1. Introduction

The pair of examples in (1) has been extensively studied in the formal literature since the seventies. The theoretical issue of interest is how they are related. Postal (1974) suggests that the embedded subject in (1b) has been raised to object position (see also Rosenbaum 1970), while Chomsky (1973) argues that it is in the embedded clause (see also Bresnan 1976):

(1) a. Max believed (that) Melvin is immortal.
   b. Max believed Melvin to be immortal.

With the advent of the view disassociating thematic positions from Case positions (see Chomsky 1989), there is broad consensus that the embedded subject Melvin in (1b) is in a position where accusative Case is assigned. In theories with movement, it gets there via A-movement from the embedded clause (see Lasnik and Saito 1991).

In this light, we may wonder whether the movement analysis for (1b) can be applied to similar examples in other languages. For instance, we may ask whether the pair of Tagalog examples in (2a,b) can be related by movement the same way that the pair in (1) can be:

(2) a. pinaniwalaan ni Bob [ na dumating si Fred ]
   believe.DV GEN LK come-AV NOM
   ‘Bob believed that Fred came.’

b. pinaniwalaan ni Bob si Fred [ na dumating ti ]
   believe.DV GEN NOM LK come-AV
   ‘Bob believed Fred to have come.’

c. pinaniwalaan ni Bob si Fred [ na dumating proi ]

I argue on empirical grounds that they cannot (contra Kroeger 1993, Sells 2000, Gerassimova and Sells 2008) and that the nominative NP (NNP) (Sells 2000) marked with si or ang originates in an A-position in the matrix clause (Nakamura 2000) and is related to a (possibly null) pronoun in the embedded clause, as in (2c) (contra Nakamura 2000). My analysis thus concurs with the spirit of Davies’ (2005) prolepsis analysis of raising in Madurese.

From the theoretical perspective, the base-generation analysis in (2c) is very natural. It follows from independently motivated principles of movement and the grammatical properties of Tagalog. The difference between the movement analysis for the English example in (1b) and the base-generation analysis for the Tagalog example in (2b) is a principled one. It has to do with an independent difference between the two languages with respect to the finiteness of the verb in the clausal complement.
2. The empirical perspective

It is by no means obvious that the NNP in (2a) is in the matrix clause; it may well be in the Spec of the complement clause. By contrast, the NNP in (3) occurring to the left of a matrix adverbial or argument is unequivocally in the matrix clause:

(3) a. pinaniwalaan ni Bob si Fred kahapon [ na darating bukas ]
    believe.DV GEN NOM yesterday LK come.AV.FUT tomorrow
    ‘Yesterday Bob believed that Fred will come tomorrow.’

    b. pinaniwalaan si Fred ni Bob [ na darating ]
    believe.DV NOM GEN GEN LK come.AV.FUT
    ‘Bob believed that Fred will come.’

I now proceed to show that the NNP is not A-bar-moved from the embedded clause to the matrix clause, and that it behaves like the argument of the matrix clause in many ways.

2.1. The NNP is not A-bar-moved from the embedded clause

A major argument for the NNP being A-bar-moved from the embedded clause is that it seems to be subject to the same general constraint on long-distance A-bar-movement (Sells 2000, Gerassimova and Sells 2008). In Tagalog as in many other Austronesian languages, extraction out of a clause is possible only if the matrix clause does not host a nominative argument (Sells 2000):

(4) a. si Fred, ay sinabi ni Bob kahapon [ na darating ti ]
    say.OV GEN NOM yesterday LK come.AV.FUT
    ‘It’s Fred that Bob said yesterday will come.’

    b. *si Fred, ay nagsabi si Bob kahapon [ na darating ti ]
    say. AV NOM NOM yesterday LK come.AV.FUT
    ‘It’s Fred that Bob said will come.’

The grammatical contrast in (5) thus seems to suggest that the raising construction too is subject to the same constraint on long-distance extraction:

(5) a. inasahan ni Bob si Fred, (kahapon) [ na darating ti ]
    expect.DV GEN NOM yesterday LK come.AV.FUT
    ‘(Yesterday) Bob expected of Fred that he will come.’

    b. *umasa si Bob si Fred, (kahapon) [ na darating ti ]
    expect.AV NOM NOM yesterday LK come.AV.FUT
    ‘(Yesterday) Bob expected of Fred that he will come.’

But the similarity between the contrast in (4) and that in (5) is only apparent. On the one hand, the A-bar-movement analysis for the NNP in (5a) cannot explain why the NNP in (6a) cannot be so moved. On the other hand, (4) and (5) are incomparable; the predicate sabi ‘say’ differs from predicate asa ‘expect’ with respect to Case-marking of its arguments:

(6) a. *sinabi ni Bob si Fred, kahapon [ na darating ti ]
    say.OV GEN NOM yesterday LK come.AV.FUT
    ‘Bob said yesterday that Fred will come.’

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1 This informal characterization of the constraint is theory-neutral. It has also been cast in terms of the controversial notion of ‘subject’ (see Kroeger 1993:210), i.e., only clausal subjects allow extraction out of them.
b. sinabi ni Bob kay Fred kahapon [ na darating si Max ]
say.OV GEN OBL yesterday LK come.AV.FUT NOM
‘Bob said to Max yesterday that Max will come.’
c. *sinabi ni Bob si Fred kahapon [ na darating si Max ]
say.OV GEN NOM yesterday LK come.AV.FUT NOM
‘Bob said to Max yesterday that Max will come.’

The form sinabi of sabi ‘say’ may take a Goal argument that is in the oblique not nominative Case (see (6b,c)). By contrast, the form inasahan of asa ‘expect’ cannot take an oblique NP argument; (5a) is ungrammatical with kay Fred replacing si Fred. The NNP in (5a) is not comparable to that in (4a) inasmuch as it is not comparable to the NNP in (6a). The ungrammaticality of example (5b) thus cannot be likened to that of example (4b), but is due to the matrix clause hosting two nominative arguments.

The NNP shows no reconstruction effect, unexpected if it is A-bar-moved from the embedded clause to the matrix clause. Generally, a nominative anaphor or pronominal NNP can be bound by the genitive co-argument (Schachter 1976):

(7) a. pinupuri ni Bob, ang sarili niya
    praised.OV GEN NOM body his
    ‘Bob praised himself.’

b. pinupuri ng bawa’t pulitiko, ang nanay niya
    praised.OV GEN every politician NOM body his
    ‘Every politician praised his mother.’

If the NNP is raised from the embedded clause to an A-bar position in the matrix clause (without transiting an A position, cf. Mahajan 1990), then it should be possible for an anaphor or pronoun NNP to be reconstructed to the embedded clause and bound by the embedded genitive argument. The prediction is not borne out by the facts:

(8) a. *pinaniwalaan ko ang sarili niya, [ -ng pinuri ni Bob, ti ]
    believed.DV 1S.GEN NOM body 3S.GEN LK praise.OV GEN
    ‘I believed Bob to have praised himself’

b. pinaniwalaan ko ang nanay niya, [ -ng pinuri ng bawa’t pulitiko, ti ]
    believe.DV 1S.GEN NOM mother 3S.GEN LK praise.OV GEN every politician
    ‘I believed every politician to have praised his mother.’

In (8), the NNP in the matrix clause cannot be reconstructed in the embedded clause and be bound by the embedded genitive argument.

On the view that the NNP originates in the matrix clause, the anaphor NNP in (8a) and the pronoun in the NNP in (8b) are not c-commanded by the argument in the embedded clause. They can therefore not be bound by it. (8a) is ungrammatical, since the anaphor is not bound.

The NNP exhibits no strong crossover effect (Postal 1971). In general, an A-bar-moved phrase may not bind a pronoun to its right if the latter c-commands the position from which the former originates:

(9) a. Who, does he, like ti?  *i=j
b. Who, does he, think [ ti is smart ]?  *i=j
c. Who, did you say [ he, thinks [ ti is smart ]]?  *i=j

A phrase undergoing A-bar-movement under av-inversion shows the same effect. The sentence in (10b) is grammatical, but only if the A-bar-moved argument does not bind the matrix pronoun:

2 Strong crossover effects are commonly taken to be reducible to Binding Condition C, on the assumption that traces left behind by wh-movement are R-expressions (Chomsky 1981).
The NNP shows no such effect. The NNP in the matrix clause in (11) may bind the pronoun in the intermediate clause, and may be resumed by an overt pronoun in the most deeply embedded clause:

(11) a. inasahan ko si Bob [ na sinabi niya [ ng tinulungan (siya) ni Fred ] ]
expect. DV 1S.GEN NOM LK say. OV 3S.GEN LK help. DV 3S.NOM GEN
‘I expected of Bob that he would say that he was helped by Fred.’

b. inasahan ko si Bob [ na nagsabi siya [ ng tinulungan (siya) ni Fred ] ]
expect. DV 1S.GEN NOM LK say. AV 3S.NOM LK help. DV 3S.NOM GEN
‘I expected of Bob that he would say that he was helped by Fred.’

The binding in (11) is readily understandable, if the NNP in the matrix clause does not move from the most deeply embedded clause, but originates in the matrix clause. The example in (11b) where the intermediate clause hosts a nominative NP is crucial evidence that the NNP in the matrix clause cannot possibly be moved out of the most deeply embedded clause (see (4b)). If this is correct, then when there is no overt pronoun in the most deeply embedded clause, the position is occupied by a null pronoun.

A last piece of evidence showing that the NNP is not A-bar-moved from the embedded clause comes from discontinuous fragments of idioms. Certain expressions, e.g., *sira ang loob* ‘break inside’ or *kain ang salita* ‘eat word’, have idiomatic interpretations, in addition to literal interpretations:

(12) a. sinira ni Bob ang loob ni Fred.
broke GEN NOM inside GEN
‘Lit., Bob destroyed Fred’s inside’ OR ‘Idiom., Bob discouraged Fred’

b. kinakain ni Bob ang salita.
eat.OV GEN NOM word
‘Lit., Bob ate the word.’ OR ‘Idiom., Bob did not speak clearly.’

The idiomatic interpretation disappears, however, when a fragment of the expression is in the matrix clause and the rest is in the embedded clause:

(13) a. inasahan ni Nena ang loob ni Fred kahapon [ na sinira ni Bob ]
expect. DV GEN NOM inside GEN yesterday LK broke GEN
‘Lit., yesterday Nena expected Fred’s inside to be destroyed by Bob.’
NOT ‘Idiom., yesterday Nena expected Fred to be discouraged by Bob.’

b. pinaniwalaan ko ang salita kahapon [ na kinakain ni Bob ]
believe. DV 1S.GEN NOM word yesterday LK eat. OV GEN
‘Lit. I believed of the word yesterday that it was eaten by Bob.’
NOT ‘Idiom., I believed yesterday that Bob did not speak clearly.’

This is unexpected, if the NNP is in fact part of the idiomatic expression in the embedded clause and is moved to the matrix clause. On the view that the NNP originates in the matrix clause, the lack of the idiomatic readings in (13) follows, since the NNP does not form a syntactic unit with the other parts with which it is interpreted idiomatically.

2.2. *-properties of the NNP

The evidence just reviewed strongly suggests that the NNP is not A-bar-moved from the embedded clause. A range of other facts show that the NNP is in an A-position in the matrix clause.
In Tagalog, the combination of a second person singular nominative and a first person singular genitive pronominal co-arguments of a predicate undergoes pronominal syncretism:

(14) a. mahal ko siya.
love 1S.Gen 3S.Nom
‘I love him/her.’
b. mahal niya ikaw (also OK mahal ka niya where ka is the clitic form of ikaw)
love 3S.Gen 2S.Nom
‘He/she loves you.’
c. *mahal ko ikaw. (also *mahal ka ko and *mahal ko ka)
love 1S.Gen 2S.Nom
‘I love you.’
d. mahal kita.
love 1S.Gen.2S.Nom
‘I love you.’

Pronominal syncretism of the sort in (14d) is impossible, however, if the two pronouns are not co-arguments of the same predicate:

(15) a. sinabi ko [ -ng matalino ka ]
said.OV 1S.Gen LK smart 2S.Nom
‘I said that you are smart.’
b. *sinabi kita-ng matalino.

The fact that the syncretic form kita is possible in (16a) shows that the NNP in (16b) must be an argument in the matrix clause:

(16) a. pinaniwalaan kita [ -ng matalino pro ]
believed.DV 1S.Gen.2S.Nom LK smart
‘I believed you to be smart.’
b. pinaniwalaan ko siya, [ -ng matalino pro, ]
believed.DV 1S.Gen 3S.Nom LK smart
‘I believed him/her to be smart.’

The NNP in (16) is thus related to an empty pronoun in the embedded clause.

The NNP can also be resumed by an overt pronoun in the embedded clause, a pattern that Kroeger (1993:28) calls copy raising:

(17) a. pinagiisipan (nila) si Corazon, [ ng mabuti-ng pangulo (?siya,) ]
think.DV 3P.Gen NOM LK good-LK president 3S.Nom
‘Corazon is thought (by them) to be a good president.’
b. nagiisip sila kay Corazon, [ ng mabuti-ng pangulo (?siya,) ]
think.AV 3P.Nom OBL LK good-LK president 3S.Nom
‘They thought of Corazon as a good president.’

This conclusion is further re-enforced by the fact that the NP bearing the same theta-role as that of the NNP in (17a) may appear in an oblique phrase in (17b). If the oblique phrase in (17b) is not a syntactic argument of the embedded clause, then the NNP related to it in (17a) does not originate in the embedded clause, either.3

3 The slightly degraded grammaticality of the examples in (17) with the pronoun siya in the embedded clause is most likely due to redundancy. Kroeger (1993:29, note 7) remarks that some speakers, like my consultants, do not require a (resumptive) pronoun in the complement clause in examples comparable to those in (17). When the pronoun is not present, the position is occupied by a null pronoun (see also remarks after (11)).
With predicates like *asa* ‘hope, expect’ and *bintang* ‘accuse, judge’, a DP complement may stand in for a clausal complement ((18b) is inspired by Kroeger 1993:26):

(18) a. inasahan ni Fred si Bob [ -na magpaliwanag ng problema ]
    expect.DV GEN NOM LK explain.AV GEN problem
    ‘Fred expected of Bob that he will explain the problem.’

b. napagbintangan (nila) si Corazon [ -ng sinuhulan ng sindikato ]
    accuse.DV 3P.GEN NOM LK bribe.DV GEN syndicate
    ‘Corazon was accused (by them) of having been bribed by the syndicate.’

(19) a. inasahan ni Fred si Bob ng paliwanag.
    expect.DV GEN NOM GEN explanation
    ‘Fred expected from Bob an explanation.’

b. napagbintangan nila si Corazon ng pagnanakaw.
    accuse.DV 3 P.GEN NOM GEN corruption
    ‘Corazon was accused by them of corruption.’

No clausal complement is evident in (19). Hence, the NNP cannot possibly come from an embedded clause, and must originate in the matrix clause. The matrix predicates in (18) are identical to those in (19). If the NNP in (19) originates in the matrix clause, then the NNP in (18) does too.

Two further facts corroborate the idea that the NNP originates in the matrix clause. In Tagalog, the nominative argument is usually interpreted as definite (Schachter and Otanes 1972). It thus comes as no surprise that it has scope over the predicate (see (20a)):

(20) a. gusto ko ang isa-ng bata.
    want 1S.GEN NOM one- LK child
    ‘I want one (particular) child.’ (one child > want, *want > one child)

b. inasahan ko ang isa-ng bata [ -ng kumain ng adobo ]
    expect.DV 1 S.GEN NOM  one- LK child LK eat.AV GEN
    ‘I expected one (particular) child to eat adobo.’ (one child > expect, * expect > one child)

The NNP in (20b) too scopes over the matrix predicate; significantly, it has no option of scoping under it. The scope property of the NNP in (20b) follows naturally if it originates in the matrix clause and therefore cannot be reconstructed to a position in the embedded clause.

The NNP exhibits A-binding properties in that an anaphor NNP may be bound by the matrix argument, and a pronominal NNP may not be bound by it (Kroeger 1993:27):

(21) a. inasahan ni Linda i ang sarili niya [ -ng mahalikan ng pangulo ]
    expect.DV GEN NOM body 3S.GEN LK kiss.OV GEN principal
    ‘Linda expected herself to be kissed by the principal.’

b. inasahan ni Linda i siya [ -ng mahalikan ng pangulo ]
    expect.DV GEN 3S.NOM LK kiss.OV GEN principal
    ‘Linda expected her to be kissed by the principal.’

The binding in (21) is expected if the NNP originates in the matrix clause.

The A-binding properties of the NNP in (21) may seem like those of the subject of the complement of exceptional case-marking verbs in English:

(22) a. Linda, expected herself, to be kissed ti by the principal.

b. Linda, expected her, to be kissed tj by the principal. *i=j

In (22), the anaphor or pronoun is related to the (logical) object of the embedded verb *kiss*. It moves to a position where the accusative Case is assigned (Lasnik and Saito 1991, Chomsky 1989). This Case position is uncontroversially an A-position.
The issue that needs to be resolved is whether examples of the sort in (21) for Tagalog should be treated on a par with the English examples in (22) in that the embedded argument is moved to an A-position. I argue presently that on the basis of an independent difference between Tagalog and English with respect to the finiteness of the verb, they should not.

3. The theoretical perspective

A major motivation for A-movement is Case; a phrase is A-moved precisely because the position from which it moves has no Case. This accounts for a range of cases including those in (23)-(24):

(23) a. *They believe [he to have arrived]
   b. They believe him, [t, to have arrived]
   c. They believe [he had arrived]
   d. *They believe him, [t, had arrived]

(24) a. *It is believed [he to have arrived]
   b. He is believed [t, to have arrived]
   c. It is believed [he had arrived]
   d. *He is believed [t, had arrived]

On the one hand, the embedded subject cannot remain in the Caseless embedded subject position (see the a-examples) and thus must move to the matrix clause in order to get Case (see the b-examples). On the other hand, when the embedded subject gets Case in the embedded clause (see the c-examples) it may not move to the matrix clause (see the d-examples).

A-movement is thus Case-driven. It is possible from a Caseless position, but not from a Case position. It is excluded by general economy considerations, insofar as superfluous, i.e., unmotivated, steps in the derivation are not permitted (Chomsky 1995).4

In Tagalog, the verbs in the clausal complements in the raising construction are finite; they allow overt subjects, just as they do in independent sentences (see (25a,b)):

(25) a. dumating si Fred.
   ‘Fred came.’
   come-AV NOM
   b. pinaniwalaan ni Bob [na dumating si Fred]
   believe.DV GEN LK come-AV NOM
   ‘Bob believed that Fred had come.’
   c. pinaniwalaan ni Bob si Fred [na dumating t,]
   ‘Bob believed Fred to have come.’
   d. pinaniwalaan ni Bob si Fred [na dumating pro]

Now, given that A-movement from a Case position to a Case position is excluded on principled grounds, there is no reason why Tagalog should be exceptional in allowing A-movement of the sort in (25c). The alternative structure in (25d) where the NNP originates in the matrix clause and is related to a null pronoun in the embedded clause avoids the problem of A-movement out of a finite clause.

Nakamura (2000:393) argues that the NNP is base-generated in the matrix clause, and that there is nevertheless A-bar-movement in the embedded clause. He claims that what undergoes A-bar-movement in the embedded clause playing the same role as the null operator is the feature bundles of the si- or ang-marked argument moving to the embedded Spec CP. Thus, the example in (26a) has the schematic structure in (26b):

4 In the theory of movement driven by feature-checking (Chomsky 1998), the Case feature on the Goal NP is deleted as soon as its unvalued Case feature is valued under Agreement with a probe. Its Case feature being deleted, the inactive Goal cannot enter into an Agreement relation with the probe. A-movement is thus impossible.
a. nagmumukha ang bata, [ -ng kumain ti, ng mangga ]
appear. AV NOM child LK ate. AV GEN mango
‘The child appears to have eaten the mango.’

b. appear the child [cp FF[or]-C [ ate [or t[or] ] mango ]]

The virtue of this analysis is that the ban on A-movement out of finite clause still holds for Tagalog.5

The issue now is whether there is independent evidence for A-bar-movement of the sort in (26b).

Nakamura (2000:395) reports the grammatical contrast in (27) and takes it to be evidence that A-bar-movement of the sort in (26b) takes place in the clausal complement:

a. nagmukha ang buong bahay, [ na nilinis ni Fe ti, ]
appeared. AV NOM whole house LK cleaned. OV GEN
‘The whole house appeared that Fe cleaned.’

b. *nagmukha si Fe [ na nilinis ti, ang buong bahay ]
appeared. AV NOM LK cleaned. OV NOM whole house
‘Lit. Fe appeared that cleaned the whole house.’

Extraction in Tagalog and many other Austronesian languages is subject to the general constraint that, in terms of feature movement, only features related to the nominative argument can be A-bar-moved, but those related to other arguments may not.6 The example in (27b) is thus ruled out but that in (27a) is not, for the moved features in (27b) are not those of the nominative argument, but those in (27a) are.

According to Maclachlan (1996) (cited by Nakamura 2000:401), A-bar-movement in the clausal complement in (28a) licenses parasitic gaps (pg) in an adjunct (the na/nang hindi ‘without’ clause). The claim is undermined, however, by the fact that a gap, whether it is pg or not, is also possible without A-bar-movement (see (28b-d)):

a. nagmumukha ang relos, [ na aayusin ti, na hindi man lang buksan muna pg.
appear. AV NOM watch LK repair. OV without even open first
‘The watch appeared to have been repaired without even opening first.’

b. nagmumukha [ na aayusin ang relos ] na hindi man lang buksan muna pg.
c. pinuri mo ang lalaki nang hindi (mo) man lang __ kinilala.
praise. OV 1 S.GEN NOM man without 2 S.GEN even know. OV
‘You praised the man without even knowing him.’
d. umalis ang lalaki nang hindi sinabihan mo __
leave. AV NOM man without say. DV 2 S.GEN
‘The man left without you telling him.’

The examples in (28c,d) are also grammatical with the overt pronoun siya ‘he/she’ in the place of __. There is thus no reason to suppose that A-bar-movement of the feature bundles of the sort in (26b) takes place in the bracketed phrase in (28a) any more than in (28b-d).

There might be some issue with dialectal variation here, though. For some speakers, example (27b) is not impossible, and is still better with a resumptive pronoun (see (29a)):

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5 In this analysis, the matrix verb is a thematic verb, not a raising verb; otherwise, the NNP would end up having no theta-role. Feature movement has the same property as movement of the whole category. For instance, strong crossover effects are detectable in questions when the category is A-bar-moved and in relative clauses where the features related to the relativized argument are A-bar-moved (see who, does he, like ti? vs the man, he, likes, *i=j). If so, the NNP would end up having no theta-role.

6 This is the well-known constraint on (local) extraction to the effect that only the nominative argument can be moved (Schachter 1976). Translated in terms of the ergative analysis for Tagalog (see Mclachlan 1996) that Nakamura assumes, the constraint disallows movement of features unrelated to the absolutive argument.
In fact, the NNP can be related long-distance to a null argument as in (29b,c). For these speakers, a null pronoun may occupy the position of the overt pronoun in (29a). If movement of the sort in (26b) is to the Spec CP most local to the NNP, then the features of the null argument in the most deeply embedded clause in (29b) are A-bar-moved to the Spec of the intermediate clause. But this is impossible, for the clause hosts a nominative NP (see note 1). The null argument must then be pro. The features of the null argument in (29c) are extractable, the intermediate clause not hosting a nominative argument. But the possible coreference between the overt pronoun and the null argument shows no strong crossover effect (see note 5); no sign of A-bar-movement is evident. In this case as well, the null argument must be pro. It therefore seems difficult not to conclude that in (29) the NNP originates in the matrix clause and is related to a possibly null pronoun in the clausal complement.

4. Conclusion

Not only is the prolepsis analysis of raising suggested for Tagalog consistent with a wide range of empirical facts, it also provides a principled explanation for why the facts hold the way they do. They are natural consequences of principles of movement theory interacting with independent grammatical properties of Tagalog. Raising in English works in a different way, for the language has non-finite verb forms. As required by Case theory, the subject of a non-finite verb must A-move to a Case position.

References


