Licensing and identifying pro

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Null subjects in grammatical theory, in linguistic typology and in language acquisition

Whether and where to pronounce what sorts of DPs?

Recall:

(1) \( \theta \)-criterion:
   a. Each chain is assigned exactly one \( \theta \)-role.
   b. Each \( \theta \)-role is assigned to exactly one chain.

(2) Uniformity of Theta-Assignment Hypothesis (UTAH): Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure (i.e. \( \theta \)-roles are uniformly projected in the syntax).

(3) Case Filter: *DP if DP has a phonetic matrix but no (abstract) Case.

(4) Extended Projection Principle (EPP): Every clause (IP) must have a structural subject (in Spec(IP)).

[Cf. RG’s “Final-1 Law” and LFG’s “Subject Condition”.

DP varieties

(5) a. \([-\text{ANAPHORIC}, -\text{PRONOMINAL}]:\]
   i. John, Mary, ..., The man that I saw yesterday, That professor, ...
   ii. traces of wh-movement (as in, e.g., Who did she like \( t_j \)?)

b. \([+\text{ANAPHORIC}, -\text{PRONOMINAL}]:\]
   i. myself, yourself, himself, herself, ..., each other, one another, ...
   ii. traces of A-movement (as in, e.g., John was liked \( t_i \)?)

c. \([-\text{ANAPHORIC}, +\text{PRONOMINAL}]:\]
   i. I, me, you, she, her, he, him, we, ...
   ii. pro (as in, e.g., Spanish [IP pro cant-o] ‘(I) sing+1sg’)?

d. \([+\text{ANAPHORIC}, +\text{PRONOMINAL}]:\]

PRO (via PRO Theorem)? [See 10/24/03 lecture]

Some evidence that pro in (5c) is indeed a pronoun resumption:
(6) a. *That asshole X, who I loathe and despise the ground t_i walks on],
pointed out that . . .

b. *That asshole X,
   *[CP who_i [TP I loathe and despise [DP the ground [CP O_j [TP t_i walks on t_j]]]],
pointed out that . . .

c. That asshole X,
   √[who_i I loathe and despise the ground he_i walks on],
pointed out that . . .

   (See Prince 1990, http://babel.ling.upenn.edu/ ellen/respro.ps)

(7) That asshole X,
   [who_i I loathe and despise √t_i/*him_i],
pointed out that . . .

(8) a. That’s the guy [CP who_i [IP Mary knows [DP the woman [CP who_j [IP *(he_i) married t_j]]]]!
   
   b. Ese es el tipo [CP que_i [IP Maria conoce [DP a la mujer [CP [con quién]_j [IP pro_i se casó t_j]]]]!

“Null subject” as a parameter?

(9) a. John/*∅ saw that film
   (English)

b. Juan/*∅ vió ese film
   (Spanish)

(10) a. He said that *(it) seems to him that John killed the dog
     (English)

b. Él/*∅ dijo que ∅ le parece que Juan mató al perro
   (Spanish)

   ‘He said that it seems to him/her that Juan killed the dog’

What’s a “parameter”?

(11) a. An isolatable property that correlates with a cluster of grammatical phenomena.

   b. A “switch” whose value is fixed in the course of language acquisition

   \[\text{UG} \text{ qua } S_0 \text{ (initial state of language faculty)}\]
   [universal principles alongside parameters with un-assigned, perhaps default, settings] +

   \[\text{PLD} \text{ (source of “triggers” or “cues” for the fixing of parametric values)}\]

   =

   \[\text{Idiolect-Specific Grammar} \text{ qua } S_1 \text{ (steady state of language faculty)}\]
   [universal principles alongside parameters with values fixed]
A “Null Subject Parameter” à la (e.g.) Jaeggli & Safir 1989?

(12) a. What grammatical properties are related with the licensing of pro?
   i. Free subject inversion?
   ii. Violations of that-trace filter?

   [Cf. Bani-Hassan Arabic (pro, subject inversion, subject extraction over a filled complementizer) vs. Levantine Arabic (no pro, no subject inversion, no subject extraction over a filled complementizer); Kenstowicz 1989]

b. How does UG connect the properties in (12a)?

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<th>Licensing and Identification of pro</th>
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Is “rich” verbal agreement a necessary and/or sufficient condition?

(13) Spanish:

- \textit{habl-o} ‘I speak’ 1sg
- \textit{habl-as} ‘you speak’ 2sg
- \textit{habl-a} ‘he/she speak’ 3sg
- \textit{habl-amos} ‘we speak’ 1pl
- \textit{habl-áis} ‘you (pl.) speak’ 2pl
- \textit{habl-an} ‘they speak’ 3pl

(14) English:

- \textit{to talk} infinitive
- \textit{talk} present 1s, 2s, 1pl, 2pl, 3pl
- \textit{talk-s} present 3s

(15) French:

- \textit{[parl-e]} infinitive (‘to talk’)
- \textit{[parl]} present 1s, 2s, 3s, 3pl
- \textit{[parl-ö]} present 1pl
- \textit{[parl-e]} present 2pl

(16) But, what about licensing of pro in Chinese? The latter has no verbal inflection whatsoever.

Jaeggli & Safir’s (1989) proposal:

(17) **The Null Subject Parameter**: Null subject are licensed in all and only languages with morphologically uniform inflectional paradigms.

(18) **Morphological Uniformity**: An inflectional paradigm \(P\) in a language \(L\) is morphologically uniform iff \(P\) has either only underived forms or only derived forms.

(19) **Identification by Agreement**: AGR can identify an empty category as thematic
pro iff the category containing AGR Case-governs the empty category [and AGR is ‘rich enough’].

German

(20)  
(ich) arbeite  ‘I work’  1s  
(du) arbeite  ‘you work’  2s  
(er/sie) arbeitet  ‘he/she work’  3s  
(wir) arbeiten  ‘we work’  1p  
(ihr) arbeitet  ‘you (pl.) work’  2p  
(sie/sie) arbeiten  ‘they work’  3p

(21) a.  * Er sagte, dass ᵀ den ᵀ Hund getötet hat  
      He-NOM said that the-ACC dog killed has  
      ‘He said that he/she has killed the dog’  

      b.  Er sagte, dass ᵀ ihm scheint, dass ᵀ den ᵀ Hund getötet hat  
            He-NOM said that him-DAT seemed that Hans the-ACC dog killed has  
      ‘He said that (it) seemed to him that Hans killed the dog’

(22) a.  German null subjects function as expletives only  no thematic null subjects  

      b.  German (as a V/2 language ) has the subject’s Case-governor (Tense) in COMP and  
            AGR in INFL.

West Flemish:

(23) a.  dase pro komt ‘that she comes’

      b.  * da pro komt ‘that he/she comes’

(24)  
      dase is the agreeing complementizer; thus, in (23a) the Case-governor (here Tense)  
            and AGR are in the same node.

European Portuguese:

(25) a.  * (Eu) vi [pro a roubarem automóveis]  (“Prepositional Inflected Infinitive”)  
          ‘I saw them stealing cars’

      b.  E difícil [pro trabalharem tanto]  (“Bare Inflected Infinitive”)  
          ‘It is difficult for them to work that hard’

(26) a.  The Prepositional Inflected Infinitive construction (as in (25a)) instantiates ECM,  
            with ACC case on the lexical subject of the inflected infinitive (i.e., ACC Case-  
            governor and infinitival Agr are in separate nodes).

      b.  In the Bare Inflected Infinitive construction (as in (25b)) instantiates ECM, infinitival  
            Agr does govern NOM Case on the lexical subject (i.e., NOM Case-governor and
infinitival Agr are in the same node).

(27) **Non-local identification of agreement:** A subordinate null subject is “controlled” by a higher subject “whenever there is no local government by tense/agreement with morphological content, then a c-commanding NP must provide an antecedent … [the subordinate] Agr inherits features from a c-commanding NP, usually a higher subject, and then these features identify the null subject of [the subordinate] complement clause” (Jaeggli & Safir 1989:36, à la Borer 1989; but see Landau, to appear [and 10/24/03 lecture]).

(28) \[Zhangsan\_shuo | \text{pro, Agr, lai le} | \] (Chinese)

Zhangsan say come ASP

‘Zhangsan said that he came’

**Problems**

(29) a. One parameter setting; two typological classes inflecting (e.g., Spanish) vs. isolating (e.g., Chinese)?
   b. Where do parameters live? In the *morphology*?

(30) What grammatical properties cluster around the “null subject parameter”?

**Pro-licensing with(out) free-subject inversion**

(31) a. \*Gianni ha telefonato ‘Gianni has telephoned’
   b. Ha telefonato Gianni ‘Gianni has telephoned’

(32) a. Zhangsan kanjian le Lisi ‘Zhangsan saw Lisi’
   b. \*Kanjian le Lisi Zhangsan

**That-trace filter violations with(out) pro-licensing**

(33) \[Chi credi che pro verrà ti? \] (Italian)

who believe COMP will-come

‘Who do you believe that will come?’

(34) \[Welche Leute \_i meinst du, dass Peter glaubt, dass \_i recht hätten\]

which people think you that Peter believes that right have

‘Which people do you think that Peter believes (*that) are right?’ (German; Law 1991)

**Morphological uniformity with(out) (thematic) pro-licensing**

(35) a. Haitian Creole, like Chinese, shows no agreement- or TMA-related verbal inflection.
   b. Haitian Creole, unlike Chinese, licenses only expletive *pro* no licensing of thematic *pro* (Déprez 1992; but see DeGraff 1991, 1996).
(36) a. Boukinèt di toutmoun (ke) ∅ genlè Jak renmen li
   "Boukinèt has told everyone that it seems that Jack loves her"

b. Mwen kwè (ke) ∅ te fè frèt Kenscoff
   "I believe that it was cold in Kenscoff"

c. Timoun yo kwè (ke) ∅ gen jwèt sou tab la
   "The children believe that there are toys on the table"

d. Mwen kwè (ke)
   "I believe that Bazin lacked the many votes that he needed to become president"

e. Mwen kwè (ke)
   "I believe that there will remain books on the table"

(37) *(mwen) achte twa liv
   "I bought three books"

What kind of ‘pronoun’ is pro? (Iatridou & Embick 1997)

(38) If [we arrive late], iti will convince Mary to buy us a car

(39) a. * Si [ pro arribem tard ]; proi convencerà la Maria de compra-nos un cotxe
   If pro arrive-1PL late pro convert-FUT the Mary to buy-us a car
   ‘If we arrive late, it will convince Mary to buy us a car’ (Catalan)

b. If [arribem tard]; aixoie convencerà la Maria de comprar-nos un cotxe

(40) Se [ loro_k non tornassero ];, questoí preoccuperebbe tutti_j
   If they not return this would worry everyone
   perché proi farebbe loroj pensare che prok hanno dimenticato il piano
   because pro would-make them think that pro have forgotten the plan
   ‘If they didn’t return, this would worry everyone, because it would make them think
   that they had forgotten the plan’ (Italian)
Iatridou & Embick’s analysis

(42) a. CP/IP lack \(\Phi\)-features:
   i. CP/IP lack the feature Gender [36]
   ii. CP/IP lack the feature Number [37,41]
   iii. CP/IP (probably) lack the feature Person

b. Referential \textit{pro} in null-subject languages that license \textit{pro} via morphological richness (e.g., Spanish, Italian, Catalan, etc.) must be associated with \(\Phi\)-features.

\textit{Pro} is the real “pro-noun”.