

BASIC CHARACTERISTICS OF COMPARATIVE CONSTRUCTIONS IN ENGLISH AND POLISH

ALICJA WOŁOSZYK-PISARSKA

Adam Mickiewicz University, Poznań

The limits of the present paper do not allow the presentation of such a vast subject as comparative construction in full details. We shall, therefore, limit ourselves to the discussion of the ways in which the most typical comparative constructions can be derived from underlying structures in both English and Polish. Our assumption concerning such a derivation is that in both the languages these constructions derive from underlying complex sentences. We shall adopt a more conservative approach here (rather than the recent one represented by Campbell and Wales (1969)) as it seems to suit our purpose better.

The way in which comparative constructions can be derived from underlying structures has been discussed for years, but linguists have not yet reached a unanimous point of view. Most who have dealt with the problem, including Smith (1961), Chomsky (1965) and Lees (1961), assume that comparative constructions derive from underlying complex sentences. The starting point for the derivation consists of a phrase marker which contains a matrix sentence and a constituent sentence parallel in structure. The constituent sentence is dominated by an adverb of extent or degree.

The above mentioned linguists, however, vary in opinion as to what the structures of the constituent sentences should be. Some of the proposals concerning the structure of the constituent sentence are:

Nom — be — Adj (Chomsky 1965; Smith 1961)

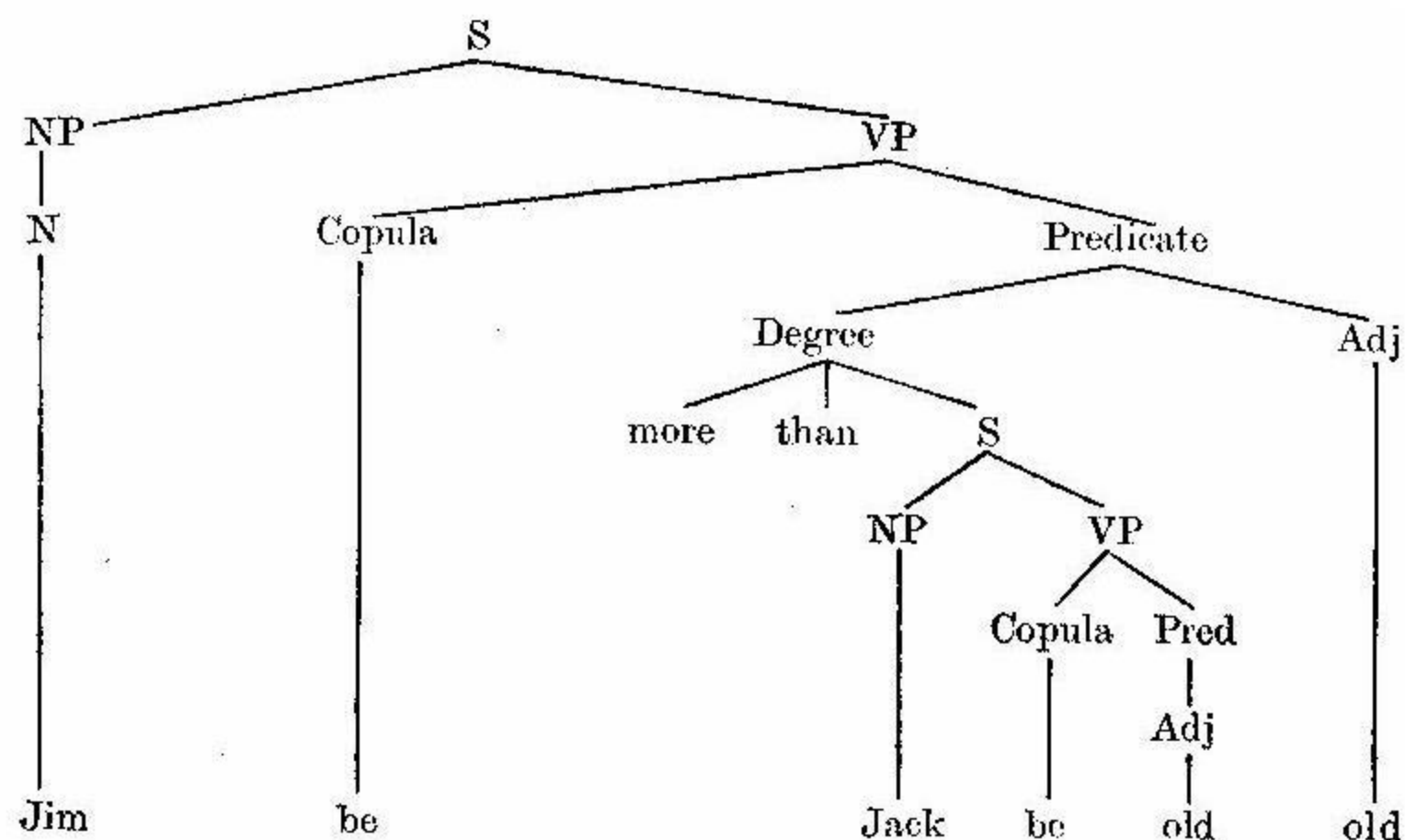
Nom — be — that — Adj (Lees 1961)

Nom — be-wh- — Adj (Doherty and Schwartz 1968)

Nom — be — than — Adj (Huddleston 1967)

In spite of the differences, these analyses are basically the same. According to all of them a comparative sentence of the kind

1. Jim is older than Jack.
- will have the underlying representation
- 2.



The identical constituents are then deleted and constituents reordered.

A different point of view is represented by Campbell and Wales (1969), who claim that comparative constructions derive from simplex strings. In their opinion, it is difficult to see how a semantic analysis of comparatives can proceed from the usual type of syntactic base.

Sentences like

3. John is as clever as Bill.
4. John is more clever than Bill.

do not imply sentences like

5. John is clever.
6. Bill is clever.

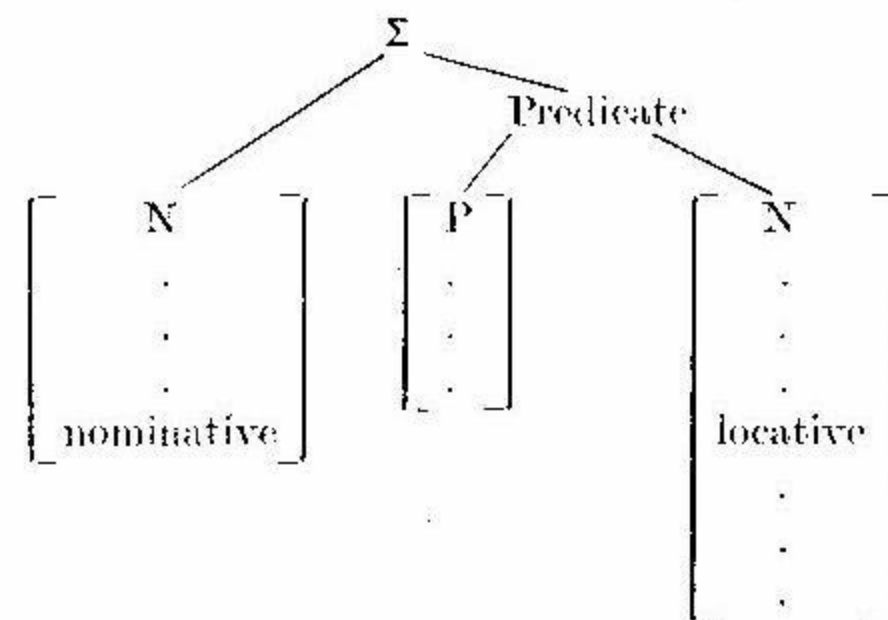
Campbell and Wales present an analysis in which the use of the optional deletion transformation is questioned and the comparative transformation is retained. Their proposal is similar to that of Fillmore (1968). Adjectives functioning in comparative constructions can be analysed as two-place predicates. Noun phrases, introduced as co-constituents of verbs, follow the verb in the underlying structures. Those associated with particular predicates have "notional" labels characterizing their functions in the sentence.

They may be interpreted as features of noun phrases introduced by subcategorization rules.

Case features relevant for comparatives are nominative (Fillmore's objective and locative).

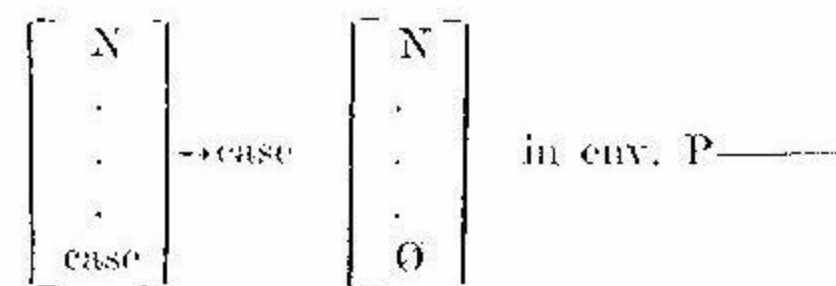
In their view, an underlying structure where a subject has been formed may have the following representation:

7.



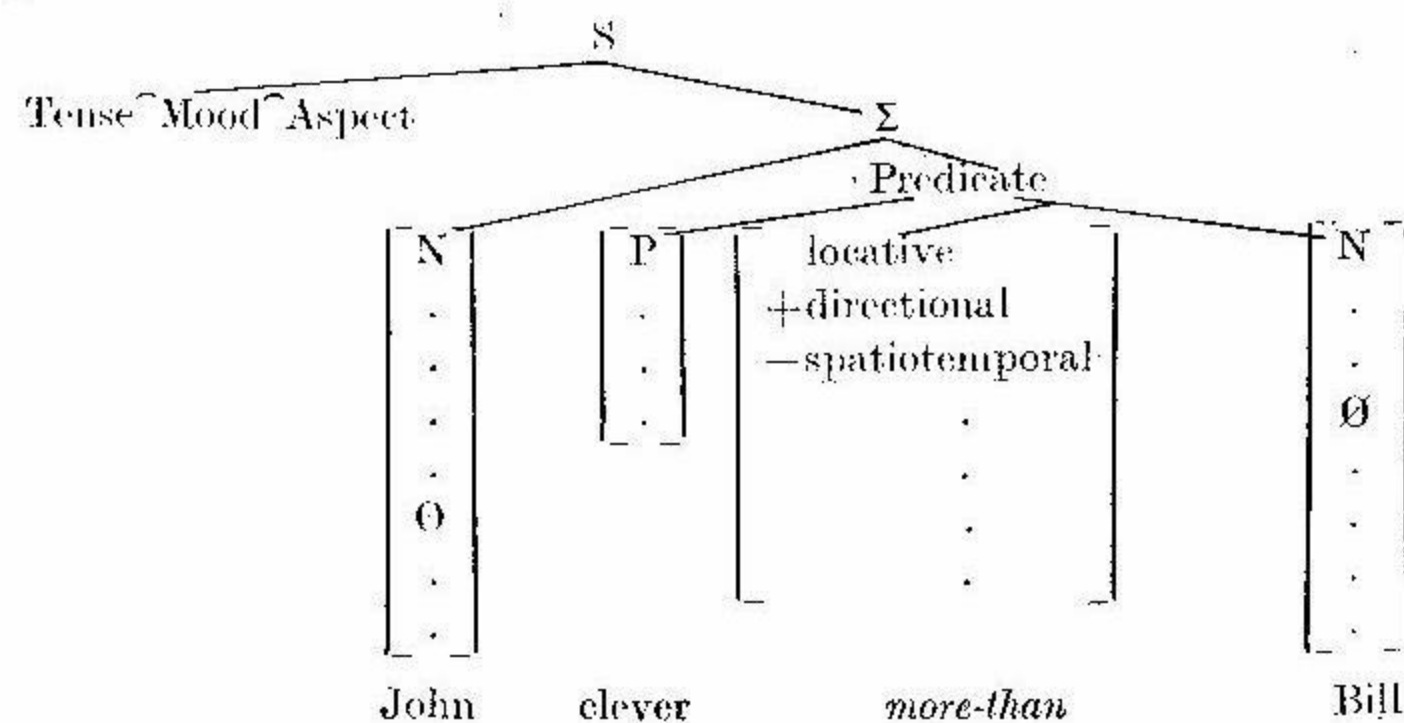
The case features of subject case σ in env. σ in env. P are deleted and case features

8.



segmentalized by transformational rules. The resulting structure is:

9.



Although Campbell and Wales are right in pointing out that older analyses need revising, it seems that these particular analyses may be more useful in explaining certain syntactic and semantic phenomena. Examples like the following:

10. During our second meeting she was as nice as when I first met her.

11. It is much quicker to fly than to go by boat.

12. W nocy jest chłodniej niż w dzień.

show that two adverbs or two adverbial clauses may occur in a comparative constructions instead of two noun phrases which might be associated with two predicates. They must be of the same notional type, otherwise we would get examples like

13.* It is colder at night than on the outside.

In simplex sentence, however, two adverbials of the same type do not occur, even if they are selected for different clauses of complex sentences. Thus, although the assumption that comparative constructions derive from simplex sentences might be accepted for the sentences of type 1, it is not possible for sentences like 10, 11, and 12. As the result, the claim that these two types have a different derivation would be unavoidable.

In Polish, noun phrases usually precede the finite verb in the main clause. Those which are introduced by *jak* or *niż* are not permitted in this position.

14.* Niż Piotr jest wyższy Jan.

15.* Jak Paweł jest sympatyczny Piotr.

Noun phrases introduced by *od* require enumeration of more people:

16. Od Piotra jest wyższy Paweł, od Pawła Jan, etc...

Thus, a special status is indicated for these noun phrases.

We may claim that comparatives should be represented as complex strings consisting of main clause and constituent clause at a certain stage of derivation. The Relative Clause Formation transformation may provide evidence for our claim. It is a variable rule in English. Therefore, a sentence like the following

17. Bill earns exactly the sum which I thought Paul earned.
is acceptable in English. In Polish the noun phrase which is to be relativized may not move over clause boundaries.

18.* Kowalski zarabia dokładnie taką sumę, o jakiej myślałem, że zarabia Wiśniewski.

In the case of comparative constructions, similar restrictions operate. If two sentences on which the comparative transformation operates are separated by an intermediate S node, and if the most deeply embedded sentence cannot be completely erased after the transformation has applied, the sentence which results is not acceptable in Polish.

19. Maria jest bogatsza niż myślałem.

In 19 the most deeply embedded sentence is erased.

20.* Maria jest bogatsza niż myślałem, że Basia jest.

Unfortunately, not much can be said about the underlying structure of complex strings and equally little about the transformations that map these structures onto the surface. It seems that the underlying strings must have a kind of relational marker which is sometimes realized as *that*, or, in other analyses, as *than* (Lees 1961 and Huddleston 1967).

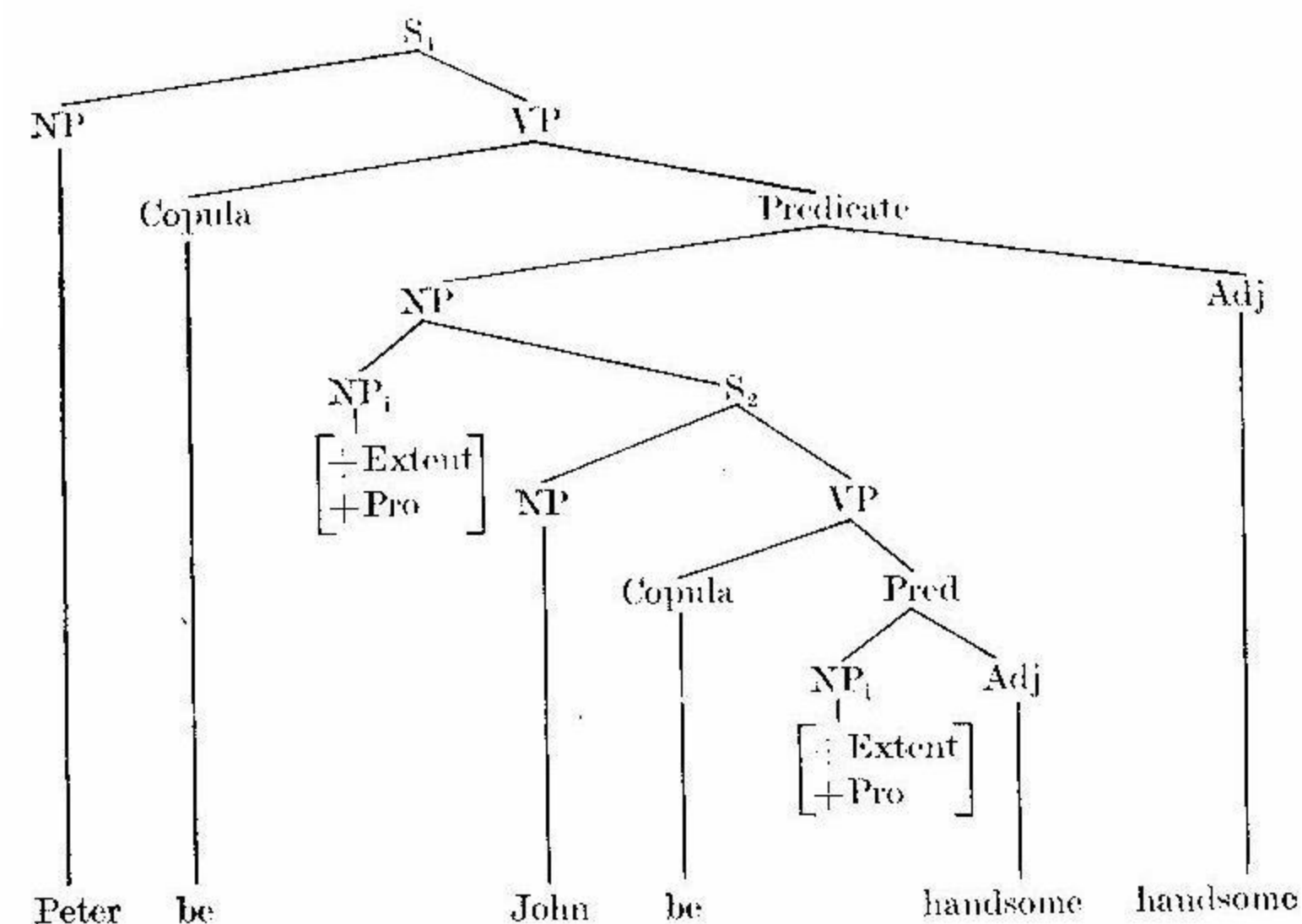
In 1. *old* is a point on the scale of *old—young*. In this and other comparative constructions the adjectives refer to scales rather particular points on these scales. Comparative formatives designate the values on these scales. We may assume that two strings in the underlying representations of comparative constructions contain adverbs of extent which may be represented as nominal pro-forms bearing the feature [+Extent], since adverbs are usually dominated by an NP node at some stage of derivation. The adverbs of extent mark the same point on a certain scale of an antonymous pair of adjectives. Referential indices must be identical for two adverbs.

The underlying structure of

21. Peter is as handsome as John.

may be represented as follows:

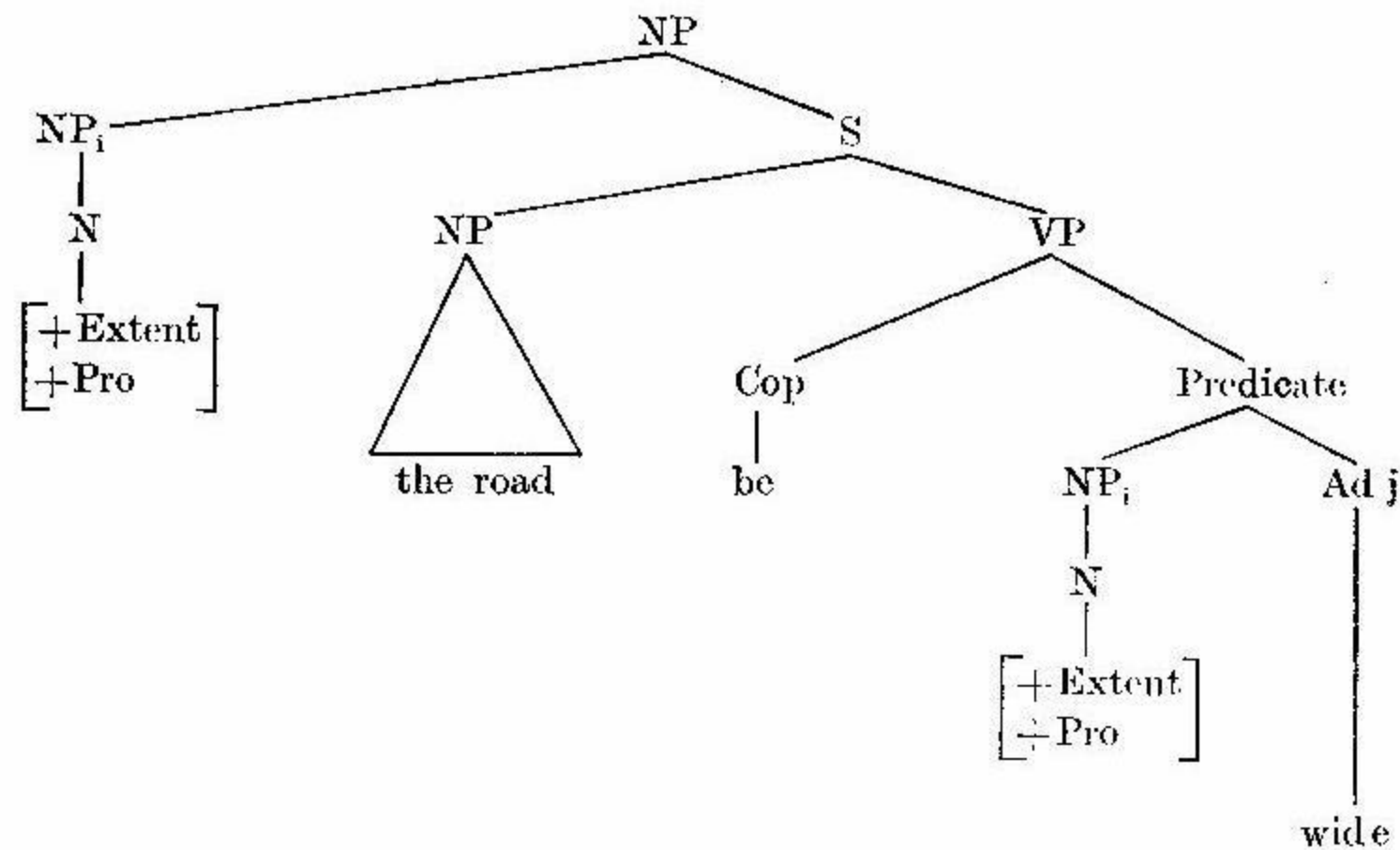
22.



Such an underlying structure may also account for adverbs like *extremely*, *amazingly*, since they may be chosen instead of comparatives. The embedded relative clause would have the form *the extent is amazing*.

Also nominalizations such as *depth*, *width*, *strength* can be derived from relative clauses whose head nouns have the features [+Pro] and [-Extent]. The underlying structure of *the width of the road* would be the following:

23.



The constituent sentence in the underlying structure of comparative constructions is a restrictive relative clause which is attached to an adverb of extent (or to a case node [+Extent]). These restricted relatives represent presupposed information.

In the underlying structure the conjunct that is known or is assumed to be known to the hearer appears as a restrictive relative clause in the derived structure. In 1. Jack's age is known to the hearer and new information is given only to Jim's age:

24. Jack is old to a certain degree.

The above sentence is also presupposed by the negated version of 1.

25. John is handsome to a certain extent.

is one of the presuppositions of 21 and may occur as a relative clause in the derivation of comparatives such as 21.

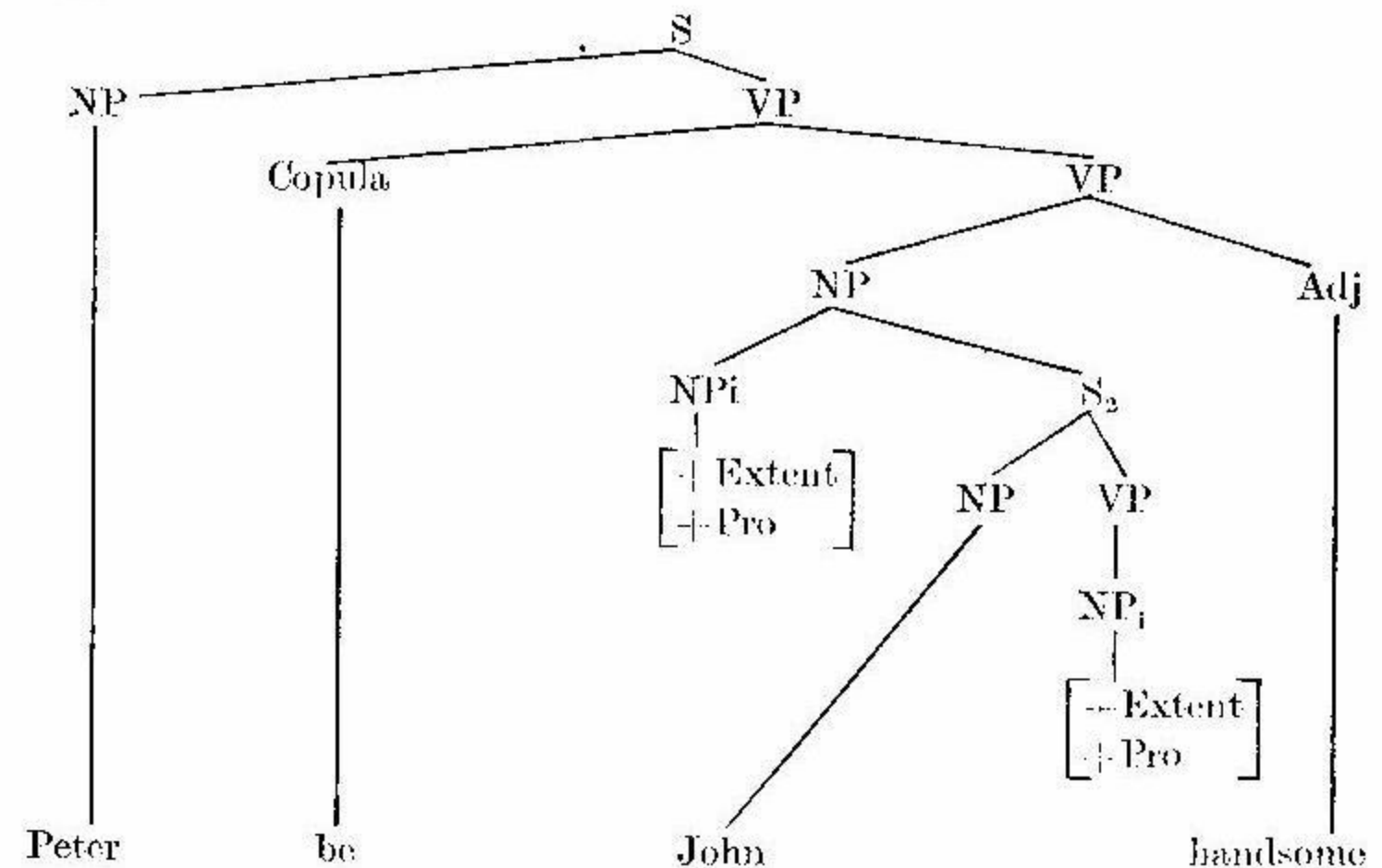
As we have already stated, not much can be said about the rules that map underlying structures onto the surface. The Relative Clause Formation transformation has to apply at a certain point and Extraposition usually

follows. The adverb of extent is relativized and adjoined to the S node of the relative clause. [+Extent], [+Pro], [-Rel] are realized as *as* in English and *jak* in Polish. *As* and *jak* may be treated as realizations of adverbial pro-forms antecedant to the relative clause. A nominal phrase usually follows the adjective in the derived structure. It is also the case with copula which may be deleted optionally.

After it has undergone the Relative Clause Formation and Extraposition transformations, the relative clause is attached to the highest S node. Both Relative Clause Formation and Extrapositions transformations are post-cyclical. We cannot claim that the Comparative transformation is a post-cyclical transformation too, since we can account for certain data only if we assume that Comparative transformation precedes both Relative Clause Formation and Extraposition transformations. A detailed presentation of the derivation of 21 may help us to support our assumption.

Let us neglect tense, aspect, etc. and assume that the Comparative transformation is the first one that applies to a marker like 22. The adjective *handsome* and (optionally) the copula in the embedded sentence are then erased.

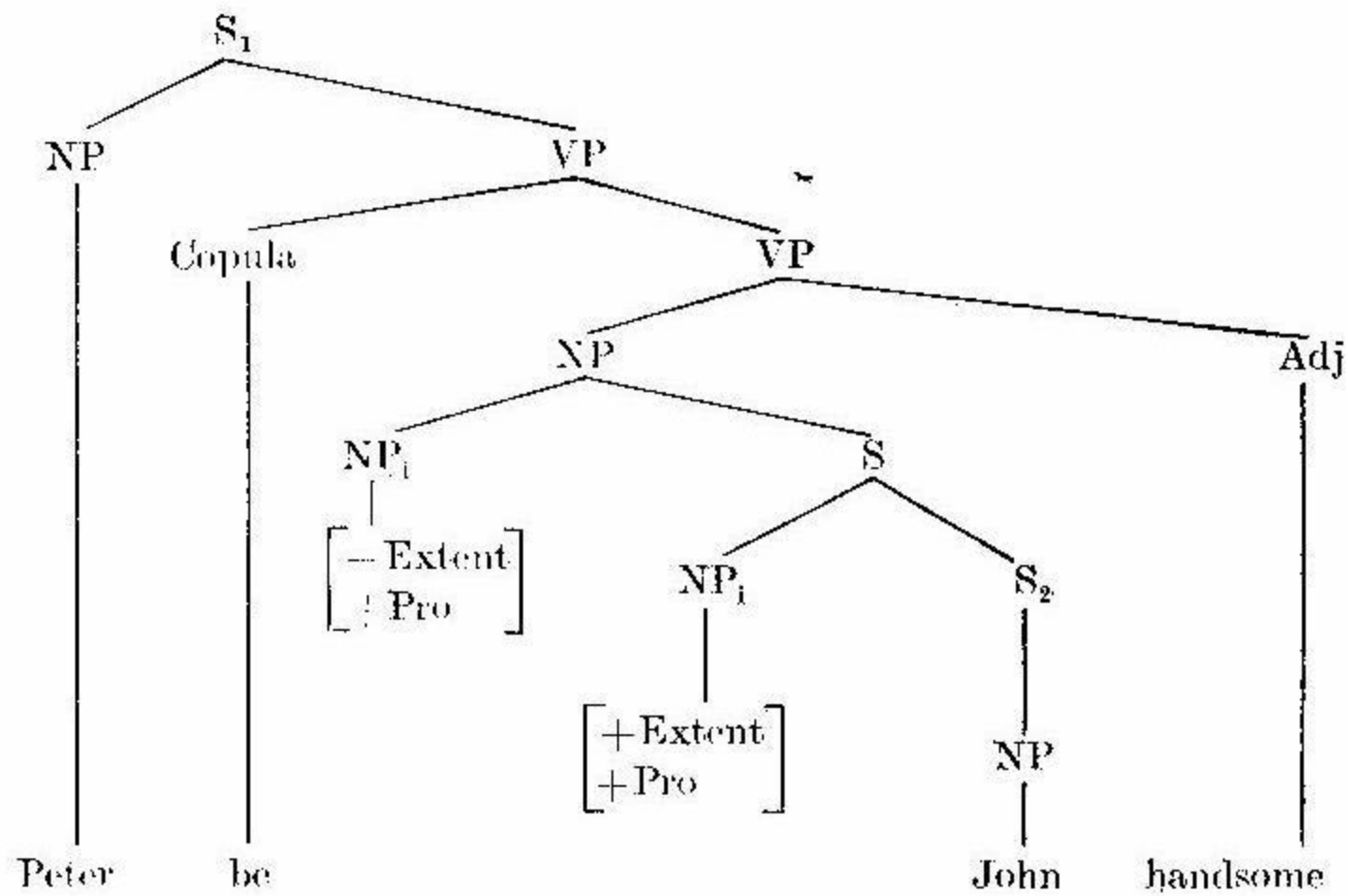
26.



The VP nodes are pruned since they do not dominate a verbal element any longer.

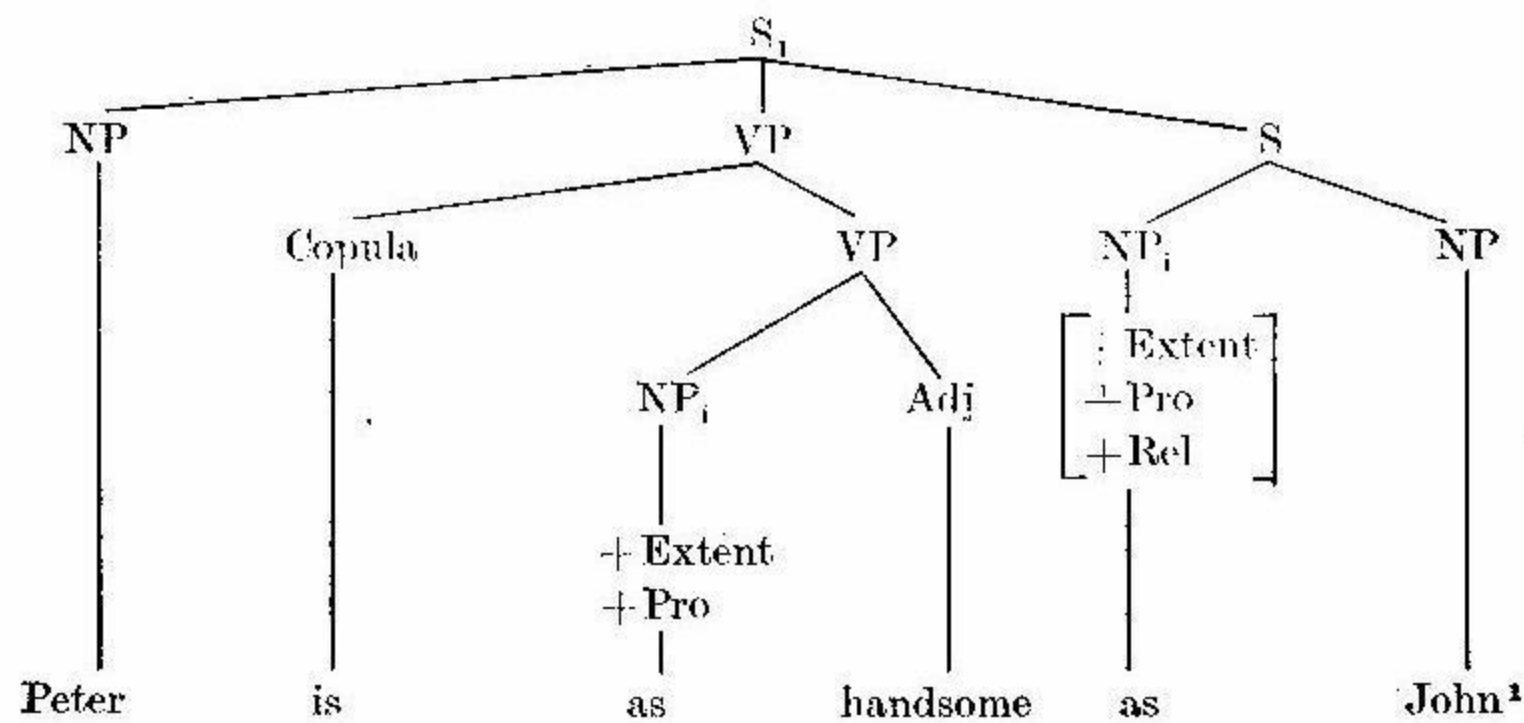
Relative Clause Formation transformation follows and adjoins the "extent adverb" of the embedded clause to the left of S₂.

27.



Now the Extraposition transformation moves the S node dominating S_2 to the end of the sentence and attaches it to S_1 .

28.



¹ In the case of examples like:

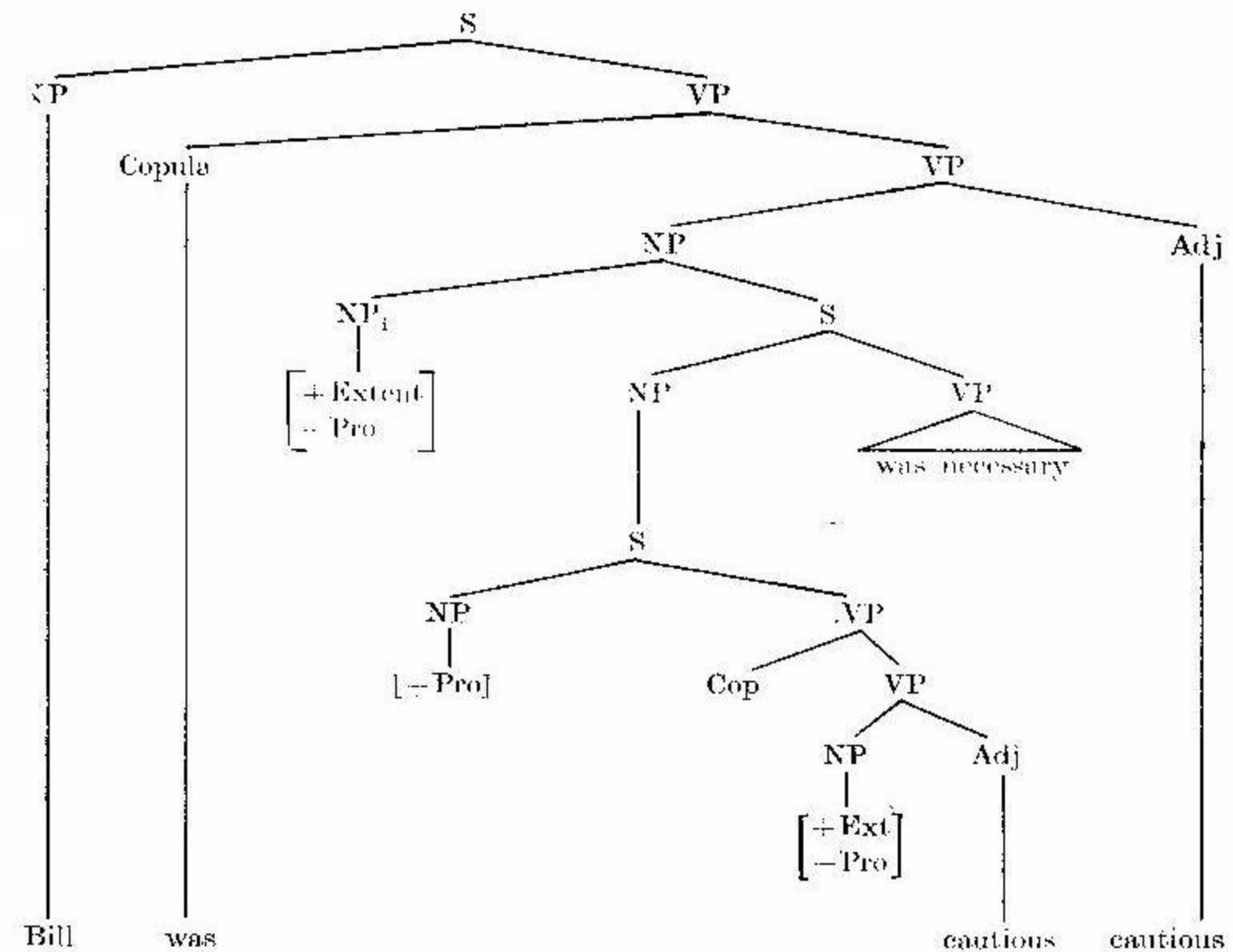
- a) Bill was more cautious than was necessary.
 b) Bill był bardziej ostrożny niż było trzeba.

The Comparative transformation is obligatory for lexical categories and optional for auxiliary ones. When underlying representations like 22 undergo the Comparative transformation, all or most of the elements in the constituent sentence which are identical to those in the matrix sentence are erased. This deletion of identical elements is obligatory for adjectives and adverbials. Identical subjects may be either pronominalized or deleted.

e) Bill was as cautious as necessary.

d) Bill był tak ostrożny jak było trzeba.

here the underlying structure of e) is the following:



the Relative Clause Formation transformation cannot apply. (cf. Sentential Subject Constraint, Ross 1967: 134). But constituents can be moved out of extraposed sentential subjects. Thus, the transformations would have to operate in the following order: Extraposition, Relative Clause Formation and Comparative.

The above examples, however, cannot undergo Extraposition transformation because expletive *it* does not appear in such sentences. Most of the sentence of this type become unacceptable if *it* is introduced.

*Bill eats more than it is healthy.

We have, therefore, to assume that the Comparative transformation precedes the Relative Clause Formation and Extraposition transformations.

29. The hall is wider than it is long.

30. * The hall is wider than the hall is long.

The deletion is optional for auxiliaries and verbs. In English we may delete the main verb or the adjective without deleting the auxiliaries.

31. He smokes more cigarettes than I (do).

In Polish the deletion of the second copula/verb and the adjective is obligatory in certain situations or it may be optional:

32. jest dłuższy niż szerszy

33. zarabia tyle ile Wiśniewski

34. jest tak biały jak (biały jest) śnieg

A sentence like the following:

35. Rozwiązałem zadanie szybciej niż ty to zrobiłeś.

is the only case where the verb *robić* is treated like a pro-form (together with the pronoun *to* it represents the action mentioned in the matrix and corresponds exactly to English *did* in: *I solved the problem earlier than you did*).

The structures of differentiating comparatives will be similar to the structure of equative ones. The only difference is in the presence of elements which usually occur in interrogative and negative constructions (*ever* and *need* in English and *kiedykolwiek* in Polish).

36. On jest uczciwszy niż ty kiedykolwiek będziesz.

On these bases we may claim that comparatives such as 1. derive from underlying structures such as 22, but the constituent of the underlying structure is negated in the case of non-equative comparative constructions. This may explain the non-existence of examples like

37. * Mary is prettier than Mary is not.

since we assume the negation of the constituent is deleted in the course of derivation of non-equative comparatives.

The following examples also illustrate the relations existing between negation and non-equation:

38. Bill was more careful than was necessary.

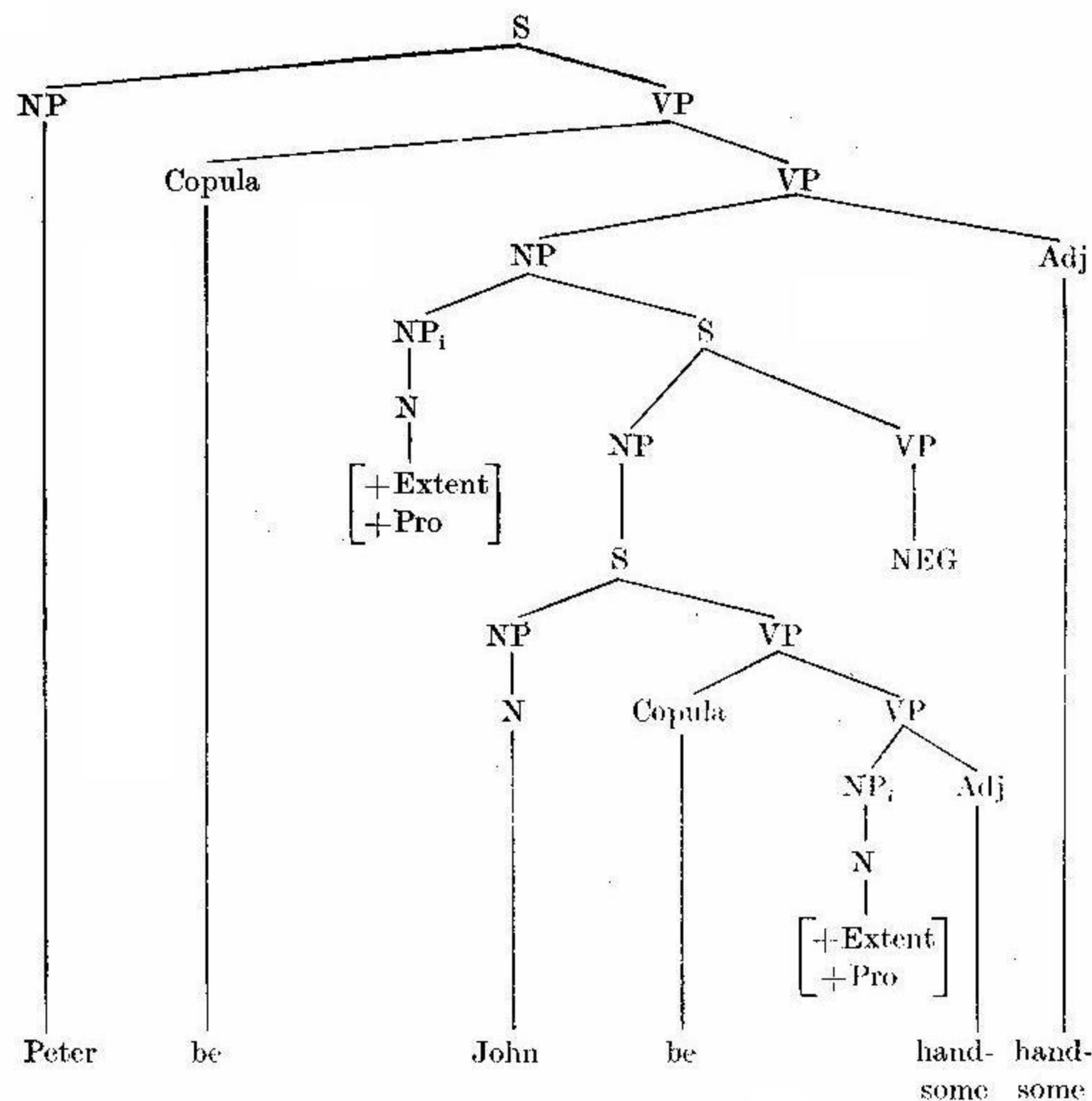
39. It was not necessary to be as careful as Bill was. This claim can also be supported by the fact that in certain European languages (French, Spanish, Italian) negated particles may appear on the surface structure of sentences. Also constructions of the type *to*+infinitival and comparative constructions were once equivalent in English. *Too* usually implies negation and the same criteria could be applied when analysing *than*.

40. She knew better than to lie = Too well to lie.

It has also been suggested by some linguists that *than* derives from Old English *þonne* which is a combination of instrumental *þon* and negative *ne*.

The underlying structures of non-equative comparatives could thus be like the following:

41.



The above underlying structure of non-equative comparative must contain some directional marker which implies that one of the persons mentioned in the example moves further in the positive direction on the scale *handsome* — *ugly*. It is not clear how this marker is introduced in underlying representations like the above. Its presence may be governed by the presence of negation in the constituent sentence since it does not occur in equative comparatives.

Finally, two conditions should be mentioned here, both of them connected with deletion. The first one, the condition of minimum identity, rules out constructions like

42. *Bill runs faster than Mary is beautiful.

43. *The wall is thicker than it is thick.

and may be formulated in the following way: two clauses undergoing the Comparative transformation may not contain either identical subjects or identical adjectives. As it stands now, the condition would, however, rule out some of perfectly acceptable English sentences. It is not yet quite clear how it should be modified.

The condition of minimum difference requires that strings undergoing the Comparative transformation must have two equivalent substrings which have not been replaced by identical lexical items. These may be noun phrases, adjectives, auxiliaries, verbs or adverbials. The condition should exclude the following examples:

44. *Nocą jest chłodniej niż na dworze.

There are, however, examples which contradict the above condition:

45. Piotr jest bardziej niż niegrzeczny.

46. Ta książka jest bardziej niż obrzydliwa.

Both these conditions, being not quite clear at present, require further investigation and modification.

Summing up, we have assumed that in both English and Polish comparative constructions derive from underlying complex sentences. Transformations which operate in the course of derivation of these constructions are the same in Polish and English and they seem to prove that in both languages the process of derivation is similar. The structure of the constituent sentence is still a subject for discussion. The English structure has been described above and the Polish structure corresponds more or less to that suggested for English by Lees (1961) and Huddleston (1967).

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