

PRO-DROP IN POLISH AND IRISH

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1. Introduction

The paper aims at an analysis of the *pro*-drop phenomena in Polish and Irish. The two languages show, as we shall see, distinct properties as regards *pro*-drop and therefore it seems particularly promising to come up with an approach applicable to the data from both of them. One of the approaches to the phenomenon in question recently proposed in the literature is the one of Vainikka and Levy (1999). Though it has been developed primarily for Finnish and Hebrew, its universal validity has been argued for by the two linguists. The task we embark on in this paper consists in testing to what extent Vainikka and Levy's approach can handle Polish and Irish data.

In Section 2 a short comparison of *pro*-drop in Polish and Irish is undertaken. Section 3 presents Vainikka and Levy's (1999) model. In Section 3 their model is applied to Polish and Irish data. Finally, in Section 5 some problems for Vainikka and Levy's analysis are examined.

2. *Pro*-drop in Polish and Irish – a comparison

Both Polish and Irish are *pro*-drop languages, that is, they 'drop' subjects in finite clauses. However, the conditions under which subjects can be dropped in these languages differ considerably. As for Polish, any unstressed pronominal subject can be left unexpressed. In other words, Polish 'drops' unstressed pronominal subjects for all persons and numbers, as its verb forms carry a distinct inflectional ending in every person and number. A typical pattern of pronoun omission is presented in (1) below, where the pronoun that can be left out is bracketed:

(1) Singular	Plural
1 st (ja) czytam 'I read'	(my) czytamy 'we read'
2 nd (ty) czytasz 'you read'	(wy) czytacie 'you read'
3 rd (on) czyta 'he reads'	(oni) czytają 'they (virile) read'
(ona) czyta 'she reads'	(one) czytają 'they (non-virile) read'
(ono) czyta 'it reads'	

The pattern in (1) demonstrates that *pro*-drop may be attested in the present tense in Polish; this phenomenon is equally common in the past and in the future, as shown in (2) and (3), respectively:

(2) Singular	Plural
1 st (ja) czytałem/czytałam ¹ 'I read'	(my) czytaliśmy/czytałyśmy 'we read'
2 nd (ty) czytałeś/czytałaś 'you read'	(wy) czytaliście/czytałyście 'you read'
3 rd (on) czytał 'he read'	(oni) czytali 'they (virile) read'
(ona) czytała 'she read'	(one) czytały 'they (non-virile) read'
(ono) czytało 'it read'	

(3) Singular	Plural
1 st (ja) przeczytam ² 'I will read'	(my) przeczytamy 'we will read'
2 nd (ty) przeczytasz 'you will read'	(wy) przeczytacie 'you will read'
3 rd (on) przeczyta 'he will read'	(oni) przeczytają 'they (virile) will read'
(ona) przeczyta 'she will read'	(one) przeczytają 'they (non-virile) will read'
(ono) przeczyta 'it will read'	

Not only can subjects be omitted in all tenses, but also in all moods. Examples (1) – (3) illustrate indicative verb forms, whereas (4) and (5) instantiate subjunctive and imperative verb forms, respectively:

¹ The two forms in the 1st and 2nd person singular and plural in the past correspond to masculine/feminine and virile/non-virile forms respectively.

² Polish also has another set of future forms which consist of the verb *być* 'to be' and either the base form of the verb or the inflected verb form. These forms can also exhibit *pro*-drop as can be seen in (i):

(i) Singular	
1 st (ja) będę czytać/czytał/czytała	'I will read'
2 nd (ty) będziesz czytać/czytał/ czytała	'you will read'
3 rd (on) będzie czytać/czytał	'he will read'
(ona) będzie czytać/czytała	'she will read'
(ono) będzie czytać/czytało	'it will read'
Plural	
1 st (my) będziemy czytać/ czytali/czytały	'we will read'
2 nd (wy) będziecie czytać/czytali/ czytały	'you will read'
3 rd (oni) będą czytać/czytali	'they (virile) will read'
(one) będą czytać/czytały	'they (non-virile) will read'

(4) Singular	
1 st (ja) czytałbym/czytałabym ³	'I would read'
2 nd (ty) czytałbyś/czytałabyś	'you would read'
3 rd (on) czytałby	'he would read'
(ona) czytałaby	'she would read'
(ono) czytałoby	'it would read'
Plural	
1 st (my) czytalibyśmy/czytałybyśmy	'we would read'
2 nd (wy) czytalibyście/czytałybyście	'you would read'
3 rd (oni) czytaliby	'they (virile) would read'
(one) czytałyby	'they (non-virile) would read'

(5) Singular	Plural
1 st _____	_____
2 nd (ty) czytaj 'read'	(wy) czytajcie 'read'
3 rd _____	_____

As has already been noted, it is unstressed pronouns that can be dropped. In fact, there is a strong tendency in Polish to omit these pronouns and wherever they are retained they bear heavy stress, as in (6):

(6) Ja czytam, a ty śpisz.
'I am reading and you are sleeping.'

Summing up, Polish closely resembles typical null subject languages, like Italian, since it regularly omits unstressed pronominal subjects in finite clauses and retains them only for contrastive purposes (see (6) above).

The conditions of pronominal subject omission in Irish tensed clauses are much more complex than in Polish. They also are subject to dialectal variation (for a comprehensive overview of dialectal variation see McCloskey and Hale 1984: 491-492). In this study we will concentrate just on one dialect, namely Connemara Irish, spoken in the western part of Ireland. Generally, Irish has two sets of verb forms, traditionally called analytic and synthetic. The latter are inflected forms which express tense, mood as well as person and number. The former express only tense and mood, but they never convey any information about person and number. Since analytic forms do not encode information about person and number, they have to be followed by personal pronouns, in contradistinction to synthetic forms which do not require any pronoun to follow them. The difference between analytic and synthetic forms is illustrated in (7a) and (7b), respectively:

³ The two forms in the 1st and 2nd person singular and plural subjunctive represent masculine/feminine and virile/non-virile forms respectively.

- (7a) bhrisfeadh sé 'he would break'
CONDIT he
- (7b) bhrisfinn 'I would break'
1SG-CONDIT

The use of analytic and synthetic forms differs across dialects.⁴ In Connemara Irish, the general rules governing the use of either of these forms are given after Stenson (1981: 39) in (8):

- (8) Always analytic: all present and future plural forms
all 3rd person singular forms
all 2nd person plural forms (except imperatives)⁵
Always synthetic: 1st and 2nd person singular conditionals
1st person singular present habituais

What follows from the rules in (8) is that Irish, unlike Polish, does not exhibit subject pronoun omission in all tenses and moods. In fact, this is allowed only in 1st and 2nd person singular in the conditional mood and in 1st person singular in the habitual present. These paradigms are illustrated by (9) and (10), respectively:

- (9) Conditional paradigm for *glan* 'clean'
- | | |
|---|---|
| Singular | Plural |
| 1 st ghlanfainn 'I would clean' | ghlanfadh muid 'we would clean' |
| 2 nd ghlanfá 'you would clean' | ghlanfadh sibh 'you would clean' |
| 3 rd ghlanfadh sé 'he would clean' | ghlanfaidís/ghlanfadh siad 'they would clean' |
| ghlanfadh sí 'she would clean' | |
- (10) Present habitual paradigm for *bí* 'be'
- | | |
|---|--------------------------------|
| Singular | Plural |
| 1 st bíim 'I normally am' | bíonn muid 'we normally are' |
| 2 nd bíonn tú 'you normally are' | bíonn sibh 'you normally are' |
| 3 rd bíonn sé 'he normally is' | bíonn siad 'they normally are' |
| bíonn sí 'she normally is' | |

In (9), as expected, in 1st and 2nd person singular forms are synthetic; the remaining forms are analytic. In (10) only 1st person singular is synthetic; all the others are analytic. What is worth noting is that in 3rd person plural in (9) two alternative forms are possible; one synthetic and the other analytic. Such doublets are commonly found in Connemara Irish in the following cases presented after Stenson (1981: 39):

⁴ Old Irish, as noted by Stenson (1981), had purely synthetic paradigms. The existence in Modern Irish of the mixed system of analytic and synthetic forms together with the recent emergence in Connemara Irish of the analytic forms in the 1st person plural paradigms suggest that Irish has been undergoing the process of the shift from purely synthetic forms to purely analytic ones.

⁵ In the imperative mood 2nd person forms are synthetic, as shown in (i):

(i) glanaigí 'clean'
2PL-IMPERAT

- (11) 1. 3rd person plural in the conditional, the simple past and past habitual, e.g.:
ghlanfaidís or ghlanfadh siad 'they would clean'
ghlanadar or ghlan siad 'they cleaned'
ghlanaidís or ghlanadh siad 'they used to clean'
2. 1st person singular present of the verb *bí* 'be', i.e.:
táim or tá mé 'I am'
3. in response forms, synthetic forms often replace the analytic forms which would be used in independent sentences, e.g.:
Chuaigh mé go Áth Buí inné.
go-PA I to Athboy yesterday
'I went to Athboy yesterday.'
An ndeachaigh tú go Áth Buí inné?
Q go-PA you to Athoy yesterday
'Did you go to Athboy yesterday?'
Chuas / *Chuaigh mé.
go-1SG-PA / go-PA I
'I did.' / 'I did.'

Thus, it seems that Irish differs considerably from prototypically null subject languages, like Polish or Italian, in that it displays *pro*-drop in highly restricted contexts only. Irish is actually similar to the so-called mixed null subject languages, such as Finnish and Hebrew, which, as we shall see in Section 3, 'drop' their pronominal subjects in 1st and 2nd person singular and plural of some tenses. However, Irish possesses a property that makes it divergent from both regular null subject languages and mixed null subject languages, namely Irish synthetic forms can never co-occur with an overt subject, be it a pronoun or a lexical DP, as shown in (12):

- (12) *ghlanfainn mé 'I would clean'
*ghlanfá tú 'you would clean'
*ghlanfaidís daoine 'people would clean'

Even if the pronouns in (12) are made emphatic, they are illegitimate after synthetic forms, e.g.:

- (13) *ghlanfainn mise 'I would clean'
clean-CONDIT-1SG I-EMPH
*ghlanfá tusa 'you would clean'
clean-CONDIT-2SG you-EMPH

The only forms available if the subject is overtly present in Irish are analytic forms, as can be seen in (14):

- (14) ghlanfadh daoine 'people would clean'

In this way Irish differs from both regular null subject languages and mixed null subject languages, which, unlike Irish, do not block the co-occurrence of the inflected verb form with an overt subject (see examples (1)-(6)). However, it is important to note that in Irish no analytic form can be used if a corresponding synthetic form exists, that is, we cannot use **ghlanfadh mé* 'I would clean' since there exists the synthetic form *ghlanfainn* 'I would clean'. In other words, analytic forms can only be adopted in the absence of synthetic ones except cases like (11), which admit both.

To sum up, *pro*-drop in the two languages studied shows distinct characteristics. While Polish pronominal subjects can be left out unexceptionally for all persons in every tense and mood, in Irish only a restricted set of forms can (and in fact has to) omit a pronominal subject. Another difference, already mentioned, concerns the fact that overt subjects can co-occur with inflected verb forms in Polish, whereas in Irish the two are totally incompatible. This is the range of facts that any adequate analysis of *pro*-drop in Polish and Irish has to address. The approach whose validity for these data will be tested is the one offered by Vainikka and Levy (1999).

3. Vainikka and Levy's (1999) analysis

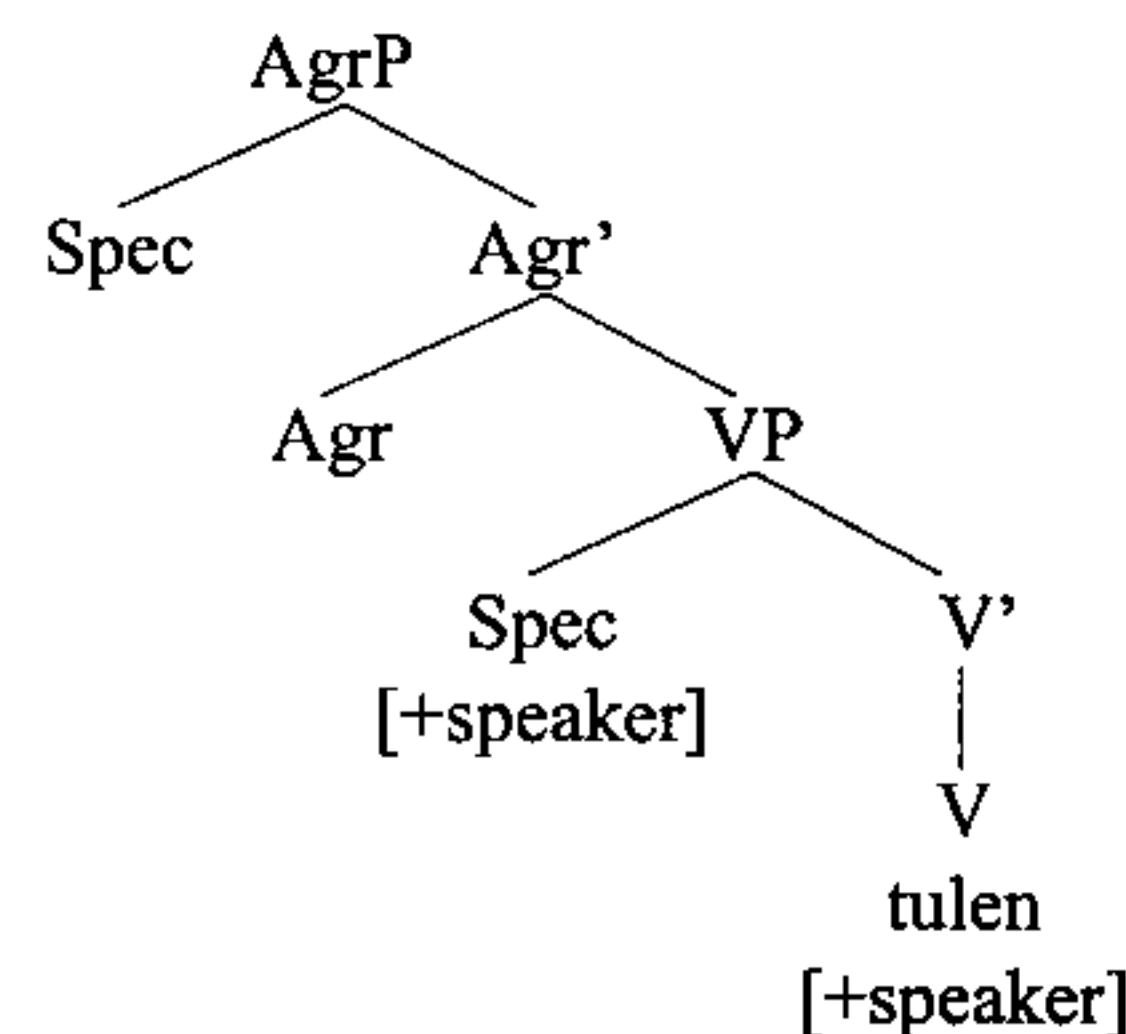
Vainikka and Levy (1999), in a way similar to Speas (1994, 1995), replace the traditional formulation of the Null Subject Parameter (see Rizzi 1986) with syntactic licensing. The starting point for their analysis is mixed null subject languages like Finnish and Hebrew. They note that in Finnish 1st and 2nd person subject pronouns are optional, whereas in the 3rd person an overt subject is obligatory. A similar pattern is found in the Hebrew past and future tenses, in which the verb is inflected for tense, number, person and gender. No pronominal subject can be omitted in the Hebrew present tense, where person marking is missing.⁶ Vainikka and Levy argue that it is person features that are crucial for subject omission in the two languages. They suggest that all person distinctions can be captured in terms of binary features, such as [+/- speaker], [+/- hearer], where 1st person is coded as [+speaker], the 2nd person as [+hearer] and the 3rd person as [-speaker, -hearer]. Other features like number or gender seem to be irrelevant for *pro*-drop both in Finnish and Hebrew and cross-linguistically.

The central point of Vainikka and Levy's (1999) analysis concerns the location of person features. They argue that in Finnish the 1st and 2nd person features are base-generated in the subject position, i.e. Spec, VP, not in Agr, as these features restrict the set of potential referents in ways relevant to the conversation. In contrast, 3rd person features, which are more remotely connected with the conversation, are base-generated in Agr. In other words, due to their special discourse function, 1st and 2nd person pronouns are most easily accessible to *pro*-drop, in contradistinction to

⁶ Vainikka and Levy (1999) note that in both Finnish and Hebrew 3rd person pronominal subjects can be omitted in expletive, generic and embedded constructions.

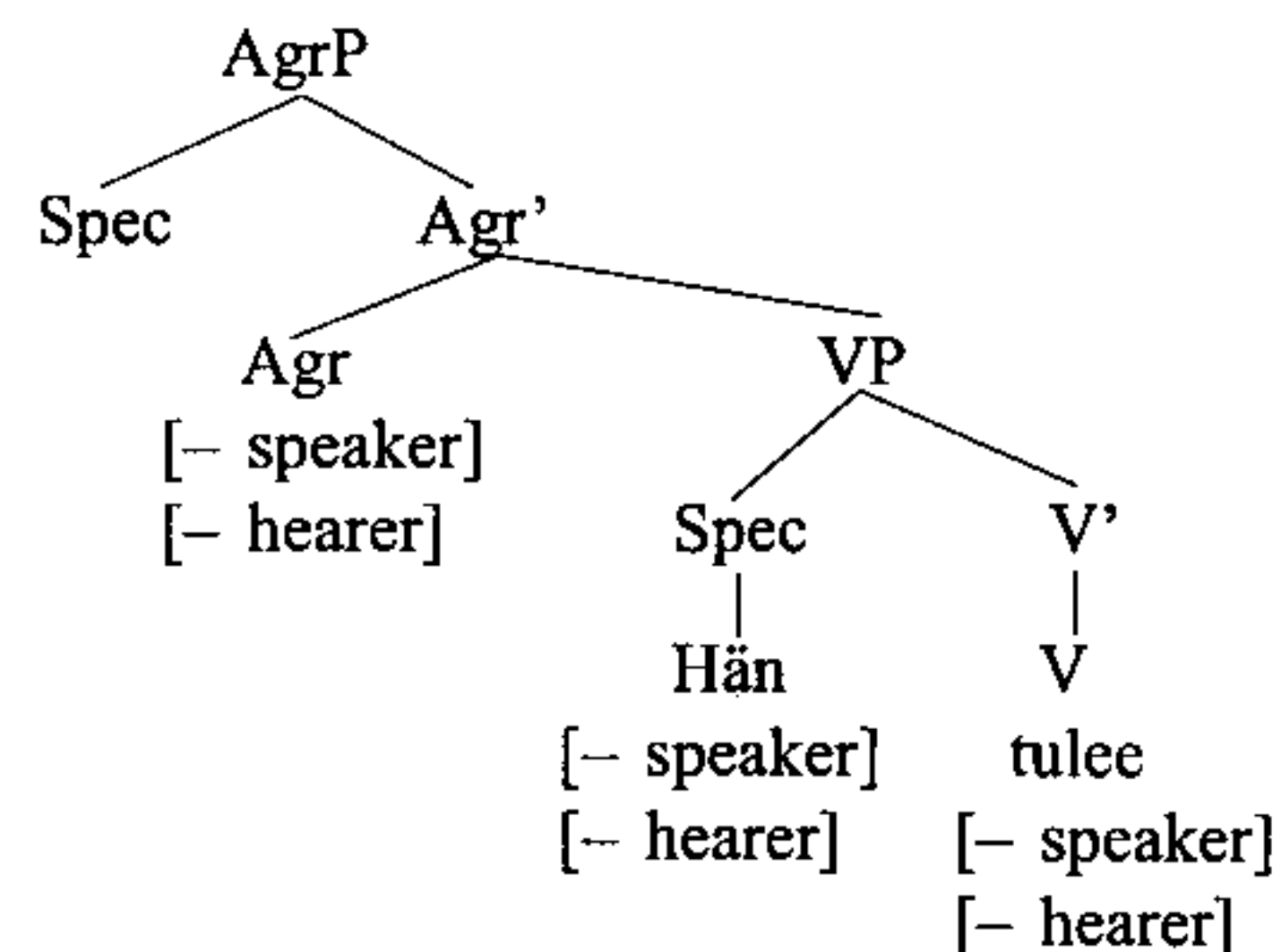
3rd person pronouns, and consequently, the two sets of pronouns have to occupy two distinct structural positions. Under this approach 1st person verb forms in Finnish and Hebrew have the structural representation in (14):

- (14) Finnish 1st person verb forms ⁷
 Tulen. (Vainikka and Levy 1999: 626)
 come-1SG
 'I come.'



A similar representation is associated with 2nd person verb forms, which instead of the feature [+speaker] bear the feature [+hearer]. According to Vainikka and Levy (1999), 3rd person verb forms in Finnish and Hebrew have the following structure:

- (15) Finnish 3rd person verb forms
 Hän tulee. (Vainikka and Levy 1999: 627)
 he/she comes-3SG
 'He/she comes.'



⁷ Although (14) and (15) are based on examples from Finnish, they also represent the structure of the corresponding Hebrew verb forms.

In (14) the feature [+speaker] or its overt realisation raises to Spec, AgrP and the verb raises to Agr. When the feature [+speaker] is not realised as an overt pronoun, it corresponds to *pro*. In (15) N-features are associated with three elements, that is, Agr, Spec of VP and the inflected verb. Just like in (14), the subject DP in Spec, VP moves to Spec, AgrP and the verb raises to Agr. Whereas the movements in (15) result from the Checking Theory, the motivation for the movement in (14) does not lie in the necessity to check features, as in Chomsky's (1995) original proposal. This is so, because the Agr node in (14) lacks person features and therefore should not trigger V-movement and subject movement. Vainikka and Levy argue for a new theory of movement based on a principle called the Principle of Obligatory Occupant Licensing (hence POOL), stated in (16):⁸

(16) Principle of Obligatory Occupant Licensing (POOL)

In order to be licensed, both the head and the specifier of a syntactic position must be filled by syntactic material at some level of representation.
(Vainikka and Levy 1999: 627)

According to them, movement in general and the movement in (14) in particular result from POOL.⁹ Contrary to Chomsky (1995), but in compliance with Marantz (1995: 358-359), Vainikka and Levy (1999) assume that features remain visible to the grammar even after checking.

Vainikka and Levy argue that their analysis of *pro*-drop in Finnish and Hebrew may be extended also to other languages. They point out that null subject languages, like Italian, have a structure like (14), with person features in the subject position for all persons; POOL is therefore satisfied at the VP-level and pronominal subjects can be omitted everywhere. On the other hand, non-null subject languages, like English, exhibit only structures like (15), with person features in Agr; they never 'drop' subject pronouns, as otherwise the violation of POOL at the VP-level would result and in addition the thematic properties of the verb would remain unrealised leading to a Theta Criterion violation.

It may be worth pointing out at this stage that certain questions arise in relation to Vainikka and Levy's (1999) approach to *pro*-drop. First of all, they suggest that AgrP is present in 1st and 2nd person verb forms in Finnish and Hebrew even if there is no material present in Agr (see example (14)). The problem is what motivates the presence of Agr in such cases. Vainikka and Levy do not deal with this question at all. It seems that the motivation for the presence of Agr in the cases considered may lie in the necessity to check [-interpretable] Nominative Case feature associated

with *pro*. This would mean that *pro* moves to Spec, AgrP, whereas the V to Agr in sentences like (14) in order to form the configuration in which the Nominative Case of *pro* can be checked. Consequently, it follows that the movement of the subject and the verb in the 1st and 2nd person in Finnish and Hebrew is contingent upon feature checking and does not result from POOL; the way Vainikka and Levy claim it to be. We will return to this issue in Section 4 while discussing the applicability of POOL to Irish.

Furthermore, the actual relation between the two mechanisms triggering movement, that is POOL on the one hand and feature checking on the other, remains unclear in Vainikka and Levy's analysis. They note that for their purposes it is immaterial which theory of movement is employed (Vainikka and Levy 1999: 625). In fact, the POOL-based theory of movement is necessary in Vainikka and Levy's analysis for 1st and 2nd person verb forms, for which Agr lacks N-features, whereas for 3rd person verb forms POOL does not have to be invoked at all (see example (15)). The question of whether POOL can be done away with also for 1st and 2nd person verb forms in Finnish and Hebrew (or, in general, for the verb forms licensing the occurrence of *pro*) will be addressed in Section 4.

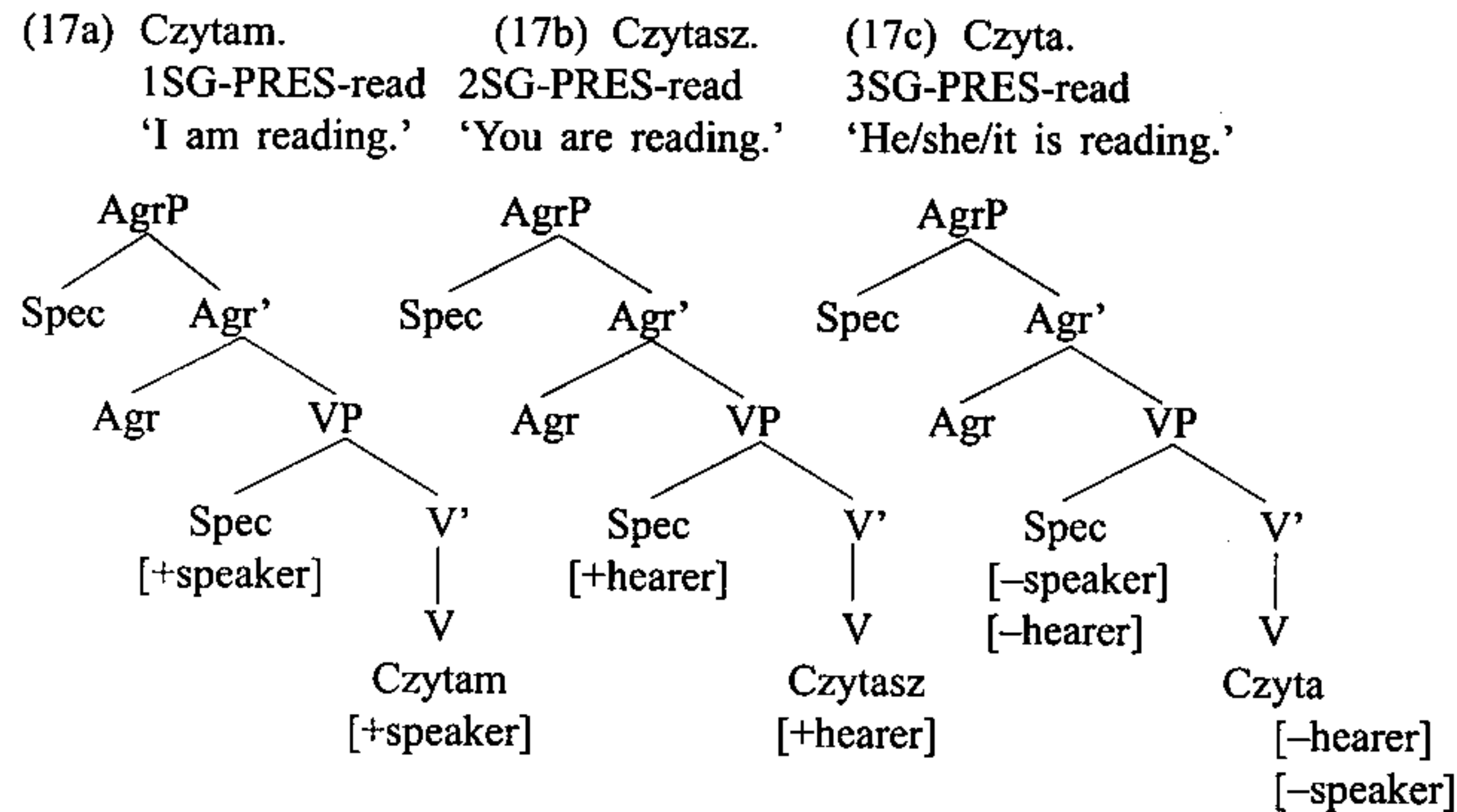
Vainikka and Levy's (1999) analysis is attractive basically for two reasons. Firstly, it provides an account of *pro*-drop phenomena in mixed null subject languages like Finnish and Hebrew, which have constituted a problem for any analysis of null subject languages offered so far. Secondly, their model seems to successfully handle data from totally unrelated languages like Finnish, Hebrew, Italian and English. They also claim that it may be applied to *pro*-drop phenomena practically in any language. It will be the purpose of Section 3 to test whether universal validity can be maintained for this approach in the light of the data from Polish and Irish.

4. Vainikka and Levy's Approach Applied to Polish and Irish

Let us first see how Vainikka and Levy's approach accounts for the *pro*-drop facts from Polish. Since Polish exhibits *pro*-drop for all persons, all person features in this language are base-generated in the subject position, i.e. Spec, VP. This is illustrated by the verb forms in (17a), (17b) and (17c), which encode the 1st, 2nd and 3rd person subject, respectively:

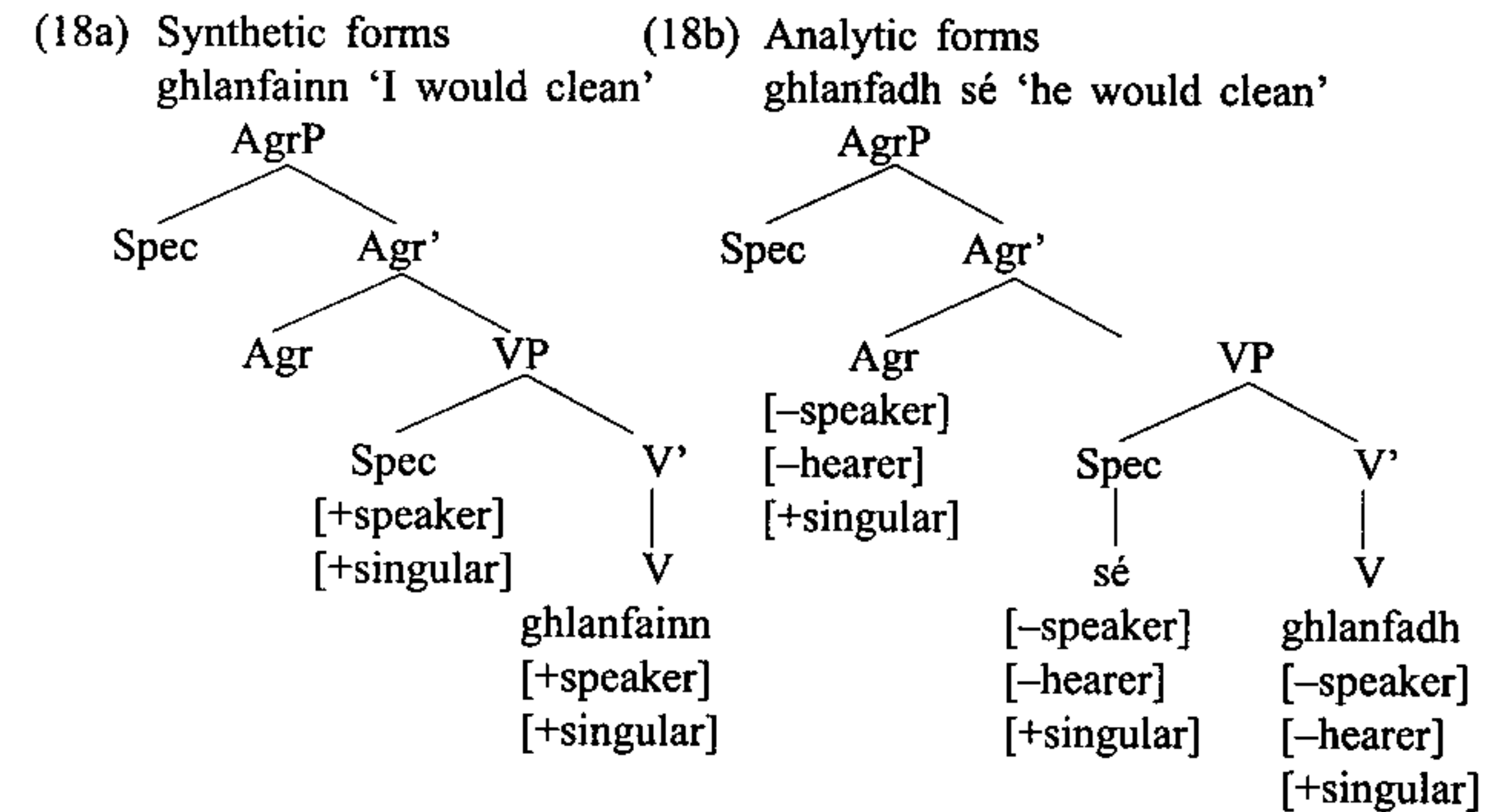
⁸ Vainikka and Levy's (1999) POOL is reminiscent of Speas's Principle of Economy of Projection, according to which either the head or the specifier of a projection must be filled.

⁹ POOL covers the EPP in that it requires that the subject position, just like any other specifier position, be filled.



No person features are located in Agr in Polish. To satisfy POOL, both the subject (which can be overt or covert, i.e. *pro*) and the verb in (17) have to move; the former moves to Spec, AgrP, whereas the latter does to Agr. This analysis of *pro*-drop in Polish, which is an embodiment of Vainikka and Levy's (1999) proposal, raises no problems, as it accounts for the whole range of Polish *pro*-drop phenomena presented in Section 1.

However, Vainikka and Levy's analysis turns out to be problematic when confronted with Irish data. First of all, it seems, on the basis of the description of *pro*-drop in Irish (see Section 2), that person features are not the only ones which play a role in subject omission. If they were, we would expect to find the same type of verb form (either analytic or synthetic) for the same person. This, however, is not the case in the Irish verbal paradigm, as in (9) and (10). (9) shows that 1st and 2nd person singular are synthetic, whereas the corresponding plural forms are analytic; 3rd person singular is analytic, while 3rd plural can be either analytic or synthetic. In (10) only 1st person singular is synthetic; all the remaining forms are analytic. Consequently, it seems that number distinction is also important in determining Irish *pro*-drop facts. Therefore, we may try to incorporate a number feature, i.e. [+/- singular] into Vainikka and Levy's account. What we would like to suggest is that in the case of synthetic forms person and number features occupy the Spec, VP node, whereas in the case of analytic forms they are located in Agr. These two options are presented in (18a) and (18b):



(18a) is similar to the Polish structures in (17a) – (17c); the only difference lies in that here number features are explicitly stated, but in Polish they do not seem to be relevant. Just like (17), (18a) is affected by subject movement to Spec, AgrP and V-movement to Agr to satisfy POOL. The subject in (18a) has to be covert, i.e. *pro*, a property which, as has already been noted in Section 1, distinguishes Irish from Polish and to which we will return in Section 4. As for (18b), POOL is violated unless an overt pronoun is inserted in Spec, VP, the pronoun then moves to Spec, AgrP and the verb to Agr.

If this analysis of *pro*-drop phenomena is adopted, the existence of doublets, such as those mentioned in (11) and exemplified by (19) is expected:¹⁰

- (19a) Synthetic form ghlanfaidís
 3PL-CONDIT-clean
 'they would clean'
- (19b) Analytic form ghlanfadh siad
 CONDIT-clean they
 'they would clean'

If the synthetic form (19a) is selected from the lexicon, then person and number features are base-generated in Spec, VP and the remaining steps are the same as in (18a). If, on the other hand, the analytic form enters the derivation, then the relevant features are base-generated in Agr and the same procedure applies as in (18b).

A natural question to ask at this point is why doublets are not possible for all persons in the conditional mood, but only for the 3rd person plural. In other words, we

¹⁰ The doublets given in (19) are just one instance in which both analytic and synthetic forms are allowed (see (11)). All other cases should be analysed in a way analogous to (19).

may ask why in pairs such as in (20) only one form is licit:¹¹

(20) Synthetic form	Analytic form
ghlanfainn	*ghlanfadh mé
1SG-CONDIT-clean	CONDIT-clean I
'I would clean'	'I would clean'
ghlanfá	*ghlanfadh tú
2SG-CONDIT-clean	CONDIT-clean you
'you would clean'	'you would clean'
no synthetic form	ghlanfadh sé
	CONDIT-clean he
	'he would clean'
no synthetic form	ghlanfadh muid
	CONDIT-clean we
	'we would clean'
no synthetic form	ghlanfadh sibh
	CONDIT-clean you-PL
	'you would clean'

The explanation of this problem which we believe to be right is that of McCloskey and Hale (1984). They argue that the unavailability of forms like the ones starred in (20) results from the mechanism of morphological blocking. This process blocks the application of a more productive morphological rule in favour of the rule of limited productivity. Whenever morphological blocking fails to operate, doublets occur, as in (19a) and (19b). However, where doublets exist, the one produced by the rule of limited productivity is restricted in register and function (see (19a)). In general, as noted by McCloskey and Hale (1984: 530-531), synthetic forms are preferred in formal registers and their common function is that of response.

So far it has been demonstrated that Vainikka and Levy's (1999) approach can be adopted for the description of *pro*-drop in Polish and Irish, with the reservation that in Irish not only person features but also number features seem to matter. Additionally, Irish employs a mechanism of morphological blocking, which, wherever applied, bans non-existent verb forms. A question which still remains concerns the incompatibility of synthetic forms in Irish with lexical subjects, which makes this language behave on a par with Standard Arabic (see Alexiadou and Anagnostopoulou 1998) rather than Polish. Another problem which has not been examined by Vainikka and Levy is how to look upon POOL in VSO languages like Irish. These two issues will be the main concern of Section 5.

¹¹ The same question arises in the case of past habitual forms, as in (10), where the doublets can be found only in 1st person singular.

5. Problems for Vainikka and Levy's analysis

As has already been mentioned in section 1, synthetic forms in Irish can never co-occur with overt subjects (see (12)). The explanation for this uncommon property, rarely found in *pro*-drop languages, may be captured in terms of agreement marking. What we would like to suggest is that Irish possesses a curious characteristic of marking agreement overtly only once, either on the subject or on the verb, that is, in the case of analytic forms agreement is marked on the subject, whereas in the case of synthetic ones it is overtly signalled on the verb.¹² There are no cases of double agreement marking and therefore forms like the ones in (12) are blocked. This property is, of course, parametrised, found in Irish (and probably in Standard Arabic) but not in the majority of *pro*-drop languages.¹³

Coordinate structures seem to be a problem for the explanation just provided, as the verb present in these constructions does not agree with the whole coordinate node, but rather with the NP adjacent to the verb. This pattern is illustrated in (21), quoted after McCloskey (1986: 254):¹⁴

(21a) Bhíos [NP *pro*-féin agus Eoghan] i láthair.
 be-PA-1SG EMPH and Owen present
 'Owen and I were present.'

(21b) *Bhíos Eoghan agus féin i láthair.

(21c) Bhí Eoghan agus mé féin i láthair.
 be-PA Owen and I EMPH present
 'Owen and I were present.'

Examples (21a) and (21b) show that the verb form used in coordinate structures does not agree with the coordinate NP (or DP). Instead, it seems that the use of the synthetic form in (21a) is contingent upon the leftmost element of the coordinate structure. This conclusion follows from the fact that (21b) with the reverse order of the conjoins than (21a) and with the synthetic form is illegitimate. Finally, (21c) with the analytic verb form is perfectly grammatical, as determined by the leftmost DP *Eoghan* 'Owen'. Coordinate structures appear to be problematic for the single

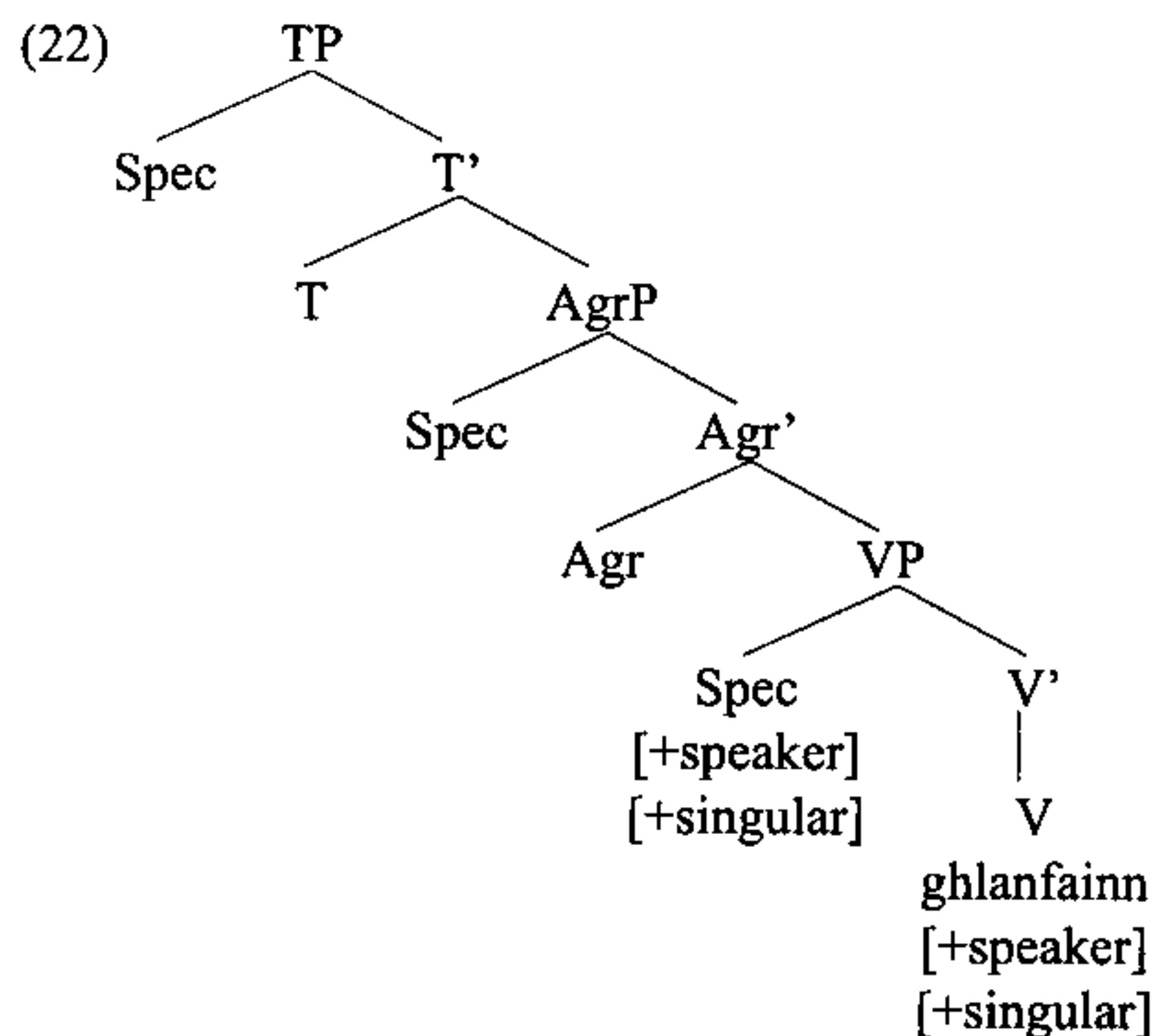
¹² The agreement properties of *pro* co-occurring with synthetic forms are marked only covertly, i.e. without any phonological realisation.

¹³ Doyle (2000) suggests an alternative explanation. According to him, synthetic forms are a kind of last resort used only when the features of the subject cannot be identified. They are not used with overt subjects, as their features are identifiable. The principle of economy ensures that the verb encodes only those features that are necessary for the correct interpretation. If lexical subjects are present, it is sufficient to mark the verb for tense and mood only, since person and number are signalled for the subject anyway. This restriction is subject to parametric variation. This explanation has to be qualified to be valid for coordinate structures discussed in the text.

¹⁴ In Irish only emphatic pronouns can be found in coordinate structures (see McCloskey 1986: 248 fn. 3).

overt agreement marking hypothesis just presented, because agreement on the verb and agreement on the coordinate node are different. If, on the other hand, we assume that adjacency comes into play in agreement marking in coordinate constructions, then all sentences in (21) will pattern in accordance with this hypothesis. In (21a) agreement is overtly marked on the verb but not on its adjacent subject (see footnote 12). (21b) is ungrammatical due to doubly-marked agreement, once on the verb and once on its adjacent lexical subject. In (21c) the verb carries no agreement features, only the leftmost conjoin does, so agreement is marked only once.

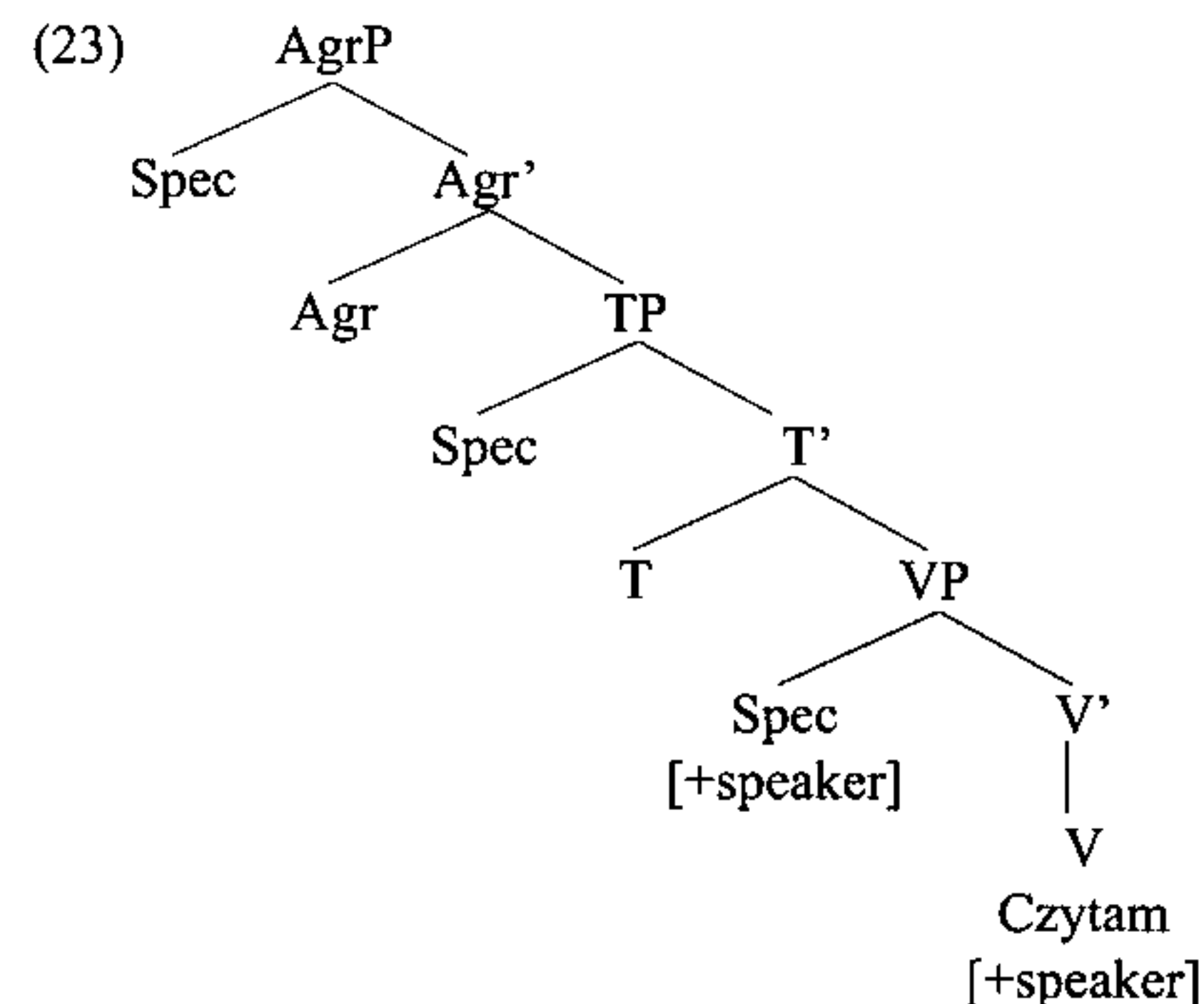
The final issue to be considered in relation to Vainikka and Levy's analysis is connected with POOL and its applicability to VSO languages like Irish. If POOL were operative in Irish above the Agr level, it would generate SVO orders illicit in finite clauses in this language.¹⁵ If we assume after Duffield (1995) and McCloskey (1996) that TP dominates AgrP in Irish, then example (18) will have the following structure:



(22) is analogous to (18a) at the level of AgrP. The problem arises at a higher level, since to satisfy POOL we have to claim that the V+Agr complex moves to T and the subject moves to Spec, TP producing SVO order, which is never found in Irish finite clauses. In Polish, there is no such problem, as it is an SVO language. Vainikka and Levy (1999) do not deal with VSO languages. Nonetheless, they note that POOL in the languages analysed by them is operative for the Agr projection only (Vainikka and Levy 1999: 627, fn. 7). This move adopted for Irish blocks unwanted SVO structures. However, it creates two additional problems. First, if, as Vainikka and

¹⁵ In non-finite clauses, Irish favours the SOV order (see Chung and McCloskey 1987).

Levy argue, movement is not triggered by the necessity to check features, it remains unclear what forces V+Agr complex in examples like (22) to move to T. Secondly, in Polish both V+Agr and the subject have to move to a higher level, though again it is not apparent what motivates these movements. For Polish the problems just mentioned may be avoided if one assumes a different ordering of TP and AgrP than in Irish. This is exactly what has been proposed in the literature by Witkoś (1996) and Tajsner (1998). If this line of reasoning is followed, then examples like (17a) will have the following structure:



In (23) the verb moves to Agr via T to satisfy POOL and the subject moves from Spec, AgrP via Spec, TP also to satisfy POOL. Consequently, we are left with one problem, namely how to force V+Agr raising to T in cases like (22). Bobaljik and Carnie (1996) argue that this kind of movement is triggered by strong V-features of Agr.¹⁶ To adopt Bobaljik and Carnie's explanation for why V+Agr move to T in cases like (22) would mean that POOL cannot be regarded as the only mechanism responsible for movement, but also feature checking has to be involved in this process. This is an unwelcome result, as we end up with two distinct mechanisms triggering movement, namely POOL operating at the Agr level and feature checking necessary at the T level. What we can do instead is to try to make sure whether the checking mechanism alone cannot be held responsible for movements in examples like (22). To recall, Vainikka and Levy (1999) claim that checking cannot serve as a straightforward motivation for movement, since the Agr position does not always

¹⁶ Bobaljik and Carnie (1996) assume, contrary to the assumption made in this paper, that AgrP dominates TP in Irish. Therefore for them it is not the V+Agr complex that moves to T in (22) but rather V+T which moves to Agr.

carry person features but nonetheless *V* raising and subject raising take place. What has already been suggested at the end of Section 2 is that both these raisings are motivated by the need to check Nominative Case. In other words, the subject moves to Spec, AgrP and the *V* to Agr, which is a configuration in which Nominative Case of the subject can be checked. Nominative Case in Irish has to be checked overtly (i.e. before Spell Out), as demonstrated by sentences such as (24):

- (24) Deireann siad i gcónaí paidir roimh am lui.
 say they always prayer before time lie [FIN]
 (McCloskey 1996: 269)
 ‘They always say a prayer before bed-time.’

In (24) the subject occurs to the left of the VP-adjoined adverb *i gcónaí* ‘always’ and therefore it cannot be inside the VP. This gives us grounds for claiming that the subject must raise from its VP-internal position to a higher inflectional position for Case checking purposes. However, the suggestion just made that the subject and the verb move in order to check the Nominative Case of the former creates a kind of paradox: on the one hand Agr lacks N-features in examples like (22), but on the other hand, it triggers NP-movement for Nominative Case checking, a property of Agr with strong N-features.¹⁷ We can see no way in which these two contradictory properties can be reconciled. Since it seems that POOL cannot be done away with and replaced with feature checking within Vainikka and Levy’s model, we are left with a situation in which POOL operates at the Agr level only, whereas at the T level in Irish V+Agr movement is triggered by strong V-features of T. V+Agr movement is not accompanied by subject raising from Spec, AgrP to Spec, TP, as T has weak N-features (see McCloskey 1996: 270).¹⁸

In this section a single overt agreement marking hypothesis has been proposed for Irish to account for the lack of overt subjects with synthetic verb forms. It has also been observed that POOL has to be restricted to the Agr level only for VSO languages like Irish and feature checking has to be operative at the T level.

5. Conclusion

The paper has focussed on the *pro*-drop phenomena in Polish and Irish. The main difference between these two languages concerns the fact that Polish ‘drops’ pronominal subjects for all persons in every tense and mood, whereas in Irish this kind of omission is allowed in highly restricted contexts only. Furthermore, Irish, in contradistinction to Polish, blocks the occurrence of lexical subjects with inflected verb

¹⁷ No such problem occurs if N-features are located under the Agr node, as in the case of analytic verb forms.

¹⁸ According to McCloskey (1996), the weak N-feature of T in Irish is responsible for the lack of EPP effects in this language.

forms. The model whose validity for Polish and Irish data has been tested is that of Vainikka and Levy (1999). It has been demonstrated that their analysis works well for the whole range of Polish *pro*-drop facts. However, the model turns out to be more problematic when confronted with Irish data. First of all, it has been observed, in contrast with Vainikka and Levy’s claim, that in Irish person features are not the only ones that are important in determining the location of *pro*; number features also have to be taken into account. Secondly, POOL, which, according to Vainikka and Levy, is the only factor motivating movement, has to be restricted to the Agr level for Irish, as otherwise it would bring about an illicit SVO word order. Additionally, POOL cannot be regarded as the only principle triggering movement in Irish; instead, it has to be accompanied by feature checking operating at the T level. Finally, it has been argued that in Irish there is a parameter which specifies that agreement can be marked overtly only once, either on the subject or on the verb. This parameter has been held responsible for the incompatibility between inflected verb forms and lexical subjects in Irish.

List of Abbreviations

CONDIT – conditional	IMPERAT – imperative
EMPH – emphatic	PA – non-virile past
FIN – finite	PRES – present
1SG – 1 st person singular	Q – question particle
2SG – 2 nd person singular	
3SG – 3 rd person singular	
1PL – 1 st person plural	
2PL – 2 nd person plural	
3PL – 3 rd person plural	

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