Rizzi (1986): ‘Null Objects in Italian and the Theory of pro’

1 Intro

(1) Understood/implicit arguments in Italian and English:
   a. This leads (people) to the following conclusion.
   b. Questo conduce (la gente) alla seguente conclusione.
   c. John is always ready to please (people).
   d. Gianni è sempre pronto ad acontentare (la gente).

Possible structures of VP: the implicit argument is i) present in the syntactic structure but phonologically null or ii) totally absent from syntactic structure

(2) \[ S \rightarrow V NP \]

(3) \[ VP \rightarrow V X \]

Claim: Whether a language chooses (2) or (3) is subject to parametric variation. Italian allows (2) whereas English only allows (3).

Questions:
- What is the type of the null object in Italian?
- Which is the parameter differentiating Italian and English?
- What determines the distribution and interpretation of the null object in Italian (formal licensing and recoverability)?

2 (2) vs. (3): Empirical Evidence

There are a number of differences between English and Italian which suggest that the null object is syntactically active in Italian but not in English:

- The implicit object as controller:
  (4) Bach’s generalization:
  In object control structures the object NP must be structurally present.

- The implicit object as binder:
  (7) Italian:
  a. La buona musica riconcilia _ con se stessi.
     ‘Good music reconciles _ with oneself’
  b. Un bravo psicanalista può restituire _ a se stessi.
     ‘A good psychoanalyst can give _ back to oneself’
  c. Loro parlano di se stessi.
     ‘They speak about themselves.’
  d. ‘La buona musica piace a se stessi.’
     ‘Good music pleases oneself.’

- The implicit object as subject of predication in SCs:
  Background assumptions: SC = AP; AP requires a structurally represented subject = PRO; object control by the matrix null object

  (8) Italian adjunct SCs:
  a. Un dottore serio visita _ nudi.
     ‘A serious doctor visits _ nude[+pl]’
  b. Di solito, Gianni fotografa _ seduti.
     ‘In general, Gianni photographs _ seated[+pl]’

  In English the adjunct SC unambiguously modifies the subject of the matrix clause.

  (9) Italian argument SCs with null subjects:
  a. Questa musica rende _ allegri.
     ‘This music renders _ happy[+pl]’
  b. Certe medicine rendono _ più intelligenti/calmi.
     ‘Certain drugs render _ more intelligent/calm[+pl]’

  In English the adjunct SC unambiguously modifies the subject of the matrix clause.

- Productivity of null objects:
  Null objects with arbitrary interpretation are highly restricted in English (lexically determined) but not in Italian.
3 Properties of arbitrary null objects

- The null object in Italian is pro [-anaphoric, +pronominal] - it is subject to Principe B of the binding theory.

  i) [-anaphoric]: the null pronoun is governed by V but needs no antecedent in its governing category.
  ii) [+pronominal]: the null pronoun can be referentially linked to an NP outside its governing category.
  iii) [-pronominal] (variable bound by an operator): null objects and overt operators in Comp can cooccur.

(10) E un’illusione [PRO sperare [che un buon pranzo possa riconciliare con se stessi]].

  ‘It is an illusion [PRO to hope [that a good meal can reconcile with oneself]]’

  ✓ ‘It is an illusion for x to hope that a good meal can reconcile x with x.’
  ✓ ‘It is an illusion for x to hope that a good meal can reconcile y with y.’

(11) Quale musica riconcilia con se stessi?

- The arbitrary null object receives an arbitrary interpretation. It must be specified as [+human, +generic, +plural]. The reflexive in (7-a) shows that pro must also be 3rd person and masculine.

(12) Certe innovazioni tecniche rendono [pro più efficienti].

  ‘Certain technical innovations render [pro more efficient][+pl]’

  ✓ ‘render people more efficient’
  ✓ ‘render machines more efficient’

- [+generic] is responsible for the fact that null objects can only occur in sentences with generic time reference.

(13) a. Il bel tempo invoglia a [pro stare].
    ‘The nice weather induces a [pro to stay].’
  b. *Alle cinque il generale ha costretto a [pro obbedire].
    ‘At five the general forced a [pro to obey].’

4 On licensing and recoverability of pro in object position

4.1 Formal licensing

standard approach to pro (Chomsky 1982): licensing of pro and recoverability under government by strong Agr(eement)

But this wrongly predicts pro in object position to be excluded in English and Italian. Rizzi splits the condition for formal licensing (under government) and recoverability (binding).

(14) Formal licensing of pro (1st version):
    pro is governed by X^0_y

(15) Heads of type y:
    a. Italian: I, V
    b. English: –
    c. French: V, P

Observation: pro cannot occur in passive sentences:

(16) a. Gianni fotografa nudi.
    ‘Gianni photographs nude.’
  b. __ vengono fotografati nudi.
    ‘(They) are photographed nude.’

In (16-b) the null subject must be interpreted as referring to a specific set of people, not as arbitrary.

(17) Formal licensing of pro (revised version):
    pro is Case-marked by X^0_y

(16-b) is excluded because the passive past participle is not a case assigner.

4.2 Interpretation

- pro can inherently bear any φ-features.
  - These φ-features must be checked by matching features on a local governing head (to guarantee recoverability).
- pro in subject position: recovered through rich agreement on Infl (person, gender, number).
- pro in object position: applies to the direct θ-slot in the θ-grid of V, this slot acquires the content [+human +generic +plural] against which pro is checked.
Convention for recoverability:
Let X be the licensing head of an occurrence of pro; then pro has the grammatical specification of the features on X coindexed with it.

Assignment of arb: Assign arb to the direct θ-role.

Coindexed structure:
\[
\text{pro}_i \quad \text{Infl} \quad V \quad \text{pro}_j \\
\text{Agr}_i \quad \text{θ}_j
\]

5 Implicit arguments in English

The assignment of an object θ-role in English is usually obligatory. For cases like (1-a) the syntactic projection of a theta-role must be prevented.

Proposal: The internal θ-role can be saturated in the lexicon and is thus not subject to the Projection Principle. Hence, (19) applies in the lexicon in English but in the syntax in Italian.

Lexically governed process in English: Assign arb to the direct θ-role.

6 Predictions

If formal licensing of pro is separated from recovery of the content of pro a double dissociation is expected:

a. arbitrary interpretation but pro is not formally licensed
b. pro is formally licensed but does not have an arbitrary interpretation

John always warns against this type of mistake. (arb assigned in the lexicon)

Expletive pro as the subject of a SC embedded under V (NP subject necessary because of the Predication Principle), pro is not θ-marked by matrix V

8 The role of strong/weak agreement

pro can function as nonargument (pro seems that S), quasi argument (pro is raining), referential argument. Different languages use pro for different subsets of these functions.

a. no occurrence of pro
b. pro = nonargument

c. pro = nonargument, quasi argument
d. pro = nonargument, quasi argument, referential argument

Italian instantiates all types in different constructions (complements of epistemic verbs).

Tensed complement, type (26-d)

a. Ritengo [che pro sia simpatico].
   'I believe that (he) is nice.' referential
b. Ritengo [che pro sia troppo tardi per S].
   'I believe that (it) is too late for S.' quasi argument
c. Ritengo [che pro sia probabile che S].
   'I believe that (it) is likely that S.' nonargument

Gianni ritiene [pro probabilie [che Maria venga].
‘Gianni believes likely that Maria comes.’

7 Problems

proarb as subject of a SC selected by a causative verb:

a. Talvolta la stampa lascia [__ perplessi].
   ‘Sometimes the press causes-to-remain puzzled.’

b. Questo esercizio mantiene [__ sani].
   ‘This exercise keeps healthy.’

PROBLEM: We have seen in (23) that pro as the subject of a SC is formally licensed but that it cannot receive an arb-interpretaion. Nevertheless, this seems to be possible if the SC is embedded under a causative verb.

SOLUTION: reanalysis: V + A form a complex predicate (indicated through identical superscripts) of which the embedded subject is an argument (θ-marked by the complex)
Infinitives introduced by 'di', type (26-a)

- Referential
  a. *Ritengo [di pro essere simpatico].
     'I believe (him) to be nice.'
  b. *Ritengo [di pro essere troppo tardi per S].
     'I believe (it) to be too late for S.'
  c. *Ritengo [di pro essere probabilmente S].
     'I believe (it) to be likely that S.'

Quasi argument

Nonargument

SC complement of epistemic verbs, type (26-b)

Referential

Quasi argument

Nonargument

Marked infinitival construction, type (26-c)

Referential

Quasi argument

Nonargument

Analysis:

- Infinite verb in the embedded clause in (28), (29), (30) no referential use of pro is possible.

An NP is referential only if it has the specification of person and number.

In infinitives Agr is weak (has no person features) and hence pro cannot receive a person specification from Agr by head binding.

Lack of number specification

An NP is argumental only if it has the specification of number.

Morphology drives syntax/interpretation.

Chinese - an exception?

- pro is possible in subject position but no overt morphology → pro should only be used as nonargument but it can have the full range of uses
- explanation: UG offers the option of using φ-features in the grammar, languages in which φ-features do not play any role, the principles in (31) and (32) are vacuous.

References: