 'an' in the long form is followed by another (dummy) verb 'ha' it is more amenable to stress than the short form and its relation to the content verb (effectively, in an embedded clause) is less direct. So in (28b), for instance, 'an' can be stressed making the expression of dislike emphatic or, alternatively, if left unstressed, it may express a milder degree of dislike than the short form in (28a) because of its distance from the verb 'coaha'.

(28)   a.   na-nun ku sayngkak-ul **an** coahay-yo
            I-TOP that idea-AC not like-DC

       b.   na-nun ku sayngkak-ul coaha-**ci**(nun) **an**-**h**-**a**-yo.
            'I don't like the idea'

The main point of this section, though, is that the long form may be interpreted either descriptively or metalinguistically, i.e. in our terms, the material within its scope may be used either descriptively or echoically; in either case it will achieve effects which the short form, used in the same context, would not achieve. So far, then, we find no reason, on the basis of the Korean data, to doubt our main thesis that, semantically, there is a single unambiguous negation operator which may take within its scope either descriptive representations or attributed representations. In all cases, provided we allow for the inevitable pragmatic processes of enrichment that occur at the level of the proposition expressed, there is no reason to suppose that this is not the familiar truth-value reversing operator. This single element of meaning happens to be encoded in two distinct linguistic forms in Korean and as with any other pair of truth-conditionally equivalent forms they are felt to give rise to different effects and to be appropriate or preferred in different contexts.

## 5.4 The contrast marker 'nun'

There is another linguistic form in Korean which often features in discussions of metalinguistic negation: this is the form 'nun' (reduced to 'un' after a consonant) which is usually referred to as a topic-contrast marker.  Attached to an initial unstressed constituent it functions as a topic marker (as in (17), (20), (22), (26) and (28) above), which is not our concern here.  When it is used as a contrast marker it is claimed to play an important role in disambiguating between descriptive and metalinguistic interpretations of the long form negation.  More generally, its role is to indicate the constituent which is the target of negation.  Constituent negation is achieved in English by placing heavy stress on the constituent in question or by making it the focus of a cleft construction; in Korean it is achieved by placing 'nun' directly after the constituent in question and giving that constituent contrastive stress:

(29)   a.   Na-nun SAKWA-**nun** coaha-ci an-a.
            I do not like APPLES (but I like other fruit).

       b.   Na-nun sakwa-lul COAHA-ci-**nun** an-a.
            I do not LIKE apples (but I'll eat them).

       c.   NA-**nun** sakwa-lul coaha-ci an-a.
            I do not like apples (but the others like them).

Although 'nun' has been discussed by many Korean linguists (for example, Kuno (1980, 1982), Choi (1989), Kim (1991)), no-one has yet provided a satisfactory explanation of its role in negative sentences.  Here we will concentrate on Kim (1991)'s claims that 'nun' is itself a negative particle and, more specifically, that it is 'a device of metalinguistic negation in Korean' (126).  We will argue that while 'nun' as a contrast marker lends itself to metalinguistic uses it is not itself any sort of negative particle, much less a metalinguistic negation operator.
   Let us consider the more specific claim first.  Kim discusses the following set of examples:

(30)   a.   tali-n-ta
            run-IN-DC
            '(he) runs'

    b.  **an**-tali-n-ta
       'he does not run'

    c.  tali-**ci an**-!nun-ta
       'he does not run'

    d.  tali-**ci-nun an**-!nun-ta
       'he does not run'

(! note that this 'nun' is quite distinct from the topic-contrast particle 'nun' we are discussing here and is equivalent to the dummy verb 'ha-n' [do-IN] as in previous examples)

He says: 'the occurrence of the negative particle 'nun' in [(30d)] seems to force a metalinguistic reading, and surely distinguishes a purely descriptive use of [(30b)] from a metalinguistic use in [(30d)]. In [(30d)], thus, metalinguistic negation as an extralogical operator is used to reject such an utterance itself' Kim (1991, 128).

   However, he does not really attempt to give any evidence to support this claim. He notes that one of the targets of a metalinguistic negation discussed in Horn (1985, 1989) is the upper bounding scalar implicature which is often communicated by an assertion of a weak scalar predicate. Example (24) above was such a case, where the use of the verb 'like' in the positive utterance, which is being echoed/metarepresented here, was taken to have implicated 'not love' and the metalinguistic negation is used to deny that implicature, as the follow-up clause makes apparent. Kim gives the following example of a scalar predicate case with 'nun':

(31)       cha-ka ttattutha-ci-**nun** an-h-da
           tea-NM warm-NOM-Npar not-do-pres
           'The tea is not warm'

However, there is no preference here for a 'more than' reading (e.g. 'the tea is hot') or an 'other than' reading (e.g. 'the tea is weak'); the descriptive 'less than' reading is equally, if not more, likely (e.g. 'the tea is cool'), as he himself concedes.

   In her discussion of '(n)un', Choi (1989) gives examples that run directly counter to Kim's view that it is a device of metalinguistic negation:

(32)   X:  Swuni namca chinku ka sey myeng i-lamye?
          'I hear that Swuni has three boyfriends; is it true?'

Y:   Sey myeng **un** ani-ya. Twu myeng i ya
       'It's not three. But it is two'

Z:   \* Sey myeng **un** ani-ya. Ney myeng i ya
       'It's not three. But it's four'

The standard assumption about these sorts of cases is that Y's response is a descriptive use (negating the lower bound 'at least three'), while Z's is metalinguistic (objecting to the upper bounding implicature of X's utterance). Given the fact that omission of '(n)un' in either case gives acceptable utterances, it does seem that it is the presence of '(n)un' which prevents a metalinguistic reading of Z. Of course, this cries out for an explanation in itself but, for our purposes here, the point is that 'nun' does not trigger a metalinguistic interpretation in these examples; on the contrary, it blocks this interpretation in favour of a descriptive interpretation even though this gives rise to an unacceptable anomaly.

Following Horn (1985), Kim goes on to point out that metalinguistic negation does not trigger negative polarity items. But he is quite unable to use this diagnostic to support his claim that 'nun' triggers a metalinguistic interpretation. In fact his own example provides a counterexample to the claim:

(33)      cha-ka cenhye ttattutha-ci-**nun** an-h-da
            tea-NM at all warm-NOM-Npar not-do-pres
            'The tea is not warm at all'

[NM: nominative particle; NOM: nominalizer; Npar: negative particle]

Kim says: 'If VP-nun is used with NPI in the same simplex sentence, the metalinguistic reading ... simply disappears ... [(33)] is no longer ambiguous between descriptive and metalinguistic uses. Rather, its meaning retains the standard 'less than' interpretation under descriptive negation' Kim (1991, 131).

There are two points to be made here. First, as Seuren (1990, 451-2) has pointed out, negative polarity items may appear in standard metalinguistic negations, as in example (34):

(34)      That car isn't (pretty) old at all.  It's antique.

Taken metalinguistically, this example is fine, whether with the positive polarity item 'pretty' or without. In our terms, what is going on here is that 'pretty' is part of the representation which is being echoed, while 'at all' falls outside the echo and is used

to make more emphatic the rejection (negation) of the utterance 'That car is (pretty) old' as making too weak a statement.  So, in fact, the presence of the negative polarity item 'cenhye' in (33) has no bearing on the issue of whether or not the negation is interpreted as descriptive or metalinguistic/echoic.  In fact, (33) is just like the scalar case discussed in (32), in that it would be interpreted descriptively even without the negative polarity item.  Our second, and stronger, point concerns the contradictory nature of Kim's reasoning.   He asserts both that 'nun' triggers a metalinguistic understanding and that the negative polarity item 'cenhye' triggers a descriptive understanding.  It follows from this that example (33) should be contradictory and so unacceptable.  However, it is perfectly acceptable on a descriptive interpretation so, again, it seems clear that 'nun' does not encode any indication of metalinguistic or echoic use.

   As you will have seen in the glosses of the examples taken from Kim's paper, he labels 'nun' a negative particle.  Let us move now to consider briefly this more general claim.  First, there are some immediate considerations that weigh against the view that 'nun' is a negative particle: (a) this would involve an increase in the semantic ambiguity of this lexical item ('nun' = topic marker, contrast marker, negative particle), which, in line with usual economy considerations (Modified Occam's Razor) is to be avoided if possible; (b) it seems clear in examples (30d), (31), (32) and (33) that the work of negation is being done by the 'an(i) ha' form, as in the earlier cases without the 'nun' particle; (c) if 'nun' were a negative particle these examples would have two negation operators and should be interpreted as positive, bearing in mind that all other cases of double negation in Korean, such as the various combinations of the short and long form negations mentioned in (15) above, are understood as positives.  However, the cases of 'nun' plus the long form negation are all understood as simply negative.  As already suggested, what the contrast particle appears to do in a negative sentence is indicate which element is the focus of the negation, so in (31), for instance, it is 'ttattutha'.

   However, Kim has some apparent evidence for his claim that 'nun' can function as a negative particle, and, in particular, as a device for signalling metalinguistic negation.  He gives the following examples:

(35)   a.   ka-ki-**nun** ka-nda
            go-NOM-Npar go-pres
            Concerning his going, he goes.
            '(He) goes'

> b.  us-ki-**nun** us-nunda
>     laugh-NOM-Npar laugh-pres
>     '(He) laughs'
>
> c.  kongpuha-ki-**nun** kongpuha-nda
>     study-NOM-Npar study-pres
>     '(He) just studies'

According to him, they 'may be read in the manner of metalinguistic negation' (Kim (1991, 131), with the negation attaching to an implicature of a previous affirmative utterance which is being echoed.  These are certainly not literally (semantically) negative: it is quite impossible to paraphrase them using a negative: 'he doesn't go', 'he doesn't laugh'.  A typical sort of context for (35a) is given in (36) where the sense is 'well, he does go but that's as much as I can say (because he cries or makes a big fuss about going)'.  Note that  in English the same effect could be achieved by intonational means; for example, using a fall-rise on the verb.

(36)    X:  So he goes (willingly) to the doctor?
        Y:  He goes.

Kim appears to be blurring the distinction between what is semantically decoded and what is recovered pragmatically.  It could be reasonably argued that something with a negative flavour is supplied pragmatically, as our paraphrase with 'but' indicates and this may be what he means by saying the negation attaches itself to an implicature, but it certainly does not follow from this that there is an element in the sentence uttered which encodes negation.

   These cases do seem to be (implicitly) echoic but what is echoed is that part of the previous utterance which the current speaker agrees with and there is a strong suggestion (communicated via the use of 'nun' or a particular intonation pattern) that that is as much as he could agree with.  In short, there is no evidence that 'nun' is functioning as a negative particle.  Rather it is, as in the earlier examples, a contrast marker, or perhaps, a better label would be the one employed by many Korean linguists, a delimiter.  In negative utterances, it delimits or picks out the constituent which is the focus of the negation and in the utterances in (35) it delimits that part of someone's utterance or opinion that the current speaker is willing to endorse.  Its delimiting or highlighting function makes it particularly useful for indicating elements of implicit echoic use.

Finally, there are any number of cases where 'nun' is used in just this contrastive/delimiting fashion and is clearly not communicating anything negative at any level, explicit or implicit.  For instance:

(37)    ku-nun PWULE-**nun** mos ha-ci-man, YENGE-**nun** cal ha-n-ta
        he-TOP French-CON cannot do-NOM-but, English-CON well do
        'He cannot speak FRENCH, but he can speak ENGLISH well'

[CON:  contrast marker (or delimiter)]

What 'nun' does here is contrast the two languages, French and English; the only negative element in this utterance resides in the inherently negative modal 'mos' translated as 'cannot' or 'unable', which has nothing to do with 'nun'.
    We believe that it is the contrastive/delimiting/focusing function of 'nun' which has led Kim to make his claim that 'nun' triggers a metalinguistic reading of negation.  In assessing his idea much depends on what he means by 'triggering'; if he means that a metalinguistic interpretation is inevitable then, as we have already shown, he is simply wrong; if triggering means instead that a metalinguistic interpretation is made more accessible; that is, that negative utterances with 'nun' appended to a constituent somehow make a metalinguistic (echoic) interpretation more likely, we would agree. In English, certain linguistic devices make a metalinguistic interpretation more accessible, without literally encoding metalinguisticness or echoicness; examples are contrastive stress, a particular rising intonation contour and the so-called **contrastive negation** structure, 'not X (but) Y', discussed by McCawley (1991):

(38)    a.    She won't EAT meat but she will COOK it (for others).
       b.    John didn't drink COFFEE but TEA.

McCawley points out that this structure is not inherently metalinguistic though it does lend itself to metalinguistic uses, as in (39), for example:

(39)    a.    Here we don't eat tom[eiDəuz] but we do eat tom[a:təuz].
       b.    Not monGEESE but monGOOSES.

The contrastive or delimiting particle 'nun' seems, similarly, to lend itself to use in negative utterances that involve echoic or metalinguistic use: what 'nun' does is indicate which part of the material in the scope of the negation the speaker is singling out as objectionable:

(40)  a.  motwu-ka o-**ci-nun  an-h**-ko myech salam-man o-ass-ta
          all-NM come-NOM-CON not-and a few people-only come-PST

      b.  kyewu pwul-**ci-nun an-h**-ass-ko, swipkey pwul-ess-e
          barely solve-NOM-CON not-do-PST-and, easily solve-PST
          '(I) didn't manage to solve it, I did it easily'

      c.  swul-**un an** mai-ko, kotcha-man masi-p-ni-ta
          wine-CON not drink-and, rice tea-only drink-AH-IN-DC
          '(We) do not drink rice wine, we drink rice tea'

[note: 'rice tea' and 'rice wine' are the same thing in the sort of context intended here; for instance, as spoken by a clergyman]

Without doubt there is still much work to be done if the particle '(n)un' is to be fully understood. However, within the context of our discussion of negation, we can safely say that '(n)un' is not peculiar to either descriptive or metalinguistic negation; what it does is focus on a particular constituent and this is a useful feature for echoic/metalinguistic negation as it indicates which part of the echoed representation is being objected to.


## 6 Summing up

We have argued, contrary to Horn, that the negation operator in cases of metalinguistic (or echoic) negation is exactly the same negation operator as that in cases of descriptive negation: i.e. the standard truth-functional negation. The difference between the two possible interpretations of negative utterances lies with the way in which the representation falling in the scope of the negation operator is being used: either to describe a state of affairs or to represent another representation.

   We have looked at some of the facts of negation in a language unrelated to English, namely Korean, and found support there for our view: there is no negation operator in this language which is exclusively used for cases of metalinguistic (or echoic) negation. The most one can say is that in Korean, as in English, certain structures make an echoic interpretation more accessible.

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