ABSTRACT
        This paper discusses the ongoing debate over small
clauses concerning the structure of the verb phrase in "I consider
Bill smart." It is demonstrated that the subject constituent in
question is not a small clause, but a Noun Phrase (NP), following
Noun (N). It is shown that some peculiar phenomena under the small
clause analysis are natural consequences of the NP analysis. Starting
from the adjectival type, it is shown that all the possible subject
small clauses share syntactic and distributional characteristics with
noun phrases, rather than other kinds of small clauses. On the basis
of the interesting paradigms of bound variable anaphora, disjoint
reference, and negative polarity, the adjunction structure is
proposed for the subject small clauses. The analysis presented shows
hat the hierarchical structure is different between an NP with
attributive interpretation and one with clausal interpretation.
(VWL)

Are Subject Small Clauses Really Small Clauses?

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Are Subject Small Clauses really Small Clauses?[1]

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1. Introduction

The ongoing debate over small clauses concerns the
structure of the verb phrase in (1):

(1)   I consider Bill smart.

Stowell (1981) and Chomsky (1981) argue that Bill smart is a
constituent and propose the so-called small clause analysis.
On the other hand, Williams (1983) and Schein (1982) consider
it is not and that the object of consider can also be
interpreted as a subject of a predication.

One of the stronger empirical arguments for the small
clause analysis comes from Safir (1983). On the basis of the
behavior of a small clause in subject position, Safir argues
that a small clause is a real syntactic constituent. In this
paper, however, I will demonstrate that the subject
constituent in question is not a small clause, but an NP,
following N. Chomsky's suggestion of this possibility
mentioned in the footnote 3 in Safir (1983). It will be

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shown that some peculiar phenomena under the small clause
analysis are natural consequences of the noun phrase
analysis.

2. Safir's Argument for Small Clauses as Constituents

Safir's argument consists of two steps: First, he argues
that the underlined part in (2) is a single constituent and
next that the constituent is not an NP.

(2)   Workers angry about the pay is just the sort of
      situation that the ad campaign was designed to avoid.
                                        (Safir 1983, 732)

Let's start with the first part: Is the underlined part a
constituent? First, "it is widely accepted that only a true
constituent may occur in the subject position of S" (Stowell
1986, 299). Second, the underlined part can undergo subject-
auxiliary inversion:

(3)   a. Is workers angry over their pay revolutionary?
      b.?Isn't workers angry over the pay just the sort of
         situation that the ad campaign was designed to avoid?
                                        (Safir 1983, 732)

Third, the part in question undergoes raising.

(4)   Workers angry about the pay does indeed seem to be just
      the sort of situation that the ad campaign was designed
      to avoid.   (Safir 1983, 732)

Since only a constituent undergoes movement, it is
conclusively shown that the underlined part is a constituent.

Then the next question is which category the constituent
belongs to. There are at least two possibilities: one may be
called the small clause analysis; namely, the constituent is
S or AP, whether you take Chomsky's or Stowell's position.
This option is indirectly taken by Safir. Safir gives two
considerations which go against analyzing the constituent as
an NP. One is concerned with the agreement facts between a
subject and a verb. Observe that the verb in (2) is
singular; thus he concludes that workers cannot be the head
of its subject constituent. The other is drawn from a
peculiarity of the interpretation of the sentence. The
sentence must be interpreted as a situation (clausal
interpretation), rather than as a real NP with attributive
adjectives (attributive interpretation). Safir therefore
concludes that the constituent is not an NP, and that it must
be a small clause.

To be more specific, consider a sentence with a singular
subject in a situational construction as follows:[2]

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2   The clausal interpretation is allowed only in certain
restricted constructions. Some examples are:

    ... is a situation.
    ... is in a mess.
    ... makes me sad/happy.
    ... upsets people.
    ... depresses people.

(5)   A man angry over his pay makes me sad.

This sentence is ambiguous between a clausal (the situation
in which a man is angry over his pay makes me sad) and an
attributive (A man who is angry over his pay makes me sad)
interpretation. What Safir is claiming is thus that the same
apparent constituent belongs to different categories,
depending on its interpretation: namely, the subject is an AP
or S in the clausal interpretation and is an NP in the
attributive interpretation.

     The alternative to the small clause analysis may be
called a noun phrase analysis; namely, it analyses the
constituent as an NP, whether it takes clausal or attributive
interprecation. This option is argued for in this paper.

3. Arguments for the Noun Phrase Analysis

     I will give three arguments below. All show that "small
clauses" in subject positions syntactically behave the same
as ordinary NPs, rather than like small clauses in post-
verbal positions (from now on, post-verbal small clauses).[3]

Although I don't try to specify the environment which permits
the clausal interpretation, I will call this the situational
construction and call the predicates used the situational
predicates.
[3]   I don't commit myself to whether there are small clauses
in general. To argue for the noun phrase analysis here, it
suffices to show that subject small clauses are entirely
different from post-verbal small clauses, and rather are
exactly the same as NPs, even granted the small clause

To call the constituent in question a "small clause" in
subject position confuses the discussion: thus, I will call
it a predication constituent.

3.1. On a Restriction on Postnominal Modification

It is well-known that most bare adjectives, specifically
those termed characterizing adjectives by Milsalk (1974),
cannot modify a noun in post head position.[4] On the other
hand, small clauses in post-verbal position of course don't
exhibit such a restriction. (6d) and (6e) are both
grammatical:

(6)   a.*I burned some books yellow.
       b. I burned some books yellow with age.
       c. I burned some yellow books.
       d. I consider these cloth dirty.
       e. I consider these books dirtier than necessary.

Let us observe whether the predication constituents exhibit
this restriction.

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analysis for post-verbal position.
4   His state-descriptive adjectives (e.g.,
drunk/thirsty/sober/hungry/available/absent/dead, etc.), on
the other hand, can occur in postnominal positions in their
bare jrms. With the exception of one configuration which I
retur to in section 4.2. both NPs and predication
constituents behave the same ways with regard to this two
types of adjectives, so the argument in the text remains
valid.

(7) a.*Lots of books dirty is a common problem in libraries.
     b. Lots of books dirty from mistreatment is a common
        problem in libraries.

(8) a.*Workers angry is just the sort of situation that the
        ad campaign was designed to avoid.
     b. Workers angry over their pay is just the sort of
        situation that the ad campaign was designed to avoid.

(9) a.*Children fat upsets me.
     b. Children far from overeating upsets me.

The (a) sentences in (7-9) are all unacceptable, while the
(b)s are all well-formed, which is exactly the same pattern
as in (6).[5] It is thus shown that predication constituents
behave exactly the same as NPs rather than as post-verbal
small clauses. If Safir's analysis is correct and a
predication constituent is a small clause, then it is not
obvious at all why small clauses in subject position obey a
constraint which governs NPs, while post-verbal small clauses
do not.

3.2. Distributional Differences with regard to Cleft and
Pseudo-cleft Sentences

        Post-verbal small clauses cannot occur in focus

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[5]   The grammaticality increases in sentences like (7a),
(8a) and (9a), when certain specifiers (e.g., almost) are
used with the bare adjectives in the post-head positions.
However, since the same degree of improvement is obtained in
sentences like (6a), this does not affect the argument in the
test, but rather reinforces it.

positions either in cleft and pseudo-cleft sentences, as shown in (10) and (11):

(10) a.*It is Bill silly that John believes.
     b.*It is my bròther intelligent who/what/that John considers.
     c.*It is Bill off the ship that John expects.
     d.*It is Bill the best student that John thinks.

(11) a.*What Chinese students consider is the current leadership rotten.
     b.*What John thinks is long trips stupid.
     c.*What they want is those new Toyotas off the ship.
     d.*What they declared was Plate's Republic the best seller of the year.

On the other hand, both NPs and predication constituents do occur in focus positions both in cleft and in pseudo-cleft sentences, as demonstrated in (12-15):

(12) Focused NPs in cleft sentences:
     a. It is Bill that John believes silly.
     b. It is my brother who John considers intelligent.
     c. It is Bill that John expects off the ship by midnight.
     d. It is Bill that John named the best student.
     e. It is Bill that the student selected president.

(13) Focused predication constituents in cleft
sentences:
  a. It is workers angry over their pay that looks
     revolutionary.
  cf. Workers angry over the pay looks revolutionary.
  b. It is streets filthy with litter that makes me sick.
  cf. Streets filthy with litter makes me sick.

(14) Focused NPs in pseudo-cleft sentences:
  a. What Chinese students consider rotten is the current
     leadership.
  b. What John thinks stupid is long trips.
  c. What John want off the ship is those new Toyotas.
  d. What they declared the best seller of the year was
     Plato's Republic.

(15) Focused predication constituents in pseudo-cleft
sentences:
  a. What lessens my appetite is apples shiny with wax.
  cf. Apples shiny with wax lessens my appetite.
  b. What discourages the ordinary consumer is huge
     parking lots filled with cars.
  cf. Huge parking lots filled with cars discourages the
     ordinary consumer.

Again predication constituents behave the same as NPs rather
than like post-verbal small clauses.

   In addition, since pseudo-clefts can focus any XPs, the
grammatical difference between the post-verbal small clauses
and predication constituents suggests that the former are not
constituents, even though the latter are. At the least, they
are quite different constructions. Moreover, since clefts
accept only NPs or PPs in their focus positions, the

grammaticality in (13) shows that the predication constituents are NPs. If we analyze predication constituents as small clauses, as Safir argues, then we need some ad hoc device to explain why the post-verbal small clauses cannot be focused in clefts or pseudo-clefts, while the subject small clauses can. Beyond this, although the cleft sentences have been considered to be one of the most rigid tests for NP-hood, the description of the test would need to be changed to something like "any NPs, any PPs and small clauses that are in subject position, but not post-verbal small clauses, can appear in the focus position in the cleft sentences."

It might be possible to say that the subject in a post-verbal small clause cannot get a case when it appears in a focus position and for this reason the sentences in (10) and (11) are ungrammatical. However, it is not apparent first of all that an NP in focus position exemplified in (12) and (14) gets a case from the matrix verb, because be does not assign case anyway. Further, whether a subject of a post-verbal small clause gets a case or not in a focus position, it still cannot be explained why there is a difference in focusing ability between a predication constituent and a post-verbal small clause in the small clause analysis. Put another way, whatever the role of a matrix verb be in assigning case to an NP in focus position, there is no clear explanation on the grammaticality difference between a post-verbal small clause and a predication constituent in the small clause analysis.

On the other hand, in the noun phrase analysis argued

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for in this paper, the fact that a predication constituent
appears in a cleft sentence focus position like an ordinary
NP does is a natural consequence.

3.3. On a Restriction on the Subject in a Predication
Constituent

The final argument for the noun phrase analysis is drawn
from the fact that a predication constituent obeys some
restrictions which govern a noun phrase. The expletive it
cannot occur in a predication constituent, while it freely
occurs in a post-verbal small clause:

(16) a. I consider it sillier than anything.
     b.*It sillier than anything makes me upset.
     c. Mary finds it appropriate that you take a summer
        vacation.
     d.*It appropriate that you take a summer vacation
        doesn't make me less jealous.

This phenomena is explained if predication constituents are
NPs, because the expletive it cannot be a head of a noun
phrase.[6] On the other hand, in the small clause analysis, it
cannot be accounted for neatly why such a restriction applies
to small clauses in subject positions, but not to post-verbal
small clauses.

       To summarize, throughout the three arguments,

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6   This fact has been pointed out to me by David Pesetsky.

predication constituents behave exactly the same as NPs, rather than as post-verbal small clauses. The explanation for the difference between predication constituents and post-verbal small clauses must depend on some totally ad hoc restrictions in the small clause analysis, while they are natural consequences in the noun phrase analysis. I believe it has conclusively been shown that a predication constituent should be analyzed as a noun phrase, rather than a small clause.

3.4. Other (Possible) Subject Small Clauses

There are other constructions which could possibly be argued to be subject small clauses, other than the type we have so far concentrated on.
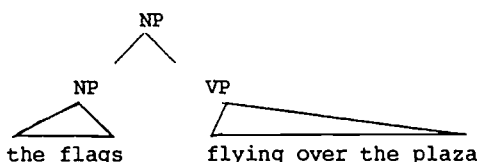
(17) a. Playing the piano is one of the most popular hobbies in Japan.
     b. The children's playing the violin encourages me to study music.
     c. The flags flying over the plaza is a good scene for a postcard.
     d. Children in dangerous parks is a scene used to convince women to quit their jobs.

As for (17a) and (17b), they are gerunds, and it is well-known that they have the same distribution as NPs (Chomsky 1970 and Emonds 1976, among others). The subject in the gerund is not a head of the whole NP, but it is still controversial as far as its exact internal structure goes
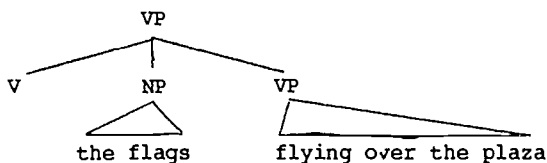
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(Suzuki 1988, Emonds 1990). No matter what its internal
structure is, however, the outermost brackets for the
subjects in (17a) and (17b) are uncontroversially NPs, not
small clauses.

Constructions as in (17c) are called accusative gerunds
and they are well-examined in relation to perception verbs in
Akmajian (1977). He argues that the constituent in the
subject position in (17c) is an NP with the structure as in
(18a), although the VP (i.e., _flying over the plaza_) adjoined
to NP (i.e., _the flags_) can sometimes be extraposed in the
post-verbal position as in (18b).

(18) a.

```
                    NP
                   /  \
            NP          VP
          /‾‾\        /‾‾‾‾‾‾‾‾‾‾\
       the flags    flying over the plaza
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    b.

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                    VP
               /    |      \
          V        NP         VP
        /        /‾‾\       /‾‾‾‾‾‾‾‾‾‾\
             the flags    flying over the plaza
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Gee (1977) has argued against Akmajian's analysis by pointing
out the "mis-agreement" between the plural subject and the
singular verb, as exactly the same way as Safir has against
the noun phrase analysis. I will explain in the next section
this phenomenon on the basis of a closer examination of the

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percolation mechanism.

Turning now to the sentence (17d), the subject is again an NP, rather than a small clause (i.e., either PP or S):

(19) Children in dangerous parks and adolescent crime is a
     scene used to convince women to quit their jobs.

As is well known, the conjunctions can only conjoin the categories of the same type. Since adolescent crime is doubtlessly an NP, the grammaticality of the sentence (19) argues that the constituent in question children in dangerous parks is an NP.

For (17c) and (17d), together with the adjectival type (e.g., workers angry over their pay), I will propose two different structures, one for the clausal interpretation, and the other for the attributive interpretation, and thereby explain the "mis-agreement" phenomenon and the peculiarity of interpretation, which are both used by Safir to argue against the noun phrase analysis.

4. Agreement and Interpretation

4.1. The Structure of the Predication Constituents

Let's now consider the two observations which are used by Safir as arguments against the noun phrase analysis: as summarized in section 2, one is the agreement facts and the other is the peculiarity of the small clause interpretation.

Observe the following examples:

(20) a. Paris and its perfumes fascinate American women.
     b. Paris and its perfumes fascinates American women.

     c. Sake and tofu make me sick.
     d. Sake and tofu makes me sick.

First of all, although Safir argues that <u>workers</u> in (2), a
plural noun, cannot be a head of a constituent in subject
position because of the following singular verb, this does
not guarantee that the predication constituents as a whole is
not an NP. For, (20b) and (20d) literally show that plural
NPs can take singular verbs.[7] Now, a question here is how we
explain in the noun phrase analysis the fact that <u>workers</u> is
not behaving as a head for the subject as a whole in (2).
Taking into account the intuition that the small clause
analysis tries to capture, namely, the fact that the NP and a
postnominal modifier are in a predication relation, together
with the fact that the whole subject is an NP, as we have
demonstrated in the previous section, I propose the following
structure for a predication constituent.

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[7]   There should be no doubt that <u>Paris and its perfumes</u> and
<u>sake and tofu</u> are noun phrases. They cannot occur where
small clauses occur:
(i)   a. *I believed Paris and its perfumes.
       b. *I believed sake and tofu.
The sentences in (i) are ungrammatical with the small clause
interpretations of (20).

(21)   NP
         /\
     NP   XP
     |
     N
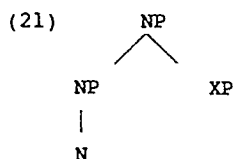
XP = AP, PP, (and possibly NP for "accusative gerunds")[8]

Here, the XP is adjoined to NP and the structure is clearly different from the well-argued structure for NPs (Hornstein and Lightfoot 1981) with attributive modifiers as in (22).

(22)   NP
              /   \
        SPEC   N'
                        /   \
                    N'   XP
                    |
                    N
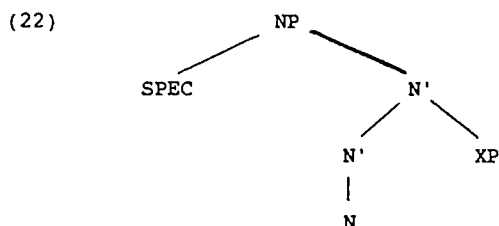
XP = AP, PP, (and possibly VP for "accusative gerunds")

As we have demonstrated in the previous section, XP adjoined to N' and NP share the same restrictions.

If we analyze a third person singular verb as a certain kind of default form which is taken when no [+plural] feature is available, the mis-agreement phenomenon discussed above can be ixplained by the difference in the two types of NPs in

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8   Jackendoff (1977) argues that "measure phrase" NPs are always between X' and NP. So it may be that any adjunct NPs should be measure phrases, and not predicates.

(21) and (22). The only thing we must say is that the number
feature on N percolates as expected to the whole NP in the
structure (22), but that it cannot reach the topmost NP in
(21): The smallest XP is the domain for percolation from the
head X. Since the topmost NP in (21) is not specified for
number, the corresponding verb simply manifests itself in the
unmarked singular form.

There are actually three more reasons for favoring the
idea that the structure of the predication constituents is
(21), rather than (22) of an attributive NP. First, consider
the following data.

(23) **Bound variable anaphora**
   a. Every worker (who is) angry about pay is in just the
      sort of situation **he** should avoid.
   b.*Every worker angry about pay is just the sort of
      situation **he** should avoid.
   c.*Every worker being angry about pay is just the sort
      of situation **he** should avoid.
   d.*The situation of every worker angry about pay is just
      the sort of situation **he** should avoid.

(a) involves an NP with attributive interpretation, (b) a
predication constituent, (c) an accusative gerund and (d) an
NP which contains another NP. If the structure for (a) is
the one of (22) and the structure for (b) and possibly (c)
are like (21) as we have proposed, then the ungrammaticality
of (b)-(d) can be explained straightforwardly; namely, the
antecedent NP every worker does not c-command the bound

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variable.

Secondly, there is a grammaticality difference between an NP with an attributive modifier on the one hand and a predication constituent or an complex NP (Ross 1967) on the other, with regard to the disjoint reference.

(24) **Disjoint Reference**
   a.*Workers (who are) angry over their pay are more
        useful to them than to their bosses.
   cf. Workers (who are) angry over their pay are more
        useful to themselves than to their bosses.
   b. Workers angry over their pay is more useful to them
        than to their bosses.
   c. Workers being angry over their pay are more useful to
        them than to their bosses.
   d. The situation of workers angry over their pay is more
        useful to them than to their bosses.

In (a), given the structure in (22), since them is c-commanded by workers in its governing category (Chomsky 1981, Chapter 3), the sentence is out. The fact that the predication constituents behaves the same way as an accusative gerund and a complex NP, in which it is well-known that the workers is not a head and is further embedded in another NP, supports the NP-adjunction structure for the predication constituents. In (b)-(d), them is far enough from workers for disjoint reference not to apply.

Thirdly, negative polarity shows a clear difference of accessibility of the head N to exterior material between an

NP with an attributive interpretation and a predication constituent.

(25) **Negative Polarity**
   a. No workers (who are) angry about working conditions are ever going to bring about a better situation.
   b.*No workers angry about working conditions is ever going to bring about a better situation.
   c.*No workers being angry about working conditions is ever going to bring about a better situation.
   d.*The situation of no workers angry about working conditions is ever going to bring about a better situation.

Again, a predication constituent patterns with a complex NP rather than with an NP with an attributive modifier. If items with negative polarity (i.e., ever here) must be c-commanded by a negative item (i.e., no (workers) here), then the above paradigm follows straightforwardly from the structures in (21) and (22). In (25a), which has a structure like (22), the negative item c-commands the item with negative polarity, while in (25b-d), the negative item is to far embedded to c-command the negative polarity item.

   To sum up, Safir's observation that the N does not behave like a head for a predication constituent on the basis of agreement facts, together with other paradigms which reinforce his observation, are equally well explained by the NP-adjunction structure proposed for a predication constituent in the noun phrase analysis and this structural

difference from the structure of attributive NPs. The above
three paradigms could not be better explained by a difference
in category labels; all these paradigms involve c-command and
hierarchy, and for them the label of a small clause subject
is irrelevant.

4.2. Attributive and Clausal Interpretations

The second peculiarity of predication constituents
pointed out by Safir (1983) is that they are interpreted as a
situation, rather than as a referential NP.

Notice that the (a) and (c) sentences in (20) are
ambiguous, while the (b) and (d) are not. For example, the
(c) sentence has two readings: one is that sake makes me sick
and that tofu makes me sick. The other is that sake and tofu
together makes me sick. Put another way, the first
interpretation is paraphrased by (26a) and the second is
paraphrased by (26b).

(26) a. Both sake and tofu make me sick.
     b. Sake and tofu together make me sick.

On the other hand, (20d) has only the (26b) interpretation.
Notice this interpretation exactly corresponds to Safir's
clausal interpretation for small clauses. Since a genuine
noun phrase (coordinated NP's) can also take a clausal
interpretation, this phenomenon itself does not conflict with
the noun phrase analysis proposed here.

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The structure proposed for predication constituents
actually is proper for this clausal interpretation; namely,
[NP XP] is a predication relation, where NP is a subject and
XP is a predicate which modifies the subject.

Interestingly, there is a gap in the availability of the
attributive interpretation, which may be explained nicely by
the analysis proposed here: when proper names and personal
pronouns are used with a post-nominal adjective, only a
clausal interpretation, but not an attributive interpretation
is available.

(27) a.*Bill sad over his mother's death cries every night.
     b. Bill sad over his mother's death depresses me.

(28) a.*Jim enthusiastic about baseball is spending all day
        exercising.
     b. Jim enthusiastic about baseball irritates me.

(29) a.*Her furious about the neighbor's dog sued the family.
     b. Her furious about the neighbor's dog is an
        entertaining situation for her friends.

Chomsky (1970) argues that a fully specified definite N such
as a proper noun or a personal pronoun cannot be doubly
specified as definite by being modified by an attributive
modifier within a single NP. If we take this view, then the
above paradigm follows from the structural differences
between the two interpretations. In the structure for an
attributive interpretation as in (22), the fully specified

definite head N is directly modified by a restrictive
modifier inside of a single NP, an thus, the sentence is
ungrammatical. On the other hand, in the adjunction
structure for clausal interpretation as in (21), two definite
features don't conflict within a single NP; each can be
associated with its own NP.

Summing up, the clausal interpretation, which is
considered characteristic of a small clause can be well
captured by the adjunction structure proposed in the noun
phrase analysis. Beyond this, the analysis proposed here
makes an interesting prediction on the distribution of the
two types of interpretations, which the small clause analysis
does not have anything to say.

5. Conclusion

We have examined in this paper on the nature of so-
called subject small clauses. Starting from the adjectival
type, (e.g., the constituent underlined in (2)), which is
argued to be a small clause by Safir (1983), we have seen
that all the possible subject small clauses share syntactic
and distributional characteristics with noun phrases, rather
than other kinds of small clauses.

On the basis of the interesting paradigms of bound
variable anaphora, disjoint reference, and negative polarity,
the adjunction structure as in (21) is proposed for the
subject small clauses. We have seen that the "mis-agreement"
phenomenon and peculiarity of interpretation, which are used

by Safir to argue against the noun phrase analysis, don't really conflict with the fact that the outermost bracket for the predication constituents is an NP. Rather, all the above paradigm show that the hierarchical structure is different between an NP with attributive interpretation and one with clausal interpretation. Beyond this, the noun phrase analysis makes an interesting predication on the availability of the two types of interpretations, attributive and clausal, whereas the small clause analysis have nothing interesting to say. One of the strongest arguments for the small clause analysis, therefore, turns out to be invalid.

Although we still have to wait for future research on the true nature of small clauses, we have clarified, in this paper, one of the basic facts which the small clause debate crucially depends on.

References:

Akmajian, A. (1977) "The Complement Structure of Perception Verbs in an Autonomous Syntactic Framework", in P. Culicover, T. Wasow, and A. Akmajian (eds.) *Formal Syntax*, Academic Press, 427-460

Chomsky, N. (1970) "Remarks on Nominalization", in R. Jacobs and P. Rosenbaum (eds.) *Readings in English Transformational Grammar*, Mouton, 62-119

Chomsky, N. (1981) *Lectures on Government and Binding*, Foris

Emonds, J. (1976) *A Transformational Approach to English Syntax*, Academic Press

Emonds, J. (1990) "The Autonomy of the (Syntactic) Lexicon
    and Syntax: Insertion Conditions for Derivational and
    Inflectional Morphemes", in C. Georgopoulos and R.
    Ishihara (eds.), *Interdisciplinary Approaches to
    Linguistics: Essays in honor of S. -Y. Kuroda*, Kluwer
    Academic Publishers

Gee, P. (1977) "Comments on the Paper by Akmajian", in P.
    Culicover, T. Wasow, and A. Akmajian (eds.) *Formal
    Syntax*, Academic Press, 461-482

Hornstein, N. and D. Lightfoot (1981) *Explanation in
    Linguistics*, Longman

Jackendoff, R. (1977) *X'-syntax: A Study of Phrase Structure*,
    MIT Press

Milsark, G. (1974) *Existential Sentences in English*, Doctoral
    dissertation, MIT

Ross, J. (1967) *Constraints on Variables in Syntax*, Doctoral
    dissertation, MIT

Safir, K. (1983) "On Small Clauses as Constituents",
    Linguistic Inquiry 14, 730-735

Schein, B. (1982) "Small Clauses and Predication", ms, MIT

Stowell, T. (1981) *Origins of Phrase Structure*, Doctoral
    dissertation, MIT

Stowell, T. (1986) "Subjects Across Categories", *The
    Linguistic Review* 2, 285-312

Suzuki, T. (1988) *The Structure of English Gerunds*, Doctoral
    dissertation, University of Washington

Williams, E. (1983) "Against Small Clauses", *Linguistic
    Inquiry* 14, 287-307