

ON THE NATURE OF SOME INDICATIVE-SUBJUNCTIVE ASYMMETRY IN POLISH

PRZEMYSŁAW TAJSNER

Adam Mickiewicz University, Poznań

The aim of this paper is to discuss some interesting facts from the syntax of Polish subjunctive clauses with the provision of an explanation of these facts in terms of the Government-Binding model of Generative Grammar.

In Polish there is a certain asymmetry between indicative and subjunctive clauses. First, there are indicative forms of the type (1):

(1) *Myślę, że jechaliśmy za szybko.*

I think that we were driving too fast.

and (2)

(2) *Myślę, żeśmy jechali za szybko.*

S-structures corresponding to (1) and (2) can be represented as follows:¹

(1a) *Myślę [\bar{s} [c \acute{z} e] [s t INFL jech- za szybko]]*

(2a) *Myślę [\bar{s} [c \acute{z} e INFL] [s t jech- za szybko]]*

It is proposed that the '*śmy displacement*' in (2a) is due to the rule 'INFL (AGR) into COMP'. It should be explained that '*-śmy*' is a morphological spell-out of the feature [person] of the set of AGR features: [person, gender, number]. The S-structures (1a) and (2a) will now undergo an inflectional rule of 'Affix Hopping' in PF, which is formulated in such a way that it allows for the feature [person] to be optionally left behind in COMP:

¹ In the present analysis we follow Rizzi (1982a) rather than Chomsky (1981) or Chomsky (1982b) in that a null subject of pro-drop languages is considered as anaphor, hence a base generated trace /t/, not PRO or pro.

The option of not leaving [person] in COMP is not available for subjunctive clauses however, as illustrated below:

(3) Chcę, żebyśmy jechali szybciej.

I want us to drive faster.

(4) *Chcę, żeby jechaliśmy szybciej.

I want us to drive faster.

This paper will attempt to explain why such a contrast exists between indicative and subjunctive clauses in Polish. In particular, it will be argued that the contrast is caused by the requirements of the ECP².

First, it may be argued, that the above contrast arises from the optionality versus the obligatoriness of the rule 'AGR into COMP' for indicative and subjunctive sentences respectively. The problem to solve is thus: "why is 'AGR into COMP' obligatory with subjunctive clauses?"³ One possible answer is that INFL is not a proper governor for the null subject anaphor in (3) unless it is moved to COMP⁴.

The above claim may arise from the different status of INFL in subjunctive clauses. It is assumed that INFL is a proper governor for the subject trace when it is coindexed with this trace; such is the case in 'pro drop languages' with an empty subject position in tensed clauses. INFL is then supposed to absorb the AGR features from the null subject (Rizzi 1982). Only [+ Tense] INFL is a possible governor for the subject trace. We suggest that INFL in Polish subjunctive clauses is [- Tense]. It is, however, co-superscripted with the subject trace, and in any event, the transfer of features from the trace to INFL takes place. Thus, INFL for the Polish subjunctive clauses can be viewed as:

$$\text{INFL} = \begin{bmatrix} -\text{Tns} \\ +\text{AGR} \end{bmatrix}$$

² The ECP, i.e. Empty Category Principle, is assumed to be a part of UG and it has two basic points:

- /i/ trace must be properly governed,
- (ii) PRO must be ungoverned.

³ Within REST all instances of 'Move α ' are crucially regarded as optional. Their application is governed, however, by the 'well formedness conditions on representations', in which all elements have to be licenced in some way (see Chomsky 1985, for discussion).

⁴ We follow here the definition of *proper government* as presented in, e.g. Chomsky (1981):

Proper government

α properly governs β if and only if α governs β , and

- (i) α is lexical ($\neq X^0$), or
- (ii) α is coindexed with β .

The above is supported by the examples given below, where the tense of the embedded subjunctive clause is not affected by the tense of the main clause and the main verb in subjunctives unchangeably has the past tense morphology:

(5) Chcę, żebyśmy jechali szybciej.

I want us to drive faster.

(6) Chciałem, żebyśmy jechali szybciej.

I wanted us to drive faster.

(7) Będę chciał, żebyśmy jechali szybciej.

I will want us to drive faster.

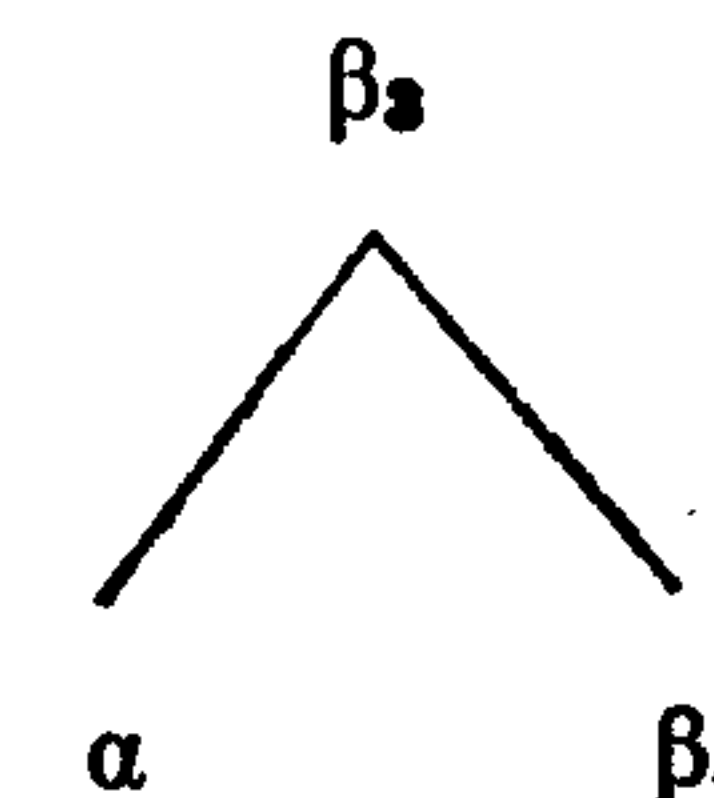
Hence, the D-structure of (3) prior to 'AGR into COMP' can be represented by (3a):

(3a) Chcę [\bar{s} [c żeby] [s t^1 INFL¹ jech- szybciej]]

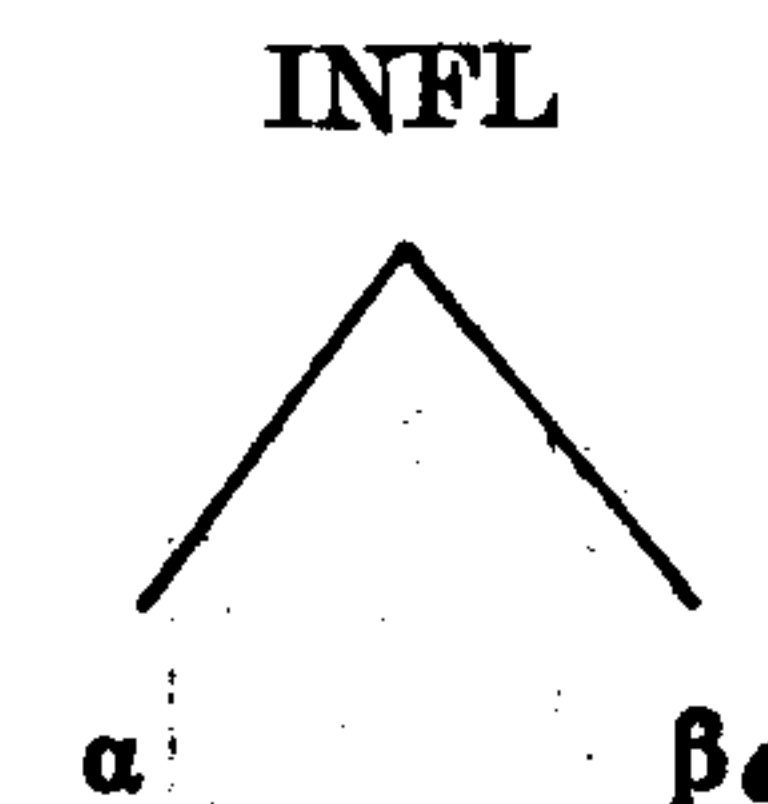
The AGR features are absorbed by INFL. It is crucial to assume that AGR is coindexed with the subject trace. If, however, AGR is taken to be head of INFL and coindexed with the subject trace, then the INFL itself could gain the same index in the configuration:

$$x[\dots \text{Head}_i \dots] \text{ where Head} = \text{AGR} \\ \text{and } x = \text{INFL}$$

But if we assume that the feature $*[\pm \text{Tense}]$ is the head of INFL, then INFL could only receive an index from $[\pm \text{Tense}]$ if this feature itself has the index. Now, if we assume, following Lasnik and Saito (1984), that α can be the head of β_3 in the following configuration:

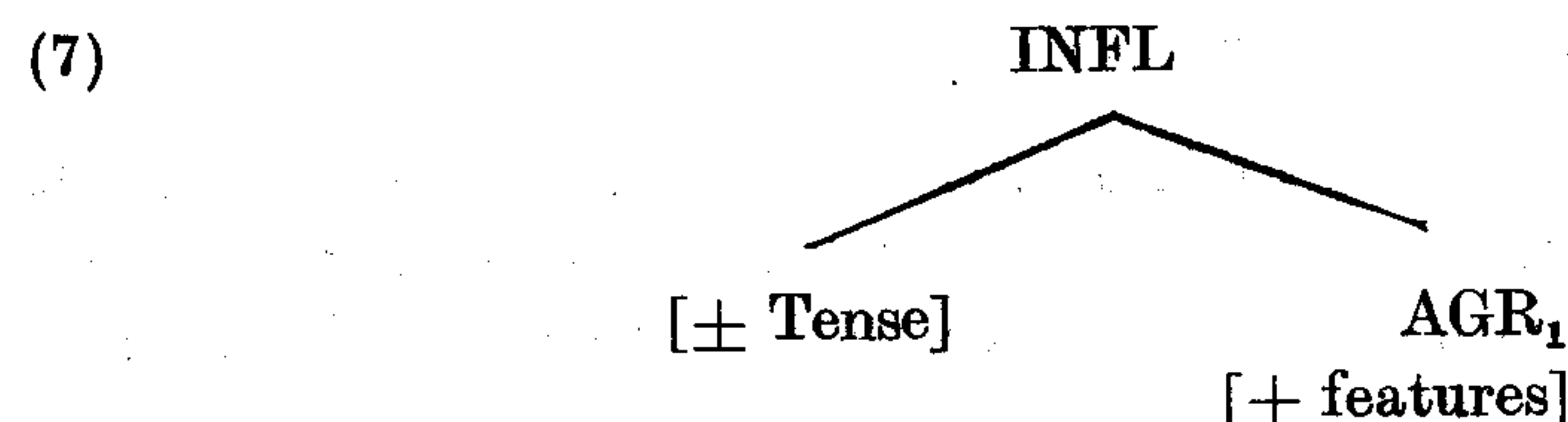


then INFL can receive an index from α in:

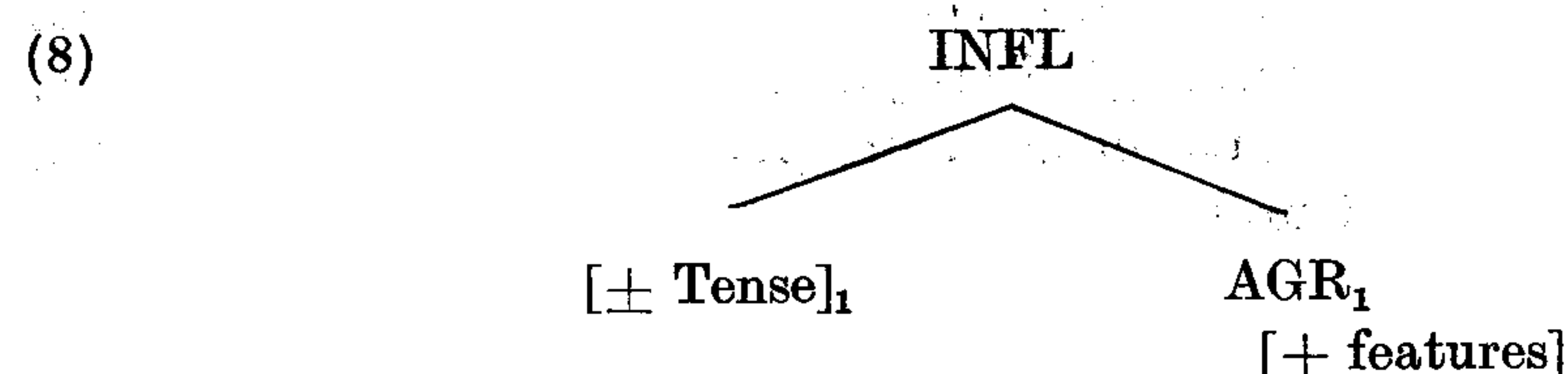


But α (the feature $[\pm \text{Tense}]$) can have an index only if it has a positive value (cf. e.g. Chomsky 1981, Rizzi 1982). Thus, only tensed INFL can govern the subject trace position. If INFL is $[- \text{Tense}]$ in Polish subjunctive sentences, which seems to be the case, then INFL cannot be coindexed with the null subject trace and there cannot be proper government.

It is claimed here, however, that in case of 'subjectless' constructions in 'pro drop languages', the transfer of the features from the null subject is accomplished via AGR which, as a constituent of INFL, is then coindexed with the subject. But INFL cannot receive the index from AGR since AGR is not the head of INFL. We should then guarantee that in some cases $[\pm \text{Tense}]$ can receive the index from AGR (after the placement of the features from the trace) so that it can transmit it to INFL. There seem to be at least two possibilities: given that the configuration in question resembles (7) below:



we can assume 1/ that the index is transmitted from AGR onto $[\pm \text{Tense}]$ just in case $[\text{Tense}]$ has a positive value. Then, (7) can be changed into (8):

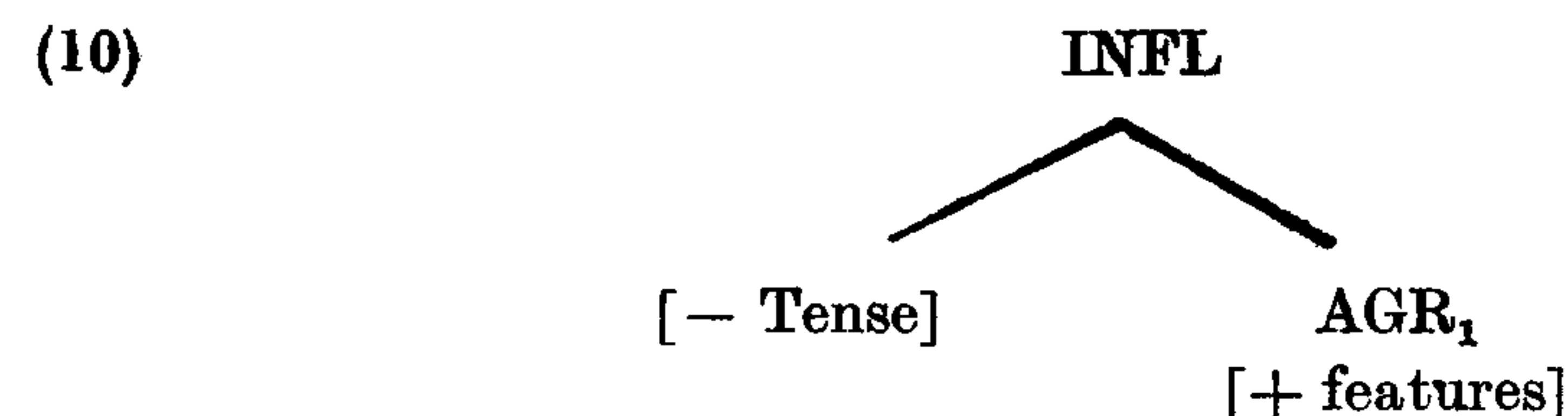


Now, INFL can acquire its index from $[\pm \text{Tense}]$ since the latter is the head of INFL. INFL is now already coindexed with the subject trace and can properly govern it. We can also do without the transmission of index from AGR onto $[\pm \text{Tense}]$ if we assume 2/ that $[\pm \text{Tense}]$ is a part of the AGR complex just in case $[\text{Tense}]$ has a positive value. Hence, INFL is not a branching node. The configuration will then be:



Here, obviously, INFL can get the index directly from AGR, as AGR is the only element under INFL, which thus constitutes its head.

If, on the other hand, $[\text{Tense}]$ has a negative value, neither 1/ (transmission) nor 2/ is possible and the configuration is (10):

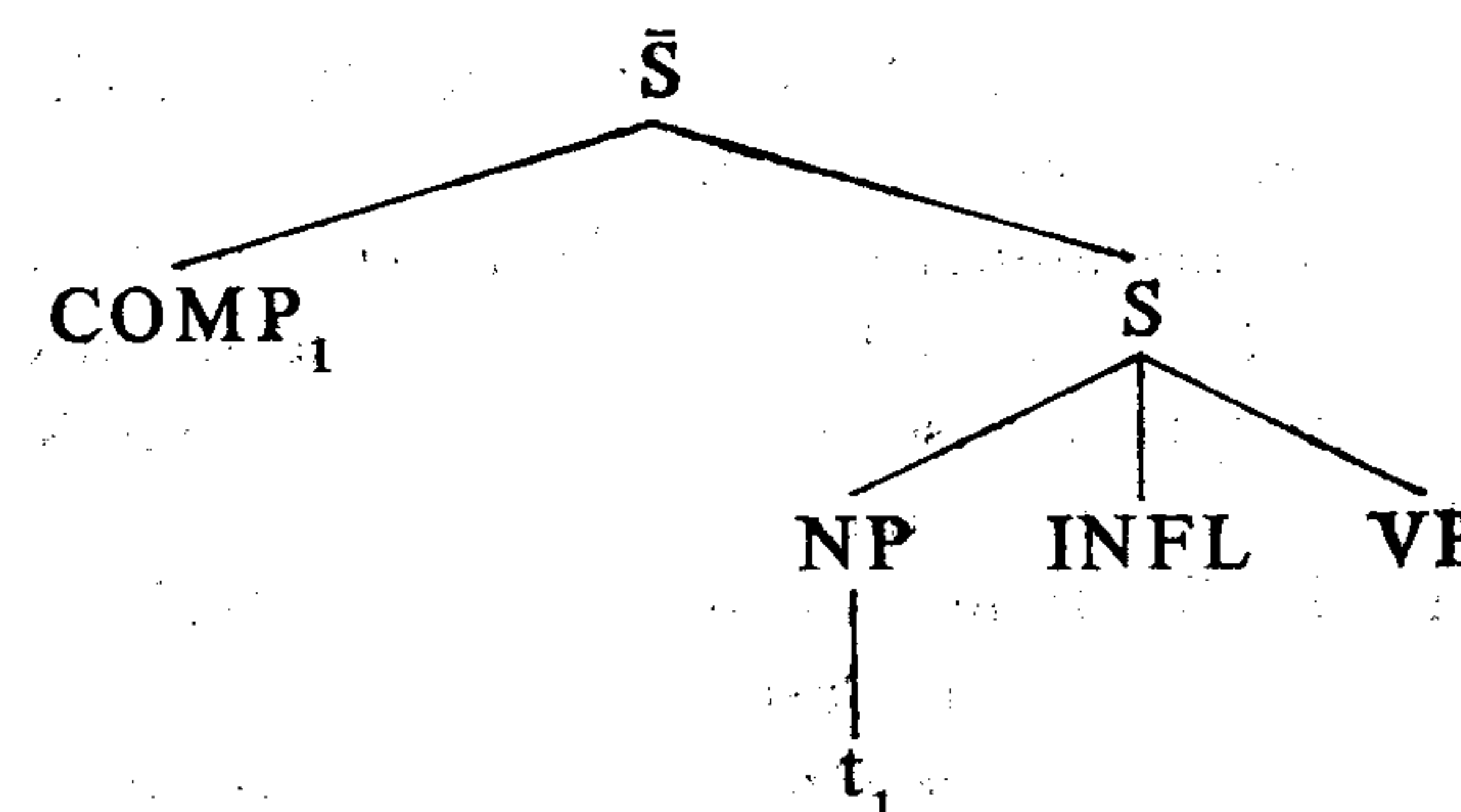


AGR, although coindexed with the subject trace, cannot properly govern it since the requirement of c-command is not fulfilled (INFL is a branching node).

If the suggested analysis is correct, then (11), which is the S-structure corresponding to (4), is ruled out because the subject trace is not properly governed, which is a violation of the ECP.

(11) Chcę $[\bar{s}[c \text{ żeby}][s t^1 \text{ INFL}^1 \text{ jecha- szybciej}]]$

(11) can be rescued, however, if AGR is moved into COMP. AGR, carrying the index, becomes a part of COMP. The complementizer *żeby* did not have any index, and it can, therefore, acquire the index from AGR. Being the head of COMP, the complementizer can now transmit its index to COMP, and the trace can be properly governed by COMP as in the configuration (12) below:



The S-structure, after 'AGR into COMP' is now (13):

(13) Chcę $[\bar{s}[c_1 \text{ żeby- AGR}][s t_1 \text{ INFL} \text{ jecha- szybciej}]]$

Now the R rule (Affix Hopping) at PF applies, leaving the feature [+ person]⁵. Notice, however, that the formulation of R as:

- (14) "R: Place the AGR features, the feature [person] optionally, on the verb."

does not suffice. If (14) was true for R, the (4) could also be generated, since ECP does not operate at PF:

- (4) *Chcę żeby jechaliśmy szybciej.
I want us to drive faster.

The following reformulation of (14) can therefore be proposed:

- (15) "R: Place the AGR features, the feature [person] optionally, on the verb, unless AGR is in COMP when [person] must not be moved."

Let us now look at examples (16) and (17):

- (16) ? Chcę żebyście wy urządzili zabawę.
(17) *Chcę żeby wy urządziliście zabawę.
I want you to organize a party.

Here the subject is not null, and thus does not have to be properly governed and (17) cannot be ruled out due to the ECP. The subjunctive-indicative contrast, discussed earlier, also holds, however, for clauses with phonetic subjects. (16), (18) and (19) are all arguably grammatical, though far less acceptable than their counterparts without phonetic subjects:

- (18) ? Myślę, żeś ty zrobiła błąd.
(19) Myślę, że ty zrobiłaś błąd.

I think that you made a mistake.

Their oddity may be due to the 'Avoid Pronoun Principle'.

(17) though, is definitely ungrammatical.

To account for the ungrammaticality of (17) we might assume that 'wy' in (17) is not assigned Nominative Case and (17) is ruled out due to the Case Filter. The above assumption arises from the principle that Nominative Case is assigned virtually under government and there is no government of the subject position by INFL. Independently, INFL in /17/ is [- Tense] and [- Tense] INFL does not assign Case (just as INFL does not assign Case in infinitive clauses). Why then is (16) grammatical? Notice that, in accord-

⁵ Following Borer (1983), we assume that the inflectional rules can apply freely at any point, not necessarily at PF and also in syntax. In our case the licencing convention of Chomsky (1985) delays the application of Affix Hopping to PF, or ill after the operation of the last syntactic rule.

ance with the previous discussion, *wy* is coindexed with AGR in (16). When AGR is moved into COMP, assigning the index to COMP, by the merger with the complementizer *żeby*, the subject position is already properly governed. We can thus postulate that the missing [+ Tense] feature of AGR which is necessary for Nominative Case assignment can be replaced by the feature [+ Subjunctive] carried by the complementizer *żeby*⁶. The set of AGR features in COMP is now:

{ + features
+ Subjunctive }, and the missing position for [Tense] is taken by [+ Subjunctive]. AGR containing the feature [+ Subjunctive] is now a Case assigner to the subject position.

A second option is to assume that the complementizer *żeby* is a Case assigner itself, though it cannot assign Case until it governs the subject. The 'AGR into COMP' is thus necessary to furnish *żeby* with the index of AGR.

In indicative clauses with both lexical NPs and traces in subject positions, the operation of 'AGR into COMP' is optional since the subject position is properly governed by the coindexed INFL.

Dependence on the assumption that after 'AGR into COMP', COMP receives the index from AGR by the mediation of its head, i.e. the complementizer *żeby*, has been crucial in the above analysis. Further, in line with the

⁶ We consider 'żeby' to be a genuine complementizer, not a merger of 'że' with the 'floating' particle 'by'. The cases of 'floating' *by* are, it seems, restricted to conditional mood constructions like (1-5) below:

- (1) Myślę, że poszliby do kina gdyby ...
I think that they would go to the cinema if ...
(2) Myślę, że byli-by poszli do kina gdyby ...
I think that they would have gone to the cinema if ...
(3) Myślę, że-by poszli do kina gdyby ...
I think that they would go to the cinema if ...
(4) Myślę, że do kina -by- poszli gdyby ...
I think that they would go to the cinema if ...
(5) Myślę, że oni -by- poszli do kina gdyby ...
I think that they would go to the cinema if ...

In our view, the 'floating *by*' is a conditional mood marker and constitutes a part of INFL. After the transmission of AGR features to INFL, the feature [person] forms a merger with *by*. This merger is never broken as illustrated in (8-11) below:

- (8)* Myślę, że do kina -by- poszliście gdyby ...
I think that you would go to the cinema if ...
(9)* Myślę, że-by do kina poszliście gdyby ...
I think that you would go to the cinema if ...
(10)* Myślę, że wy -by- do kina poszliście gdyby ...
I think that you would go to the cinema if ...
(11)* Myślę, że wyście -by- do kina poszli gdyby ...
I think that you would go to the cinema if ...

idea of Lasnik and Saito (1984) that, in Polish, only the leftmost moved element in COMP can transfer its index to the head of COMP, or, eventually, can become the head of COMP itself, we can now explain the contrast between (20–23) below:

(20) *Chcesz żebyśmy co zrobili?*

you want that/we/what did

What do you want us to do?

(20a) *chcesz* [\bar{s} [c_1 *żeby* — AGR₁ co_2] [s t_1 *zrobili* t_2]]

(21) *Co chcesz żebyśmy zrobili?*

what you want that/we/did

(21a) co_2 [s *chcesz* [\bar{s} [c_1 *żeby* — AGR₁] [s t_1 *zrobili* t_2]]]

(22) **Chcesz co żebyśmy zrobili?*

you want what that/we/did

(22a) *chcesz* [\bar{s} [c_2 co_2 *żeby* — AGR₁] [s t_1 *zrobili* t_2]]

(23) **Chcesz żeby cośmy zrobili?*

you want that what /we/did

(23a) *chcesz* [\bar{s} [c_2 *żeby* co_2 — AGR₁] [t_1 *zrobili* t_2]]

(20) and (21) are grammatical because the leftmost of the moved elements is AGR and thus can assign its index to the COMP via *żeby*. COMP can now properly govern the empty subject in (20) and (21). (22) and (23) are ruled out since the leftmost of the moved elements is a wh-word *co* which transmits its index to COMP and the subject trace is left ungoverned. The convention throughout is that the first moved element is placed most to the left in COMP.

Notice now that (24) is grammatical while (25) is not:

(24) *Chcesz żeby kto wygrał konkurs?*

you want that who won the contest

Who do you want to win the contest?

(25) **Chcesz kto żeby wygrał konkurs?*

you want who that won the contest

The corresponding S-structures are (24a) and (25a) below:

(24a) *chcesz* [\bar{s} [c_1 *żeby* AGR kto_1] [t_1 *wygrał* *konkurs*]]

(25a) *chcesz* [\bar{s} [c_1 kto_1 *żeby* AGR] [t_1 *wygrał* *konkurs*]]

It can tentatively be assumed that in cases of subject extraction AGR is no coindexed with the wh-trace. We will try to explain this point later.

In (24) then, *kto*, when in COMP, can transmit its index to the head of COMP via AGR since AGR has no other index. Both proper government by COMP and the Nominative Case assignment by *żeby* (with the feature

[+ Subjunctive]/) is thus possible in (24). In (25) however, if *kto* moves first and directly into a head position implying perhaps the deletion of *żeby*, although carrying the right index and thus allowing for proper government, it cannot assign Case to its own chain⁷. (25) therefore violates the requirement that variables must in be Case-assigned positions. Only *żeby*, as a head of COMP when assigned index from *kto*, can assign Nominative Case to the subject trace thanks to the feature [+ Subjunctive], but in (25) *żeby* is not coindexed with the subject trace⁸.

Let us now look at another contrast in Polish. It is assumed here, following Lasnik and Saito (1984), that there is no syntactic COMP-to-COMP movement in Polish. Structures like (26):

(26) **Kto Maria chce żeby kupił chleb?*

who Mary wants that bought bread

Who does Mary want to buy bread?

(26a) kto_1 [*Maria* *chce* [\bar{s} [c *żeby*] [s t_1 *kupił* *chleb*]]]

cannot however be ruled out due to the Subjacency Condition since there are grammatical object extraction structures like (27)⁹:

(27) *Co Maria chce żeby, Janek kupił?*

what Mary wants that Janek bought

What does Mary want Janek to buy?

(27a) co_1 [s *Maria* *chce* [\bar{s} *żeby* [s *Janek* *kupił* t_1]]]

If there are no intermediate traces either in (26) or in (27), both would be the violation of Subjacency. We will try to account for this contrast adopting ECP.

⁷ We subscribe here to the account of e.g. Chomsky (1985) where Case is taken to be a property of chains, not categories. For a general discussion on chains see e.g. Chomsky (1981), Brody (1984), Chomsky (1985).

⁸ In the present account we assume that a subject wh-word moves to COMP in syntax and does not stay 'in situ' (a case of vacuous movement). Notice also that for the elimination of e.g. (25) we do not invoke the Doubly-filled COMP Filter which does not seem to be generally operative in Polish, as the examples below suggest:

(12) *Co żeście zrobili?*

What did you do?

(13) *Któż to zrobił?*

Who did it?

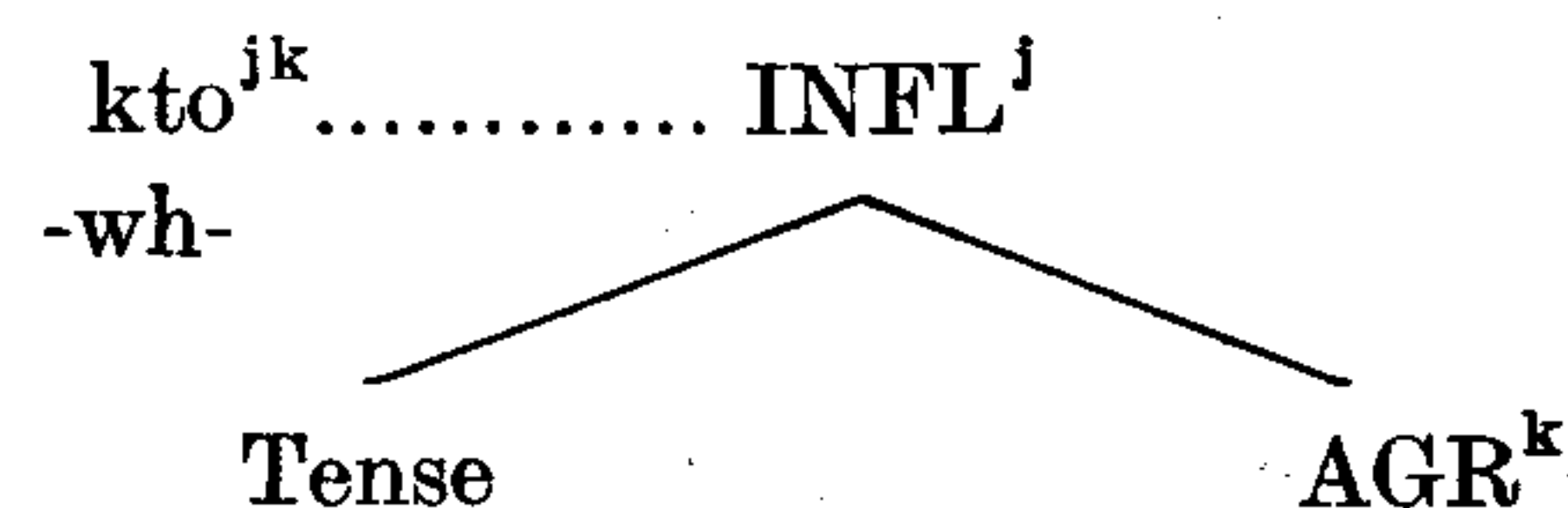
(14) *Kto kogo zabił?*

who whom killed

Who killed whom?

⁹ We leave open the problem whether Subjacency Condition is generally observed in Polish.

The first assumption to be made here in connection with structures like (26) is that a *wh*-word in subject position cannot be coindexed with AGR in the same way that a null anaphor can. We will assume that the relation which holds between a *wh*-word in subject position and AGR is one of co-superscripting rather than coindexing. This claim seems plausible if we note that the relation in question is of some special kind, distinct from the relation between a null anaphor and AGR. The 'speciality' of this relationship is reflected by the fact that the set of features associated with *kto* is uniform and the verb will always have a stable inflection of third person, singular, masculine. This relationship is represented in (28) below:



In this case, i.e. if there is no coindexing with AGR, the trace left after extraction is not properly governed. Besides, in the case of subjunctives, the *wh*-trace is not assigned Case since INFL is [- Tense].

If *kto* in (24) is in lower COMP, the structure is grammatical, since *kto* carries its index and, when in COMP, transmits it to the COMP via the merger 'zeby-AGR'. This is possible since AGR did not previously carry any index. *Zeby* can now be a Nominative Case Assigner for the chain (*kto*, *t*) as soon as it acquires the index from *kto*.

Let us now return to the proposal that a *wh*-word is not coindexed at D-structure with AGR. Adopting this assumption we can also explain the ungrammaticality of indicative structures like (29):

- (29) *Kto myślisz, że przyniesie prezent?
 who you think that will bring the present
 Who do you think will bring the present?

(29a) [\bar{s} [c kto_1] [st myślisz [\bar{s} [c że] [s t_1 AGR przyniesie prezent]]]]]

If INFL is always a proper governor for a subject trace, when it is [+ Tense] and if there is no trace in COMP (no COMP-to-COMP), (29) should be grammatical. But under the proposal that the *wh*-word is not coindexed with AGR, and thus INFL, in spite of being [+ Tense] is unable to receive the index from the *wh*-word, the ungrammaticality of (29) is straightforward¹⁰.

It has so far been assumed that both *wh*-words and AGR move in Polish

¹⁰ We assume that the so-called 'antecedent government' in the sense of Saito and Lasnik (1984) is in (29) blocked by S (cf. Chomsky (forthcoming) for a discussion on the nature of barrierhood in similar cases).

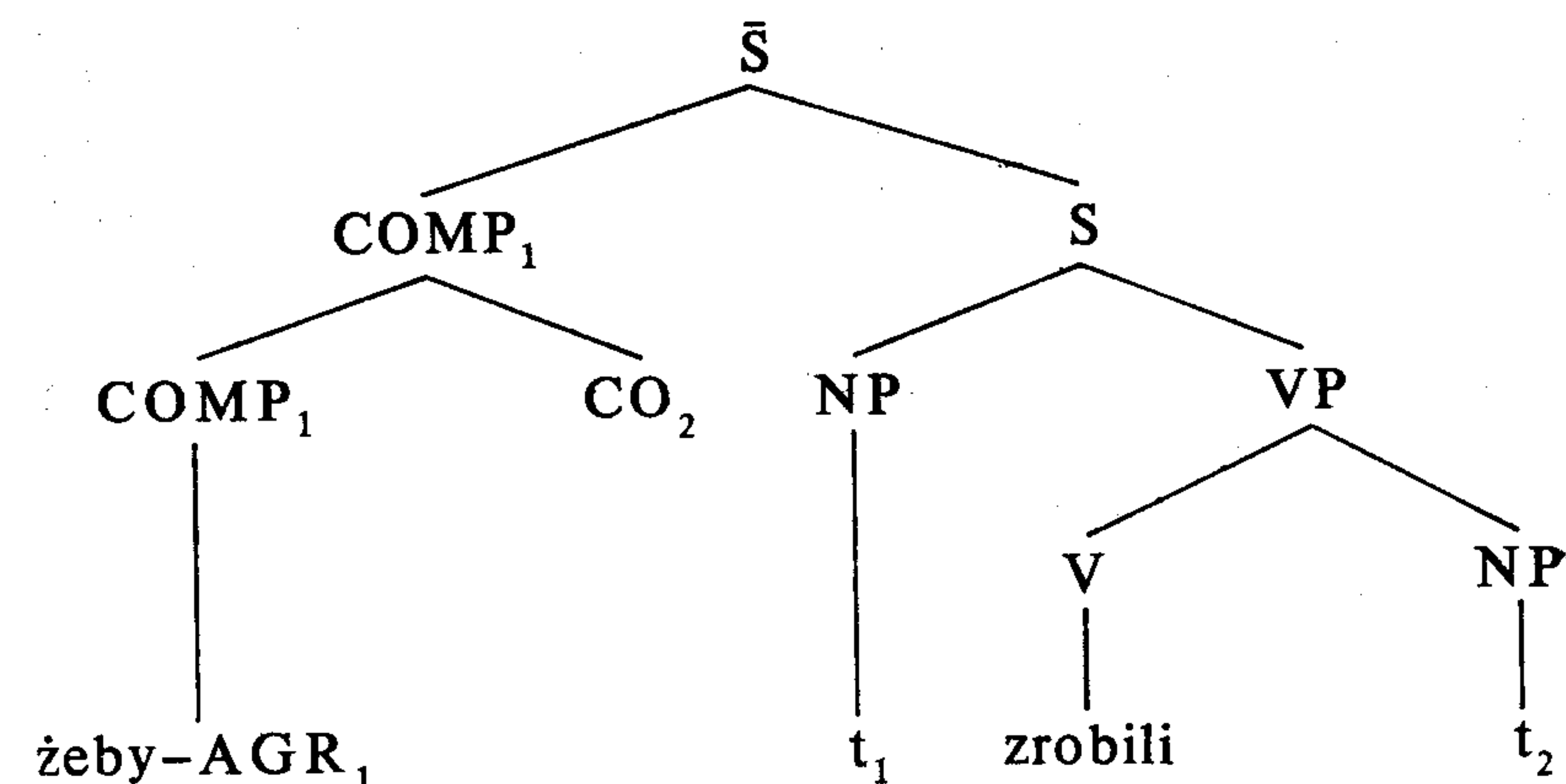
into COMP. However, we want to retain the principle that, generally, as a property of UG, there is only one position accessible in COMP for the moved elements. But it seems that this principle is best understood as a restriction only on lexical elements. Thus, we think it is impossible to have in COMP more than one lexical, i.e. phonetically realised element. But some lexically null elements are probably also allowed in COMP. As a result, we can have intermediate traces in COMP in languages which licence syntactic COMP-to-COMP, e.g. English. In Polish, on the other hand, we will admit in COMP the AGR marker, which cannot be regarded as a lexical item for two reasons: (i) even if the feature [+ person] remains in COMP and is phonetically spelt out, it is a morph, and not a lexem, and thus cannot be 'lexical' in a strict sense; (ii) the rules of PF will inevitably join the unbound morph [+ person] to the complementizer, so that the two will form a merger and may be regarded as a single complementizer.

Thus, it is assumed that the rule of 'AGR into COMP' is in fact an instance of movement *into* COMP.

It is different with *wh*-movement. *Wh*-words are lexical items and cannot be moved, in accordance with the above discussion, into Comp when there is already an overt complementizer. We will then assume that they are adjoined to COMP as in the configuration (30):

- (30) Chcesz żebyśmy co zrobili?
 you want that what we did
 What do you want us to do?

(30a) chcesz [\bar{s} [c_1 [c_1 żeby — AGR₁] co_2] [s t_1 zrobili t_2]]]

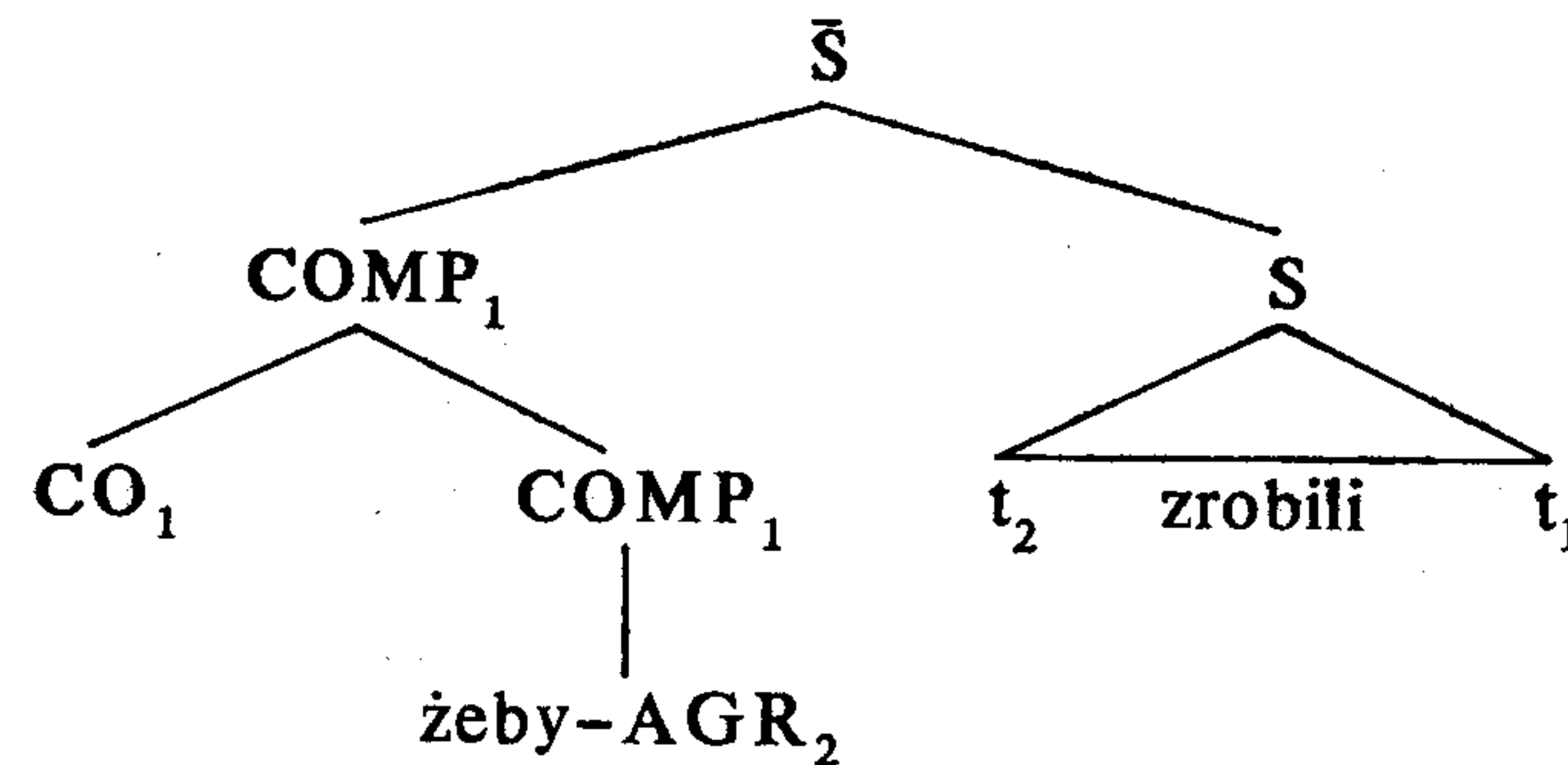


By convention, only the leftmost of the moved elements can transmit its index to COMP, whether adjoined to COMP or moved into it. In (31), on the other hand, the leftmost moved element is the adjoined *wh*-word which transmits.

its index to COMP:

- (31) *Chcesz co żebyśmy zrobili
 you want what that we did
 What do you want us to do?

(31a) chcesz [_S [co_{C1} [żeby AGR₂]] [t₂ zrobili t₁]]



In (31a) t_2 is not properly governed and (31) is ruled out.

Notice that in indicative clauses like (32), the situation is analogous but (32) is grammatical anyway:

- (32) Co żeśmy zrobili?
 what that we did
 what did we do?

(32a) [_S [co_{C1} [że AGR₂]] [t₂ zrobili t₁]]

The explanation may be, following Lasnik and Saito (1980), that the proper government is the assignment of the feature $[+\gamma]$. This feature is assigned at S-structure, prior to various instances of 'Move α '. In (32) the INFL is $[+\text{Tense}]$ and the index carried by AGR can be transmitted to INFL. As a result, t can be assigned $[+\alpha]$ feature (proper government) from INFL before AGR is moved into COMP. After 'AGR into COMP' there could not be any more proper government from COMP, since, as we have said, the COMP is not coindexed in (3a) with the null subject. However, there is no more for proper government since t_2 has already acquired the above feature.

To summarize, the following main points have been proposed:

- (i) there is a syntactic rule 'AGR into COMP' in Polish;
- (ii) 'AGR into COMP' is obligatory in the case of Polish subjunctive constructions which follows directly from ECP and Case Theory
- (iii) there is an additional position in COMP, available for AGR but not for any lexical material;
- (iv) the relation between a subject wh-word and AGR is that of co-superscripting rather than of coindexing.

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