

SESSION V: NEW APPROACHES TO NULL SUBJECT PHENOMENA – EAST ASIAN-TYPE NULL SUBJECT LANGUAGES

1. DISCOURSE OR RADICAL PRO-DROP LANGUAGES RECONSIDERED

- Radical pro-drop languages are those which permit pro-drop despite their total lack of verbal agreement morphology – e.g. Japanese, Korean, Chinese, Thai, Vietnamese, Indonesian, Burmese, Khmer, ...
- traditional explanations – 2 tacks:
 - null subjects may be of a different type – e.g. bound variables (Huang 1984)
 - null subjects may indeed be *pro*, which is, in this case, licensed by the total absence of inflection (cf. Jaeggli & Safir 1989)
- Müller (2007: 6): “... there is no evidence for person feature impoverishment in languages like Korean, where there is no person marking in the first place. Therefore, pro-drop in these languages is also predicted to be possible.”

(For Müller: morphological richness = absence of system-defining person impoverishment)

- Why we might want to re-examine *pro*-drop in languages with no verbal agreement morphology:
 - (a) there are languages where the absence of verbal agreement does NOT result in radical *pro*-drop, e.g. Afrikaans, Swedish, Norwegian; creoles like Papiamentu, Jamaican creole, and Tok Pisin:

(1) a. **(Ek) skryflesings en (hulle) skryfverslae* [Afrikaans]
I write lectures and they write reports

“I am writing lectures and they are writing reports”

(2) a. **(mi) a rait* [Papiamentu]
I _{PROG} write = “I am writing”

b. *Ta kiko *(bo) ta hasi?*
PRT what you _{PROG} do = “What are you doing?”

(b) there are languages where the occurrence of partial (i.e. non-full) agreement on

verbs does NOT block the availability of *pro*-drop patterns (unlike English, French etc.), e.g. Kokota (Palmer 1999); and

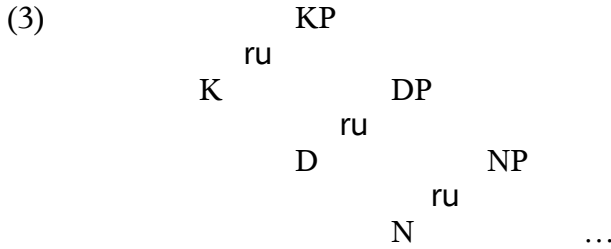
(c) if total absence of agreement allows for *pro*-drop, lack of object agreement in English, German, French may be expected to allow for object *pro*-drop in these languages, but that’s not what we find.

- A new proposal = Neeleman & Szendrői/N&S (forthcoming): the morphological structure of pronominal elements in a language may determine whether it permits *pro*-drop. In particular, languages with agglutinating/analytic morphology in DPs will license *pro*-drop for **pronoun**-related reasons.

2. BACKGROUND TO THE PROPOSAL IN N&S

2.1. Spell-out rules for pronouns

- Assumption: extended nominal projections are as in (3). (K = case)



- Late spell-out (Halle & Marantz 1993):
 - syntactic terminals don't contain phonological information
 - syntactic representations are associated with phonological material in a mapping procedure at PF
 - this allows for the spell-out not only of terminal nodes, but also *larger chunks of structure*

Pronouns often spell-out larger chunks of structure than just D or N

- Weerman & Evers-Vermeul (2002) on 3 types of possessive pronoun in Dutch:

- regular possessive pronouns realize **just D**:

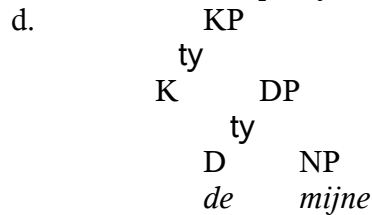
(4) *(*de) mijn mooie boek*
 the my pretty book = “my pretty book”

- Another type of possessive pronoun spells out **NP**: always requires an overt determiner, but can't co-occur with overt N or with overt adjectives

(5) a. *De mijne is gestolen*
 The mine is stolen = “Mine has been stolen”

b. **Mijne is gestolen*

c. **De mijne mooie boek*
 the mine pretty book

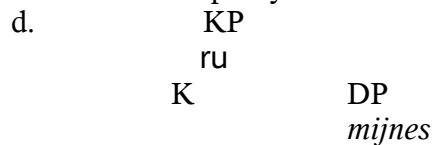


- A third type in non-standard Dutch spells out **DP**: no other overt D, N or Adj allowed

(6) a. *Mijnes is gestolen*
 mine is stolen = “Mine has been stolen”

b. **De mijnes is gestolen*
 the mine is stolen

c. **Mijnes mooie boek*
 mine pretty book



- Weerman & Evers-Vermeul suggest that personal pronouns like *hem* 'him' and *hij* 'he' spell-out KPs:
 - they cannot co-occur with any other KP/DP-internal elements, and show overt case alternations

(7) PF spellout rule for *hem*
 $[\text{KP} +\text{p}, -\text{a}, 3, \text{SG}, \text{MASC}, \text{ACC}] \Leftrightarrow /hem/$

2.2. *Pro-drop as zero spell-out of regular pronouns*

- Key proposal: phonetically null arguments are *regular pronouns in syntax* that fail to be realized at the PF interface, and are not a special lexical element *pro*.
- Radical pro-drop languages have available the spellout rule for pronouns in (8):

(8) $[\text{KP} +\text{p}, -\text{a}] \Leftrightarrow \emptyset$

2.3. *The role of the Elsewhere Condition* (Kiparsky 1973)

- General intuition behind the Elsewhere Condition: where two rules could potentially apply in the same environment, the more specific rule blocks the application of the more general rule (which applies 'elsewhere').
- Illustration: English past tense form of the verb *go* = *went* not **goed*
- The specific rule for *go* in (9c) pre-empts the application of the general past tense rule in (9b):

(9) a. $\text{GO} \Leftrightarrow /go/$
 b. $\text{PAST} \Leftrightarrow /-ed/$
 c. $\text{GO}+\text{PAST} \Leftrightarrow /went/$

(10) The **Elsewhere Condition** formally stated:

If the structural description of a rule A (a special rule) properly includes the structural description of a second rule B (a more general rule), then it is rule A which is applied to an appropriate input form (not rule B).

- (9c) properly includes (9b), so (9c) applies rather than (9b).

2.4. *Two implications of the Elsewhere Condition for the phonological realization of syntactic structures.*

- Implication 1

The Elsewhere Condition favours spell-out of a category C over spell-out of the categories contained within C, all else being equal.

(11)
$$\begin{array}{ccc} & \text{WO} & \\ & \text{target of (9a)} \rightarrow \text{GO} & \text{PAST} \leftarrow \text{target of (9b)} \end{array}$$

Rule (9c) spells-out a constituent which contains two other categories. Spell-out of V as */went/* therefore blocks individual spell-out of the categories contained within V: *GO* and *PAST* \rightarrow **go-ed*

GENERALIZATION: Spell-out of a higher-level category will generally involve a more specific rule than spell-out of the categories contained in it. It will therefore be favoured over spell-out of lower-level categories.

- Implication 2

All else being equal, the Elsewhere Condition gives preference to a phonological realization of a category C that spells out more of C's features over a phonological realization that spells out fewer features (again a more specific rule, referring to more features, than a less specific rule, that could be applied in a wider set of environments).

Example case: the spell-out of person agreement in German

- Assumption: person distinctions are syntactically encoded through two features:
 - (a) PAR = participant in speech act
 - (b) ADD = addressee
 - 1st person = [PAR] (a participant but not an addressee)
 - 2nd person = [PAR, ADD] (both a participant and an addressee)
 - 3rd person = [] (no person features, neither participant nor addressee)

(12) Spell-out rules for person in German:

- [PERSON PAR] \Leftrightarrow /e/
- [PERSON PAR, ADD] \Leftrightarrow /st/
- PERSON \Leftrightarrow /t/ (i.e. simply 'person', no sub-features PAR or ADD)

Applications:

- for 3rd person, only (12c) can apply; (12a/b) are over-specified
- for 1st person, both (12a) and (12c) might apply in principle
- for 2nd person, all of (12a-c) might apply in principle

The correct patterns are captured if it is assumed that selection of the rule which spells out more of C's features over a phonological realization that spells out fewer features is made:

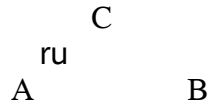
- for 1st person, (12a) spells out more features than (12c) so blocks (12c)
- for 2nd person, (12b) spells out more features than either (12a) or (12c), and so blocks both of these

- ich spiel*-[PERSON PAR] \rightarrow *ich spiele* (“I play”)
 - du spiel*-[PERSON PAR, ADD] \rightarrow *du spielst* (“you play”)
 - er spiel*-[PERSON \emptyset] \rightarrow *er spielt* (“he plays”)

2.5. Optionality in rule application

- The two implications of the Elsewhere Condition may conflict with each other:
 - Implication I favours spellout of higher categories.
 - Implication II favours spellout of more features.

Consider a situation where category C contains two categories A and B:



- If the spell-out rule for category C realizes fewer features than the use of spellout rules for both categories A and B, then there is a conflict between Implication I (spellout higher categories) and Implication II (overt realization of more features).
→ a stalemate: neither form will block the other, both realizations are allowed
- the importance of 'all else being equal': the effects of the implications apply only as long as there is no conflict between them; conflict → optionality

2.6. Back to pro drop

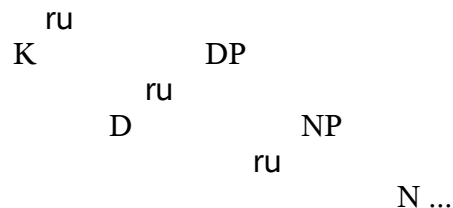
Consider instances where the spellout rule for pronouns targets KP, as in (14), and the general 'radical' pro-drop rule (15) also targets KP:

(13) $[_{\text{KP} + \text{p}, -\text{a}, 3, \text{SG}, \text{MASC}, \text{ACC}}] \Leftrightarrow / \text{hem} /$ PF spellout rule for Dutch *hem*

(14) $[_{\text{KP} + \text{p}, -\text{a}}] \Leftrightarrow \emptyset$

- Rules (13) and (14) are in competition, targeting the same chunk of syntactic structure.
- Due to the Elsewhere Condition, (13) will always win out, being the more specific rule which spells-out more features of the target than (14), a much more general rule.
→ radical *pro*-drop will always be blocked where languages have pronoun spellout rules such as (13). Hence Dutch does not exhibit radical *pro*-drop.

(15) target of spell-out → KP ← target of radical rules for pronouns pro-drop rule (18)



- Does *pro*-drop ever occur when spellout rules for pronouns and a *pro*-drop rule target the same category KP?

Yes. A language may have a **context-sensitive *pro*-drop rule** different from (14), mentioning the presence of **agreement**, as in (16):

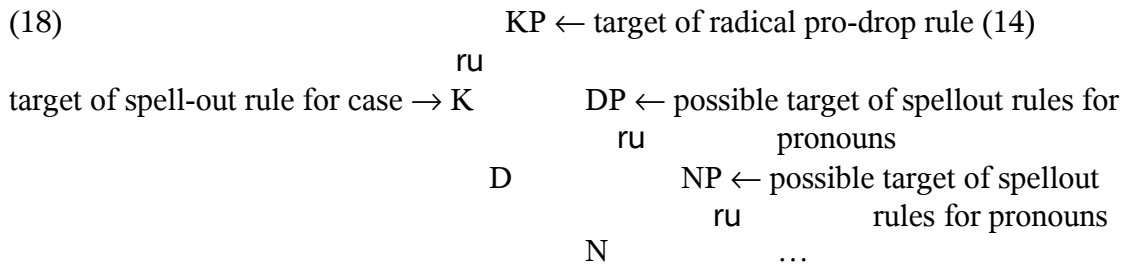
(16) $[_{\text{KP} + \text{p}, -\text{a}, \phi_i}] \Leftrightarrow \emptyset / _ [\phi_i]$

- (16) is NOT in competition with the spell-out rules that result in overt pronouns. Although both may target KP, each is more specific than the other in different ways.
 - Compare (16) with a rule (17) for Italian *egli* 'he':
- (17) $[_{\text{KP} + \text{p}, -\text{a}, 3, \text{SG}, \text{MASC}, \text{NOM}}] \Leftrightarrow / \text{egli} /$
- (17) is more specific than (16) in mentioning SG, MASC, NOM.
 - (16) is more specific than (17) in mentioning the presence of agreement.

→ (16) and (17) are not in an 'elsewhere relation', so either can be employed, and Italian (and other languages with full/rich agreement) can have context-sensitive *pro*-drop (where this is made possible by the presence of verbal agreement).

3. ANALYSING RADICAL *PRO*-DROP

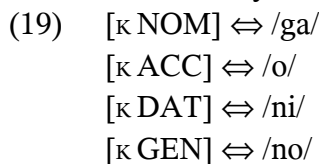
- For the radical *pro*-drop rule (14) to be able to have an effect and not be blocked, a language must have spell-out rules for lower levels of structure than KP.
- Consider the situation if a language has a separate spell-out rule for K, case. This will force the spell-out rule for pronouns to be understood as targeting a category other than KP, perhaps DP or NP:



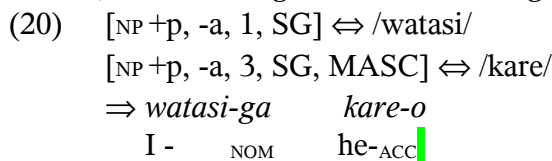
- The result = two options:
 - **Option 1:** the pronoun and its case-marker are spelled out by the two spellout rules. This is possible because it results in the overt spellout of more features than use of the *pro*-drop rule (14) (the effects of Implication 2 of the Elsewhere Condition).
 - **Option 2:** the *pro*-drop rule (14) is used. This is possible because the spellout rules are not targeting the same chunks of structure, and Implication 1 of the Elsewhere Condition favors/allows for the spellout of higher categories which contain sets of lower categories.

3.1. An example case: Japanese

- Japanese has case-morphemes which are added to pronouns. These can be assumed to be added by the spell-out rules in (19):



- Because there is a spellout rule for K, the spell-out rule for pronouns cannot target KP, and must target some lower category – either DP or NP (N&S assume NP):



(21)		KP ← target of <i>pro</i> -drop rule (14)
	ru	
target of →	NP	K ← target of spell-out rule for case
spell-out		
rule for	<i>watasi</i> -	<i>ga</i>
pronouns		

- Because Japanese is a language where the situation in (18) holds, EITHER NP and K can be spelt out overtly, OR KP can be interpreted as \emptyset by the *pro*-drop rule.
- **Important generalization:** the occurrence of sets of spellout rules for categories lower than KP is what critically allows for radical (non-agreement-mediated) *pro*-drop, and this requires **clear agglutination** of some KP-internal feature on pronoun stems.
- If a language has pronoun forms that are purely **fusional**, there will not be sets of spell-out rules for KP-internal categories. Pronoun spell-out rules and the radical *pro*-drop rule (14) will therefore both target KP, and the pronoun spell-out rules will block the *pro*-drop rule (14), being more specific and spelling out more features overtly.

(22)	target of spell-out →	KP	← target of <i>pro</i> -drop rule (18)
	rule for Dutch		
	pronouns <i>hem</i>		

3.2 Non-case-marked radical *pro*-drop languages

- In languages without case-markers, radical *pro*-drop will still be licensed if some other KP-internal feature is spelt out on pronouns in an agglutinating way.
- The occurrence of *any* KP-internal productive/regular agglutination on pronouns will provide evidence for sets of KP-internal spell-out rules targeting categories lower than KP, and hence not in competition with the *pro*-drop rule (14). In all cases, this should allow for *pro*-drop to occur.
- Wherever radical *pro*-drop occurs (= *pro*-drop not licensed contextually by agreement), N&S predict there must be some regular KP-internal agglutination/regular analytic morphology.
- **Chinese:** In Chinese, it is suggested that the existence of the regular, agglutinative, plural attachment *-men* indicates that there are two KP-internal spell-out rules, one for [PLURAL] and one for pronouns. Pronouns are therefore spelt-out as categories lower than KPs (NPs for N&S).

(23)	[_{NP} +p, -a, 1, SG] ⇔ /wǒ/	[_K ...] ⇔ \emptyset
	[_{NP} +p, -a, 2, SG] ⇔ /nǐ/	[_{PL}] ⇔ /men/
	[_{NP} +p, -a, 3, SG] ⇔ /tā/	[_{POSS}] ⇔ /de/

- These rules generate pronouns like (33).

(24)	a. wǒ-men- \emptyset	b. wǒ-de	c. nǐ- men- \emptyset
	I- PL- CASE	I - POSS	you-PL- CASE

- Because of this agglutination of the KP-internal plural morpheme *-men* with pronouns, it is expected that Chinese will allow radical *pro*-drop.

3.3 Languages with no verbal agreement and no KP-internal agglutination

- Languages with no KP-internal agglutination are expected NOT to license radical *pro*-drop.
- If such languages also have no verbal agreement to license context-sensitive *pro*-drop, then no *pro*-drop will occur in the language.
- Example: Jamaican creole and other creoles: fusional pronouns, no case-marking, no agglutinative plural marking

(25) **SG** **PL**

1 *mi* *wi*

2 *yu* *unu*

3 *im, i* *dem*

(26) a. **(Mi) a rait*

“I am writing”

b. *Nobadi neva sii *(im)*

“Noboday ever saw him”

- For approaches to *pro*-drop which suggest full lack of agreement may result in the possibility of *pro*-drop (e.g. Speas 1994, 2006), the non-occurrence of *pro*-drop in non-inflecting creole languages is potentially problematic, but explained (here) by the fusional nature of the pronominal system.

3.4. Languages with fusional case-marking

- Languages which have case-distinctions present in KPs, but have these encoded in a non-agglutinative, fusional way are expected not to have radical *pro*-drop.
- If such languages have insufficient verbal agreement to have context-sensitive *pro*-drop, *pro*-drop is expected not to occur.
- Example languages: Swedish, German, English, French

(27) **The Swedish pronoun system**

Person	Nominative	Accusative	Possessive
1SG	<i>jag</i>	<i>mig</i>	<i>min</i>
2SG	<i>du</i>	<i>dig</i>	<i>din</i>
3SGM	<i>han</i>	<i>honom</i>	<i>hans</i>
3SGFEM	<i>hon</i>	<i>henne</i>	<i>hennes</i>
1PL	<i>vi</i>	<i>oss</i>	<i>vår</i>
2PL	<i>ni</i>	<i>er</i>	<i>er</i>
3PL	<i>de</i>	<i>dem</i>	<i>deras</i>

(28) a. *I går tok *(han) sin hatt*

 yesterday took he 3.REFL hat

“Yesterday, he took his (own) hat”

b. *Jag har *(henne) inte gett lov att komma*

 I have her not give permission to come

“I didn’t give her permission to come”

(29) **The Afrikaans pronoun system**

Person	Nominative	Accusative	Possessive
1SG	<i>ek</i>	<i>my</i>	<i>my</i>
2SG	<i>jy</i>	<i>jou</i>	<i>jou</i>
3SGM	<i>Hy</i>	<i>hom</i>	<i>sy</i>
3SGFEM	<i>Sy</i>	<i>haar</i>	<i>haar</i>
3SGN	<i>Dit</i>	<i>dit</i>	<i>sy</i>
1PL	<i>ons</i>	<i>ons</i>	<i>ons</i>
2PL	<i>julle</i>	<i>julle</i>	<i>julle</i>
3PL	<i>Hulle</i>	<i>hulle</i>	<i>hulle</i>

- (30) a. *Ons is egter vol vertroue dat *(ons) sal slaag*
us is however full confidence that us will succeed
“We are full of confidence, however, that we will succeed”
- b. *Ons sal hulle nie toelaat om oor *(ons) te loop nie.*
us will them not allow for over us to walk not
“We will not allow them to walk over us”

3.5. **Languages with fusional case- and plural-marking, but rich verbal agreement**

- Expectation: radical *pro*-drop is not allowed, but context-sensitive *pro*-drop may occur.
→ If only (rich) subject agreement occurs on the verb, regular *pro*-drop will be restricted to subject position.
- Examples: Spanish, Italian

(31) **Italian strong pronouns**

Person	Nominative	Accusative
1SG	<i>io</i>	<i>me</i>
2SG	<i>tu</i>	<i>te</i>
3SGM	<i>lui</i>	<i>lui</i>
3SGFEM	<i>lei</i>	<i>lei</i>
1PL	<i>noi</i>	<i>noi</i>
2PL	<i>voi</i>	<i>voi</i>
3PL	<i>loro</i>	<i>loro</i>

- *Pro*-drop in subject position
- (32) *Gianni ha detto che e_{i/k} ha telefonato*
Gianni has said that has telephoned
“Gianni said that he called”
- No equivalent *pro*-drop of specific individuals in object position
- (33) *Maria *(te) ha visto ieri*
Maria you has seen yesterday
“Maria saw you yesterday”

3.6. **Further examples of languages with agglutinative marking of features within KP**

Korean

- Agglutinative case-marking in KP permits radical *pro*-drop

(34) [NP +p, -a, 1, SG] ⇔ /na/, ... [NP +p, -a, 1, PL] ⇔ /wuli/
 [NP +p, -a, 2, SG] ⇔ /ne/, ... [NP +p, -a, 2, PL] ⇔ /ne-huy/, ... (simplified)
 [NP +p, -a, 3, SG] ⇔ /ku/, [NP +p, -a, 3, PL] ⇔ /ku tul/

(35) [K NOM] ⇔ /ka/ [K ACC] ⇔ /(l)ul/
 [K GEN] ⇔ /uy/ [K DAT] ⇔ /ey/; /eykey/; ...

- Application of these rules gives rise to inflected pronouns like the one in (36):

(36) *ku-tul-ka*
 he-PL- NOM
 “they”

(37) a. *Chelswu-ka_i [Yenghi-ka_i e_{i/k} hyeppak ha-ess-ta]-ko cwucang ha-ess-ta*
 Chelswu-NOM Yenghi-NOM threaten do-PAST-DECL-C claim do-PAST-DECL
 “Chelswu claims that Yenghi threatened him”

b. *John-un_i [Bill-i e_{i/k} cenhwa ha-ess-ta]- nun sasil-ul acik moru-n-ta*
 John-TOP Bill-NOM phone do-PAST-DECL-ADNOM fact-ACC yet know-not
 “John does not yet know that Bill called him” (Yoon 1985)

Burmese

- Agglutinative case- and number-marking permits radical *pro*-drop (no verbal-agreement)

(38) [NP +p, -a, 1, SG, M] ⇔ /canaw/ [PL] ⇔ /toú/
 [NP +p, -a, 1, SG, F] ⇔ /camá/
 [NP +p, -a, 2, SG] ⇔ /niñ/ (simplified)
 [NP +p, -a, 3, SG, M] ⇔ /thu/
 [NP +p, -a, 3, SG, F] ⇔ /thumá/

(39) [K NOM] ⇔ /ká/ [K ACC] ⇔ /kou/
 [K GEN] ⇔ /yé/

(40) *thu-toú- ká*
 he- PL- NOM
 “they”

And similar patterns in Turkish, Hindi, Assamese....

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