

A Unified Account for Italian *Pro*-Drop and German Topic-Drop*

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1 Introduction

In the Principles-and-Parameters model of grammar (Chomsky 1981), syntactic variations of null arguments can be deduced from the pro-drop parameter and the topic-drop parameter.

In a language like English in which null subjects and null objects are impossible, the pro-drop parameter and the topic-drop parameter are set to off.

(1) [- pro-drop, - topic-drop] (cf. English)

In a language like Italian in which null subjects are possible but null objects are impossible, the pro-drop parameter is set to on but the topic-drop parameter is set to off.

(2) [+ pro-drop, - topic-drop] (cf. Italian)

In a language like German in which both null subjects and null objects are possible, the pro-drop parameter is set to off and the topic-drop parameter is set to on.

(3) [- pro-drop, + topic-drop] (cf. German)

The purpose of this presentation is to provide a unified account for Italian *pro*-drop and German topic-drop phenomena without appealing to the notion of parameters.

Main claim:

Null arguments are derived from Delete-feature assignment at the CP probe-level.

The key to deriving the variation is whether C-to-T feature-inheritance takes place.

- Section 2: A Mechanism of PF-Deletion: A Proposal
- Section 3: A Unified Account for Italian *Pro*-Drop and German Topic-Drop
- Section 4: Conclusion

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2 A Mechanism of PF-Deletion: A Proposal

Assumption 1: Chomsky's (2007, 2008) probe-goal system

- (4) a. The phase head C has two probes, an edge-feature (EF) and ϕ -features. (\rightarrow (5))
- b. ϕ -features are inherited by T from C (C-to-T feature-inheritance). (\rightarrow (6))
- c. ϕ -probe is subject to intervention effects but EF-probe is not.

(5) $C_{[EF][\phi]}$

(6) $C_{[EF]} \dots T_{[\phi]}$

Assumption 2: A feature that triggers PF-deletion (cf. Merchant's 2001, 2008 E feature)

- (7) C bears a Delete-feature that is responsible for null arguments. (cf. Sigurðsson 2011)

(8) $C_{[EF][\phi][Delete]}$

Assumption 3: On C-to-T feature-inheritance (Goto 2010, 2011, cf. also Obata 2010)

- (9) C-to-T feature-inheritance does not take place in the V2 environment. (Appendix 1)

Claim: Null arguments are derived from Delete-feature assignment at the CP probe-level.

(10) $C \dots T_{[\phi][Delete]}$ (in non-V2 environment, cf. Italian)

☞ Delete-feature assignment applies at the ϕ -probe-level.

(11) $C_{[EF][Delete]} \dots T$ (in V2 environment, cf. German)

☞ Delete-feature assignment applies at the EF-probe-level.

Prediction: The distribution of null arguments in Italian (non-V2) is restricted by the ϕ -probe that is subject to intervention effects, but the distribution of null arguments in German (V2) is restricted by the EF-probe that is not subject to intervention effects.

3 A Unified Account for Italian *Pro*-Drop and German Topic Drop

3.1 Deriving null arguments in Italian

- ★ Italian allows null subjects.

(12) [e] parla.
 ‘He/She is speaking.’

- ★ The standard approach is to assume *pro* in the subject position.

(13) *pro* parla.

- ★ Instead, I propose the probe-goal approach.

(14) a. [C_{[φ][Delete]} [T<sub>[vP] egli parla]] (φ-&-Delete)
 b. [C [T_{[φ][Delete]} [vP egli parla]]] (φ-inheritance)

 c. [C [T_[φ] [vP egli_[Delete] parla]]] (φ-probe)

 d. [C [T_[φ] [vP ~~egli~~_[Delete] parla]]] (PF-deletion)</sub>

- ☞ Firstly, C enters a derivation with φ-features and a Delete-feature. (→(14a))
- Secondly, T inherits a Delete-feature and φ-features from C. (→(14b))
- Thirdly, φ-probe assigns a Delete-feature to the agreeing subject. (→(14c))
- Finally, the Delete-assigned subject gets deleted at PF. (→(14d))

Consequence: Under the probe-goal approach, *pro* is eliminable from the grammar and such a null entity is just the result of PF-deletion of a full-fledged pronoun.

- ★ The proposed approach straightforwardly explains why Italian does not allow null objects.

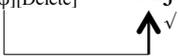
(15) a. *Mario ha costretto [e] a partire.
 Mario has.3SG forced (me / her / ...) to leave
 b. *Gianni sa che Maria [e] vide
 Gianni knows.3.SG that Maria (him) saw (Rizzi 1986: 517)

(16) T_{[φ][Delete]} ... Subj ... Obj


- ☞ Obj cannot be null because the intervening Subj blocks Delete-assignment.

Prediction: Obj can be null when there is no intervening Subj.

(17) ... tre uova ... Rompere [e] in una scodella. Sbattere [e] con cura.
 three eggs break.INF into a bowl. beat.INF with care
 (Sigurðsson and Maling 2008: 24)

(18) $T_{[\phi][Delete]} \dots \text{Obj}$


☞ Obj can be null because there is no intervening Subj that blocks Delete-assignment.

★ Unlike Italian, English does not allow null subjects.

(19) *[e] speaks.

(20) Assumption (Alexiadou and Anagnostopoulou 1998)
 EPP on T can be satisfied via V-raising in Italian but not in English.

(21) [$T_{[EPP]}$ [$_{VP}$ she_[Delete] speaks]]


☞ EPP is not satisfied; hence English (19) is ungrammatical when Subj deletes.

(22) [$T_{[EPP]}$ -parla [$_{VP}$ egli_[Delete] t_i]]


☞ EPP is satisfied by V-raising; hence Italian (14d) is grammatical even if Subj deletes.

★ Like Italian, English does not allow null objects.

(23) *She speaks [e].

(24) $T_{[\phi][Delete]} \dots \text{Subj} \dots \text{Obj}$


☞ Obj cannot be null because the intervening Subj blocks Delete-assignment.

(25) Take 3 beaten eggs. Put [e] in a hot oven for 5 minutes. Watch [e] carefully.
 (Massam and Roberge 1989: 135)

(26) $T_{[\phi][Delete]} \dots \text{Obj}$


☞ Obj can be null because there is no intervening Subj that blocks Delete-assignment.

3.2 Deriving null arguments in German

- ★ Unlike Italian, German allows both null subjects and null objects.

- (27) a. (Ich) hab' ihn schon gesehen.
 (I) have him already seen
 '(I saw him already.'
 b. (Ihn) hab' ich schon gesehen.
 (him) have I already seen
 'I saw (him) already.'

(Huang 1984: 547)

- ★ The standard approach to German null arguments is to assume topic-drop.

- (28) [_{TopP} (Ich/Ihn) [...]]

- ★ Instead, I propose the probe-goal approach.

- (29) C_{[EF][Delete]} ... Subj ... Obj

☞ Delete-assignment can access Obj beyond Subj, as the EF-probe is intervention-free.

- (30) C_[EF] ... ~~Subj~~_[Delete] ... Obj

☞ When a Delete-feature is assigned to Subj, Subj gets deleted at PF. (→(27a))

- (31) C_[EF] ... Subj ... ~~Obj~~_[Delete]

☞ When a Delete-feature is assigned to Obj, Obj gets deleted at PF. (→(27b))

Consequence: Under the probe-goal approach, the topic-drop parameter is unnecessary and such a null entity is just the result of PF-deletion of a full-fledged pronoun.

- ★ Why doesn't (27a) become ungrammatical as an EPP violation even if Subject deletes?

- (32) Assumption (Abe 2010, Goto 2010, 2011)

EPP on T is activated only when C-to-T feature-inheritance takes place.

- (33) [T [_{vP} ~~Ich~~_[Delete] [...]]]

☞ EPP is not activated; hence German (27a) is grammatical even if Subj deletes.

Prediction: Neither Subj nor Obj can be null when there is an element in SPEC-CP.

(34) a. *Ihn hab' [e] schon gesehen.
 him have (I) already seen
 'I saw him already.'

b. *Ich hab' [e] schon gesehen.
 I have (him) already seen
 'I saw (him) already.'

(Huang 1984: 547)

c. *Wer hat [e] schon gesehen?
 who has (it) already seen
 'Who has already seen it?'

(Rizzi 1986: 513, fn. 8)

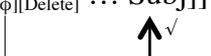
(35) [_{CP} Ihn/Ich/Wer C_{[EF][Delete]} ... Subj ... Obj]


☞ Delete-assignment cannot apply because EF is satisfied by an element in SPEC-CP.

★ Unlike German, Italian allows null subjects even if there is an element in SPEC-CP.

(36) Dove (egli) va?
 Where go-3sg
 'Where is he going?'

(Deal 2005: 35; cf. also Rizzi 1994)

(37) [_{CP} Dove C_[EF] [T_{[φ][Delete]} ... Subj]]


☞ Delete-assignment applies at the φ-probe-level, thus SPEC-CP doesn't matter.

3.3 Deriving a difference between Italian and German

★ Italian allows null subjects in the embedded clause.

(38) so che cosa (te) hai detto.
 know-1SG what thing you have-2SG said
 'I know what you said'

(Deal 2005: 35, Rizzi 1994)

★ German doesn't allow null subjects in the embedded clause (cf. (27a)).

(39) Hans glaubt *(ich) habe es gekauft.
 Hans believes I have it bought
 'Hans believes that I have bought it yesterday'

(Rizzi 2005: 14)

(40) ... (te) hai detto.

a. [C [T_[φ] [L_{VP} te_[Delete] hai detto]]] (φ-probe & Delete-assignment & deletion)

b. [C [T_[EPP]-hai [L_{VP} te_[Delete] t_i detto]]] (V-raising & EPP-satisfaction)

☞ Italian (38) is grammatical because EPP is satisfied by V-raising when Subj deletes.

★ German embedded clauses fall into the non-V2 environment (→(41b)).

(41) a. Der Mann **hat** den Hund gesehen. (V2)

the man have the dog seen

‘The man has seen the dog.’

b. Er sagte daß der Mann den Hund gesehen **hat**. (Non-V2)

he said that the man the dog seen have

‘He said that the man has seen the dog.’

Consequence: In German (39), Delete-assignment applies at the φ-probe-level.

(42) ... *(ich) habe es gekauft.

a. [C [T_[φ] [L_{VP} ich_[Delete] habe es gekauft]]] (φ-probe & Delete-assignment & deletion)

b. [C [T_[EPP] [L_{VP} te_[Delete] habe es gekauft]]] (No V-raising; hence EPP-violation)

☞ German (39) is ungrammatical because EPP is not satisfied by V-raising (cf. (21)).

Prediction: Null objects are not allowed in the German embedded clause (cf. (27b)).

(43) a. *Du weißt, daß Ich [e] gesehen habe.

you know that I (her / him / it) seen have

‘You know that I have seen (her / him / it).’ (Cardinaletti 1990: 76)

b. *sagt Hans, hat/habe er [e] gesehen.

says Hans has/have-subj he (it) seen

‘Hans says he has seen (it).’ (Deal 2005: 40, Cardinaletti 1990: 77)

(44) T_{[φ][Delete]} ... Subj ... Obj

☞ Obj cannot be null because the intervening Subj blocks Delete-assignment.

3.4 Deriving null arguments in Icelandic

Prediction: The distribution of null arguments in Icelandic should be like German.

★ Like German, Icelandic allows both null subjects and null objects in the matrix clause.

(45) a. (Ég) þekki það ekki.
(I) recognize that not (Sigurðsson and Maling 2008: 5)

b. (Það) þekki'ég) ekki.
(that) recognize'I not (Sigurðsson and Maling 2008: 14)

(46) $C_{[EF][Delete]} \dots \text{Subj} \dots \text{Obj}$


☞ Both Obj as well as Subj can be null because Delete-assignment by EF-probe is intervention-free.

★ Like German, null arguments are not allowed when there is an element in SPEC-CP.

(47) a. Núna þekki *(ég) það ekki.
now recognize (I) that not (Sigurðsson and Maling 2008: 6)

b. Núna þekki'ég) *(það) ekk
now recognize'I (that) not (Sigurðsson and Maling 2008: 14)

c. Stundum tala *(ég) íslensku.
sometimes speak.1.SG (I) Icelandic (Sigurðsson 2011: 287)

(48) $[_{CP} \text{Núna/stundum } C_{[EF][Delete]} \dots \text{Subj} \dots \text{Obj}]$


☞ Delete-assignment cannot apply because EF is satisfied by an element in SPEC-CP.

(49) Assumption (Holmberg and Platzack 1995 among many others)

Icelandic embedded clauses are V2 environments.

Prediction: In the Icelandic embedded clause, Delete-assignment applies at the EF-probe-level.

(50) a. Vissi ég að (þetta) mundi gerast
knew I that (this) would happen

b. Vissi ég að þú myndir segja (þetta).
knew I that you would say (this) (cf. Sigurðsson 2008: 8)

☞ Subj and Obj can be null, since Delete-assignment by EF-probe is intervention-free (cf. (46)).

4 Conclusion

- ★ Delete-feature assignment at the ϕ -probe-level =>
Null arguments in the non-V2 environment, cf. Italian, English German embedded clauses
- ★ Delete-feature assignment at the EF-probe-level =>
Null arguments in the V2 environment, cf. German matrix clauses and Icelandic
- ★ The *pro*-drop parameter and the topic-drop parameter are unnecessary for the explanation of the variation of null arguments. The point is whether C-to-T feature-inheritance takes place or not in terms of (9), which is repeated below in (51).

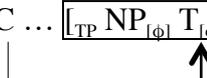
(51) C-to-T feature-inheritance does not take place in the V2 environment.

5 Appendix: The Motivation for (51)

- ★ Chomsky (2008): C-to-T feature-inheritance takes place at the CP-phase-level.

(52) C ... T_[ϕ]


- ★ Richards (2007): The inheritance takes place when CP and TP are transferred *separately*.

(53) [_{CP} C ... [_{TP} NP_[ϕ] T_[ϕ] ...]] (TP-Transfer)


Prediction: The inheritance is unnecessary when CP and TP are transferred *in full*.

(54) [_{CP} C_[ϕ] ... [_{TP} NP_[ϕ] T ...]] (CP-Transfer)

- ★ Chomsky (2004: 108): Root CP is transferred *in full*.

(55) a. [_{CP} *who will*(C) [_{TP} John visit]] (cf. English matrix *wh*-questions)
b. [_{CP} *der Mann hat*(C) [_{TP} den Hund gesehen]] (cf. German V2 environments)

Conclusion: C-to-T feature-inheritance does not take place in the V2 environment.

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