1 The aim of this research

In this research, we will see whether bare plurals can appear in the left dislocated position in German and Italian. We also compare bare plurals with definite plurals in different left-dislocate construction. Firstly, the data suggest the following facts:

- There is a difference in the interpretation of dislocated nominals between in Italian and in German.
- Italian bare plurals can be licensed in the left periphery in a certain discourse condition.

From these facts, we claim the followings:

- Constructions and contexts closely interact with each other.
- Nouns in the left periphery are interpreted differently due to the specificity imposed by the topic positions.

1.1 German and Italian Kind Denoting Nominals in Argument Positions

- Italian generally does not allow bare plurals in argument positions.
- Even licensed by verbs or prepositions, they cannot denote kinds.

(1) a. Luigi odia i gatti.
   Luigi hates the cats
   ‘Luigi hates (the) cats.’

b. Luigi odia gatti.
   Luigi hates cats.

- Definite plurals (1a) are ambiguous between kinds and definite.
- Bare plurals (1b) are interpreted existentially.

- As for kind denoting nouns in German, definite plurals have kind readings as well as bare plurals (Dayal 2004).

(2) a. (Die) Pandabären sind vom Aussterben bedroht.
   ‘(The) pandas are facing extinction.’

b. (#The) pandas are facing extinction.

- As (2) shows, in German both bare plurals and definite plurals are compatible with kind-predicates.
1.2 Italian Bare Nominal in the Left Periphery

- Italian bare nominals can be licensed in the left periphery, too (Chierchia 1998).
  
  (3) a. pollo io voglio, non pesce.
      chicken I want, not fish
  
  b. Soldi, non ne ho.
      money not ne have

  – Bare nominals are licensed when they are stressed and left-dislocated (3a).
  – No clitic accompanies with nominals: Left Dislocation\(^1\) (LD) (Cinque 1990).
  – Bare nominals are also licensed by CLitic Left Dislocation (CLLD).
  
  \(ne\) should be used as a resumptive pronoun (3b).
  Other types of resumptive pronouns such as \(li\) or \(le\) are not perfectly acceptable
  (Zamparelli 1995).
  
      boys cl.3pl have.1sg seen boys

- Problem
  
  – Are nominals in the left periphery interpreted in the same way as those in argument
    positions or predicate positions?
  – Can the literature on nominals in those positions be applied to ones in the left periphery?

2 Research on NPs in argument positions

- Two main approaches to the nominal semantics
  
  – Ambiguity Approach: bare nominals are ambiguous between kind readings and existential
    ones.
  – \(\Rightarrow\) neo-Carlsonian Approach: bare nominals unambiguously refer to kinds (Carlson 1977).

2.1 Chierchia (1998)

- Chierchia sets two operators, namely \(\cup\) and \(\cap\).
  
  (5) Let \(d\) be a kind. Then for any world/situation \(s\),
  \[\cup d = \lambda x [x \leq d_s], \text{if } d_s \text{ is defined}\]
  \[= \lambda x [\text{FALSE}], \text{otherwise}\]
  where \(d_s\) is the plural individual that comprises all of the atomic members of the
  kind
  \(\Rightarrow\) kinds into properties

  (6) For any property \(P\) and world/situation \(s\),
  \[\cap P = \lambda s \iota P_s, \text{if } \lambda s \iota P_s \text{ is in } K,\]
  undefined, otherwise
  where \(P_s\) is the extention of \(P\) in \(s\)
  \(\Rightarrow\) properties into kinds

- nouns get interpreted by these operations and type shifts proposed by Partee (1987)

\(^1\)Large capitals by us to distinguish this from left dislocations in general
Two Nominal Mapping Parameters: \([\pm \text{arg}]\) and \([\pm \text{pred}]\)

- Italian: \([-\text{arg}, +\text{pred}]\) → Every noun cannot occur in argument positions without projecting D.
- English: \([+\text{arg}, +\text{pred}]\) → Bare nominals freely occur in argument positions

We still need some mechanism to prohibit unnecessary type-shift (cf. English definite plurals).

Type-shift Restriction: Blocking Principle

(7) Blocking Principle (‘Type Shifting as Last Resort’)
For any type shifting operation \(\tau\) and any \(X. \# \tau(X)\)
if there is a determiner \(D\) such that for any set \(X\) in its domain, \(D(X) = \tau(X)\)

→ This principle prohibits covert type shifting when there are other overt type shift available.

Existential Readings of Bare Plurals

- Bare plurals can be interpreted existentially, too.

(8) a. Dogs love to play.
    b. Dogs are ruining my garden.

To derive existential readings from kind readings, Chierchia proposes an operation called DKP (Derived Kind Predication) defined as follows:

(9) Derived Kind Predication (DKP):
If \(P\) applies to objects and \(k\) denotes a kind, then
\[ P(k) = \exists [\exists k(x) \land P(x)] \]

→ Bare plurals always take narrower scopes in relation to other operators.

(10) a. Bob is not looking for ship parts. (\textit{de dicto} only)
    b. Bob is not looking for ship parts of the Titanic. (\textit{de dicto/de re})

→ This argument is supported by the fact that bare nominals become able to have wide scope readings when they cannot be interpreted as kinds due to other modifiers.

Problem
German kind denoting nouns, which seem to violate the Blocking Principle

2.2 Dayal (2004)

German Kind Denoting Nominals

- German kind denoting nominals seem to violate Chierchia’s Blocking Principle

(11) a. (Die) Pandabären sind vom Aussterben bedroht.
   ‘(The) pandas are facing extinction.’
    b. (#The) pandas are facing extinction.

→ Dayal concludes that the Blocking Principle should be only applied to canonical meanings of the definite article.
\(\land\) is not the canonical meaning of German definite article.
\(\Rightarrow\) German is not a counterexample to the Blocking Principle.
2.3 Zamparelli

- Other Approaches to Italian Bare Nominals
  - Zamparelli (2002) claims that Italian bare plurals never refer to kinds.
  - Zamparelli explains scopes of bare nominals without DKP.
  - It is some projection of D which is needed to take wide scopes.

2.4 Problems

- Even for the nominal semantics in argument positions, there is a controversy over the matter what approach is appropriate.
  ⇒ What about nominals in the left periphery?

3 Kind-denoting Nouns in the Left Periphery

- What we focus on in this research
  → What does a noun refer to as a topic or focus?

    Reading: That kind of animal, I saw in the Ueno Zoo.

b. The monkeys, I saw in the Ueno Zoo.
    Reading: # That kind of animal, I saw in the Ueno Zoo.

- (12a): monkeys refers to a kind and can be replaced with that kind of animal under an appropriate context.
  After the bare plural is reconstructed in the object position, it must be subject to type-shifting.

- (12b): the monkeys cannot be replaced with that kind of animal without changing meaning.
  The interpretation in the topic position corresponds to that in the object position.

- It should be noted that nouns can refer to kinds in topic position independently of the predicate in the main clause.
  → It is possible that the discourse topic is a certain kind in general, and the main clause conveys more specific information.
  ⇒ Therefore, predicates in the main clause need not to be so-called kind predicates.

3.1 Italian

- Italian Kind-denoting Nominals in the Left Periphery\(^2\).

(13) Le rivoluzioni, per fortuna, non le fanno i giudici.
     ‘Fortunately, revolutions, judges do not cause.’

(14) e le dissi, senti, contar palle è una cosa che non mi viene bene, è difficile, arrivi tu con le due domande, e io che dovrei fare? Bugie, non mi va di raccontarne, non ci si può più prendere in giro.
     ‘And I said to her. Listen, I do not feel like telling a lie, and it is difficult. You come with the two questions, and what must I do? Lies, I do not feel like telling about them.’

\(^2\)The examples are from CORIS (CORpus di Italiano Scritto) di Università di Bologna (http://corpora.dslo.unibo.it/coris_eng.html)
Bambini, ne volete? Sono in programma. Abbiamo cominciato a provarci un paio di mesi fa.
‘Children, do you want? I am planning it. We began to try to do it a few months ago.’

- Definite plurals can refer to kinds in the left periphery as ones in argument positions, too (13).
- Bare plurals in the left periphery with a clitic ne refer to kinds (14, 15).

- Both definite plurals and bare plurals refer to kinds in the left periphery.

3.2 German

- German Kind-denoting Nominals in the Left Periphery

(16) a. Mozartopern, die habe ich gesehen. kind reading
   b. Die Mozartopern, die habe ich gesehen. *kind reading
   ‘Operas of Mozart/ The operas of Mozart, I saw’

- A bare plural Mozartopern ‘Operas of Mozart’ denotes a kind, namely operas composed by Mozart in general in example (16a).
- A definite plural Die Mozartopern is only interpreted as contextually definite operas by Mozart or all of the operas by Mozart.

- Only bare plurals can refer to kinds in the left periphery.

4 Bare Plurals and Nominal Interpretation in the Left Periphery

The permission of bare plurals in the topic position is problematic for the previous account for the nominal semantics we introduced earlier.

- Our Claims

  - This obvious difference between German and Italian in the naturalness of bare plural topics is construction-dependent.
  ← In German, bare plurals as well as definite plurals are compatible with the kind-reading with the normal prefield topicalization (11).

  - Only canonical meaning of the definite article is available in the left periphery in German.
  - It is Italian bare plurals that is to be explained why and how they are licensed.

4.1 Two types of Licensing

1. Bare plurals are introduced as topics when their superkinds have been introduced as a discourse topic in the context.

(17) a. Quale animale hai visto?
   which animal have.2sg seen
   ‘Which animal did you see?’

b. (Di) cani, ne ho visti.
   of dogs ne have.1sg seen
   ‘I saw dogs.’
Bare plurals in the left periphery become felicitous when the preceding context provides a topic related to kinds.
⇒ The preceding context semantically licenses the bare plural.

2. Bare plurals are licensed as frame-setting topics, because of accommodation between speech participants.

(18) a. Quando litighiamo mi viene sempre da pensare che l’unico motivo per cui mi ha sposato sia che voleva la cittadinanza americana. Ma non capita spesso. Nove giorni su dieci andiamo d’accordo. Sul serio.
‘When we argue, I always feel like thinking that the only motivation for which she married me might have been that she wanted American citizenship. But it does not happen often. Nine days out of ten days, we reach agreement. Seriously.’

b. Bambini, ne volete?
boys ne want.2pl
‘Do you want children?’

• Crucially, the preceding context is not related to a kind; rather we argue that this irrelevance is the factor which licenses the bare plural.
• An utterance (18b) suddenly changes the topic and introduces the bare plural bambini as the frame-setting topic.

• We claim that bare plurals are licensed in different manners in these two conditions.
  – In the first case, bare plurals are licensed by the preceding context.
  – In the second case, the specificity of the topic position in the left periphery licenses kind-denoting bare plurals.

4.2 Question under Discussion and Nominal Interpretation

• In the first case, we claim that QuD proposed by Roberts (1996) can affect nominal interpretation.
  ⇒ The alternative answers to a question license a reference to kinds.

(19) a. Mario, lo rivedrò.
   Mario him I will see again.

b. MARIO, rivedrò (non Luigi).
   Mario I will see again, not Luigi

  – In (19), it should be the case that the addressee already knows the fact that the speaker will see someone again.
  – To a question ‘What will happen to Mario?’, (19a) is an appropriate answer and (19b) is not.
  ⇒ The presupposed question by (19b) is only ‘Who will you see again?.

• In (17), kind-denoting bare plurals are licensed whenever the domain is composed of kinds.
In (17a), ‘which animal’ specifies animal kinds as a potential domain.
e.g. the question denotes a set of answers

(20) \( A = \{ x \in Q | I \text{ saw } x \} \),
where the variable \( x \) determines each possible answer in a given domain \( Q \) composed of animal kinds.
⇒ Bare plurals can be semantically licensed when the QuD has established a discourse topic related to kinds.

(21) **Licensing Condition 1**

Bare plurals in the topic position at $m_k$ can be licensed as kind-denoting nominals when $m_i$ ($n \leq i \leq k - 1$) provides a question $\alpha$ where $m_n$ is the move which starts a new domain goal of conversation, and D, which is the domain of the model, is made up of by kinds.

- This licensing condition states that appropriate topics must be introduced so that bare plurals can denote kinds.

4.3 Frame Setting Topics and Bare Plurals

- In the second case, we claim that bare plurals are licensed to denote kinds due to the specificity imposed by the topic position.

  - Discourse-Oldness of Topics
    Topics are not necessarily discourse-old according to Benincà (1988) and Brunetti (2009)

  (22) Sai? Dante lo hanno bocciato all’esame di chimica. 
    know.2sg Dante cl.3sg have.3pl failed at the exam of chemistry 
    Do you know? Dante failed the chemistry exam.

  - Benincà claims that the speaker must assume that the topic referent is known to the addressee.
  - Brunetti claims that such an assumption is not necessary.

- There is a controversy, but we assume that Brunetti is correct.

  - For the utterance to be regarded felicitous, discourse-oldness is an adequate condition although it is not a necessary condition.

  - The topic referent does not have to be known to the hearer.
  ⇒ In such a case, the hearer can accommodate his knowledge based on the assumption that the referent in the topic is specific.

  * The specificity of the topic is manifested by the indefinite, too (Ebert *et al.* 2012).

  (23) a. [Einen Song von Bob Dylan]r, den kennt jeder. 
    Some-ACC song of Bob Dylan, RP-ACC knows everybody. 
    ‘Everybody knows some song of Bob Dylan.’

  b. Einen Song von Bob Dylan kennt jeder. 
    Some-ACC song of Bob Dylan knows everybody. 
    ‘Everybody knows a song of Bob Dylan.’

  - In (23a), the indefinite is left dislocated by German Left Dislocation (GLD).
  ⇒ This indefinite has only a wide scope reading.

  - In (23b), the indefinite is simply located at the beginning of the sentence without topicalization.
  ⇒ this indefinite is ambiguous between a wide scope reading and a narrow scope one.

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3In representing discourse structure where bare plurals are licensed, I adopt the definition of the information structure by Roberts (1996: 10). M is the set of moves in the discourse. That is, M can be regarded as the set of utterances in the discourse. The number attached to $m$ indicates the precedence relation. The smaller the number is, the earlier the $m$ is uttered in the discourse.
The topic in the second condition is what is called frame-setting topic. This topic should be differentiated from the aboutness topic (Frey 2005).

(24) Ich habe etwas in der Zeitung über Hans gelesen.  
I have something in the newspaper about Hans read  
‘I read something about Hans in the newspaper.’

(25) a. Den Hans, den will der Minister zum Botschafter ernennen. (GLD)  
the-ACC Hans RP-ACC wants the minister to ambassador (to) appoint  
b. #Hans ↓, der Minister will ihn zum Botschafter ernennen. (HTLD)  
Hans the minister wants him to ambassador (to) appoint

- In (25a), Hans is left-dislocated by GLD as an aboutness topic.
- In (25b) Hans is topicalized by HTLD (Hanging Topic Left Dislocation) as frame-setting topic.
  ⇒ This sentence sounds inappropriate since the topic is not changed between (24) and (25b).

We claim that bare plurals can be licensed as kinds when it is dislocated as a frame-setting topic due to the accommodation by the hearer.

- When a discourse topic is suddenly changed and a bare plural is located at the topic position, it is a kind that occurs to hearer’s mind as an interpretation of the bare plural.
- Kind names can always be called upon if necessary since they are considered as a part of the common ground (kind-specificity).

(26) Licensing Condition 2  
Bare plurals at m_k can be licensed as kind denoting nouns when a domain goal is achieved at m_i (i ≤ k − 1), and they are left-dislocated as a topic with ne.

This says that bare plurals can be interpreted as kinds when they are frame-setting topics.
⇒ For the topic to be changed, it is necessary that speech participants have achieved a domain goal, which is a part of the biggest goal of conversation.
⇒ Topic shift should be made only after the speaker judges that he and the addressee should commit to another domain goal.

Again, Licensing Condition 1 and Licensing Condition 2 is different.

- Licensing Condition 1 indicates that a bare plural is licensed by a domain goal which has already been introduced in the context.
- Licensing Condition 2 requires speech participants have achieved their domain goal before a topic bare plural is introduced.

4.4 ne and Bare Plural

The Role of ne: How to define ne

(27) Cani, ne Mario vuole?  
dogs ne Mario want.3sg  
‘Dogs, does Mario want?’

Ignoring now the interrogative semantics, there are two options as the possible tree structure.
1. *Ne* as a free relative

(a) Predicate Abstraction is applied to the main clause.

(b) \( \cap \)-operator turns the predicate into a kind.

(c) A relation function \( R \) takes two kinds and denotes a relation, which so far we assume is an identity relation.

We assume *ne* does there three operation: (i) predicate abstraction (ii) \( \cap \) down operator (iii) denotes a relation \( R \). This is shown by the denotation below:

\[
\langle \text{ne} \rangle = \lambda P \lambda k. \left[R(\cap P)(k)\right]
\]

where \( k \) is a kind

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4 Here I adopt Heim & Kratzer’s notation and calculation. I assume that the meaning of \( \text{[want DP]} \) is \( \text{[want PRO (to) have DP]} \). The verb *want* and the clause governed by it is combined by intensional functional application. That intensionalization is indicated as \( t \rightarrow \langle s, t \rangle \) in the tree.

5 We use *kind* in a broader sense. Therefore it may be inappropriate to use Chierchia’s \( \cap \)-operator here since it presupposes a kind is a natural kind.
2. Ne as ⟨e, ⟨et, t⟩⟩

The second option is to assume that ne takes a kind and existentially quantifies it in the main clause.

(30)

- Assuming left dislocated bare plurals are kind names and are of type e, the argument of ne is of type e.
- ne corresponds to di+DP ‘of-DP’. If we follow Zamparelli (2008), di serves as ∪, and takes a kind as its argument.
- To get a truth value by combining with a predicate-abstracted sentence, ne+DP should have type ⟨et, t⟩.

(31) 〚ne〛=λk ∈ D_{kind}. λf ∈ D_{⟨e, t⟩}. there exists x such that x ∈ 〚∪k〛 and f(x) = 1

What ne is doing is:

1. It takes a kind as an argument, and returns its property, i.e., a set which consists of instantiations of the kind.
2. The quantification is handled by making this set the restrictor of quantification.
3. If there is no overt quantificational expression, ne serves as closure under existential quantification.

- Scope of bare plurals in the left periphery

(32) a. Mario vuole cani. (want > ∃, ∃ >want)
    Mario wants dogs.

    b. Cani, ne vuole Mario.
    Dogs ne wants Mario

- (32a) only has a de dicto reading.
  It can be considered to be true even when Mario mistakenly considers raccoons as dogs.
Assuming the same situation where Mario thinks that raccoons are dogs, (32b) is false. In this case $⟦cani⟧$ must be evaluated under $w_0$. When a kind reading is licensed for bare plurals, that is the result of accommodation by the hearer or semantic licensing.

- An appropriate interpretation of (32b) is: 6:

\[
\lambda w_0 \text{Mario} [\lambda w_1 \exists x [⟦\text{have}⟧_{w_1}(x)(\text{Mario}) \land \langle \{\text{dogs}\}⟧_{w_0}(x) = 1]]
\]

1. *Cani* ‘dog’ in (32b) should be interpreted outside the scope of *volete* ‘want’
2. After that *cani* is interpreted within the scope of *want*.

$→$ This sentence is true when Mario wants some animals, but he does not know they are categorized as dogs.
$⇒$ This is the so-called *non-specific de re* reading (Fodor 1970).

- A bare plural is required to be interpreted in $w_0$, where conversation is delivered.

- The two important points this example suggests are:
  1. Left-dislocated plurals can take wide scope as their surface positions suggest when it is used to evaluate a kind-membership.
  2. In their canonical position, reconstructed bare plurals behave like those base-generated in that position, so they take narrow scope in relation to an intensional verb.

5 Conclusion

- We argued that in German and in Italian, the nominal semantics in the left periphery is different from that in argument positions and predicative positions.
  - Italian bare plurals can be a topic in the left periphery and they can refer to kinds.
  - German definite plurals cannot refer to kinds in the left periphery.

- We claim that this difference is due to the properties of the left periphery.
  - Left periphery is very sensitive to information packaging.
  - Different demands on foregoing contexts are organized as constructions.
    $→$ The information packaging is not only packaging of the own sentence, but also one of the foregoing context.
  - Some constructions affect semantic interpretation of nominals.
    $⇒$ This mechanism is responsible for why nominals in the left periphery are interpreted differently from those in argument positions or predicate positions, where Chierchia’s parameters are viable.

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6 In this notation, I attached overt world variable to the predicates to show in which world they should be interpreted. As for the denotation of $⟦\text{want}⟧$, I adopt one in von Fintel & Heim 2011
References


