The Semantics of Bare Nouns in Karitiana

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FUNDACAO NACIONAL DO ÍNDO
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TERRA INDÍGENA KARITIANA COM
ACESSO INTERDITADO A
PESSOAS ESTRANHAS
ARTIGO Nº 231 DA CONSTITUIÇÃO FEDERAL
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ARTIGO Nº 161 DO CÓDIGO PENAL
Karitiana

- A native Brazilian language.
- The only surviving language of the Arikén family, Tupi stock.
- Spoken by approximately 400 people.
- Reservation located in southwestern Amazonia.
<table>
<thead>
<tr>
<th>Population</th>
<th>Year</th>
<th>Source</th>
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<tr>
<td>64</td>
<td>1970</td>
<td>Monteiro 1984</td>
</tr>
<tr>
<td>65</td>
<td>1973</td>
<td>D.Landin &amp; R.Landin 1973</td>
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<td>78</td>
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<td>109</td>
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<td>168</td>
<td>1994</td>
<td>Lúcio 1996</td>
</tr>
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<td>185</td>
<td>1997</td>
<td>Storto 1997</td>
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<td>220</td>
<td>1999</td>
<td>ISA 2000</td>
</tr>
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<td>270</td>
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<td>Vander der Velden 2004</td>
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<td>320</td>
<td>2005</td>
<td>Nelson Karitiana (pc)</td>
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<td>420</td>
<td>2011</td>
<td>Cláudio Karitiana (pc)</td>
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Facts about NPs in Karitiana:

• No inflectional morphology on NPs: they are unmarked for any functional distinctions, such as gender or number.

• Determinerless: no functional words comparable to Romance or Germanic articles, demonstratives or determiner quantifiers.
Bare Nominals in Karitiana...

(1)  
| ‘y | kinda’o |
| eat | fruit |

‘eat the fruit(s)’  
‘eat a fruit/some fruits’  
‘eat fruits’  

| definite  | indefinite  | bare indefinite |

(2)  
| Ōwā | Ø-na-aka-t |
| child | 3-decl-COP-NFT |

‘Children are beautiful’  
‘The child/A child is beautiful’  
‘The children/Some children are beautiful’  

| generic  | definite/indefinite  | def./indefinite |

*Translations are the ones given by consultant, and not necessarily the only possible ones.*
Mass NPs vs. Count NPs are almost impossible to tease apart

(3) Jonso Ø-naka-ot-Ø ese.
woman 3-DECL-fetch-NFT water
‘Women fetched water’
Demonstratives are clauses:

(4)

[Ony sojxa.ty aka] kyn Ø-naka-pon-Ø João
DEIC pig.big be at 3-DECL-shoot-NFT João

‘João shot at that/those boar(s)’

*Literally:* ‘João shot at boars that be there.’
Universal Quantification is expressed by a clause

(5)

Sojxa.ty aka-tyym Ø–na-pon-pon-Ø João
pig.big COP-SUB 3-DECL-shoot-RDP-NFT João

‘João shot at all the boars.’

Lit: ‘João shot at boars that be.’
Pronouns & Proper Nouns are the only purely argumental nominals.

(6) Yn i-so’oo-t ombaky-ty.
    I PART-see-ABS.AGR jaguar-obl
    ‘I saw a jaguar.’

(7) Inácio Ø-na-manga-t Nadia ka’it
    I 3-DECL-lift-NFT N today
    ‘Inácio lifted Nádia today’
Questions:

• What are Bare Nominals in Karitiana?

• What is their semantics?
Thesis:

• Bare Nominals in Karitiana are predicates.

• The variables they introduce get bound by sentencial quantifiers (Heim 1982).
Structure of presentation

1. Cross-linguistic variation on the existence and interpretation of BNs.

2. Theories that account for variation.

3. Interpretations of Karitiana BNs.

4. On the existence of covert determiners in Karitiana.

5. Analysis

6. Conclusions
1. BARE NOUNS: CROSS-LINGUISTIC VARIATION
Lots of cross-linguistic variation on the distribution of BNs

• **French**: articles, number, no BNs.

• **Chinese**: no articles, no number, classifiers, BNs.

• **Hindi**: no articles, number, BSgs and BPls.

• **English/Spanish**: articles, number, BPls, no BSgs.

• **Hebrew**: only def. article, number, BSgs, BPls.

• **Brazilian Portuguese**: articles, number, BSgs and BPls.

• **Karitiana**: no articles, no number, no classifiers, BNs.
• Possible readings for BNs vary cross-linguistically.
Kind readings

(8) Dogs are extinct.  

(9) *Perros están extinguidos.  
    dogs are extinct  
    ‘Dogs are extinct’

(10) Gou juezhong le.  
    dog extinct Asp  
    ‘Dogs are extinct.’
Generic quantification:

(11) a. Dogs bark.  
(\equiv\text{‘Generally, if it is a dog, it barks’})

b. Cachorro late.  
   dog bark  
   ‘Dogs bark’

b. *Perros ladran  
   dogs bark
Existential - indefinite:

(12)

a. Dogs are barking. \textit{English}

\(\equiv \text{‘Some dogs are barking’}\)

b. *Cachorro está latindo. \textit{BrP}

dog is barking
Existential - definite:

(13)

a. *Watermelons are on the table. \hspace{2cm} \textit{English}
   
   \((\cong \text{‘The watermelons are on the table’})\)

b. *Melancia está na mesa. \hspace{2cm} \textit{Brazilian Portuguese}
   
   watermelon is on.the table

c. Xigua fang zai zhuozi shang. \hspace{2cm} \textit{Chinese}
   
   wtrmelon put locate table on
   
   ‘The watermelon is on the table’
2. HOW CAN WE ACCOUNT FOR VARIATION?
Theories of variation:

- BNs always denote predicates – extra structure or movement ‘lifts’ predicates into arguments (Longobardi 2001).

- BNs may denote individuals (kinds) from the start (Chierchia 1998).
Syntactic parameterization

Longobardi 2001:

• Reference to individuals is tied exclusively to the Det node:
  
  o $[D_{iexpl} [N_{P_i}]]$ \textit{kind readings}
  
  o $[\exists_i [N_{P_i}]]$ \textit{existential readings}

• Parametrization will have to do with the licensing of empty Ds.
Semantic parametrization

- Chierchia 1998:
  - Languages vary on the syntactic level at which reference to individuals is located (N or D).
    - Ns may be argumental without the need of extra structure.
  
  - Parametrization will have to do with whether a language allows Ns as arguments, and on the availability of type-shifting operations.
3. INTERPRETATIONS OF KARITIANA BNS
Karitiana NPs are always bare, they are not marked for ...

* (in)definiteness;
* number;
* classification;
* gender;
* proximity;
* specificity;
* universal/existential quantification.

(Müller et al. 2005)
On the other hand...

- Karitiana NPs allow for definite, indefinite and generic interpretations in all argument positions.
OBJECT POSITION
Object position – definite interpretations

(14)

a.
Koot y-ta-’amy-t yn mynhin-t livro-ty.
ytday 1s-DECL-buy-NFT l one-OBL book-OBL
‘Yesterday I bought one book’

b. Yn Ø-na-ta-tarak<a>-t livro ambip.
   l 3p-DECL-bring-VT-NFT book house
   ‘I brought the book home’
Object position – indefinite interpretations

Context:
- One Karitiana says that Inácio has returned from hunting. Another Karitiana asks:

(15) i-so’oot-t Inácio sojxa.ty?
3p-see-NFT Inácio pig.large

‘Has Inácio seen boars?’
Object position –
generic/kind interpretations

(16)
Maria  na-aka-t    i-pasa-t     gok-ty
Maria   DECL-COP-NFT  PART-like-ABS.AGR  manioc-OBL

‘Maria likes manioc’
SUBJECT POSITION
Subject position –
definite interpretations

(17) Ombakyby’edna
  dog – Juli

Ø-na-aka-t
  3p-DECL-COP-NFT

honghong
  arf.arf

i-a-tyka-t
  PART-make-IMPF-ABS.AGR

‘The dogs – Juli & Gigante – are barking’
Subject position – indefinite interpretations

(18) \( \emptyset \)-Pyry-hyryp-yn  
    tysyp-yn  
    ombaky

3P-ASST-cry-NFT  
IMPF-NFT  
jaguar

‘Jaguars are roaring’
Subject position – generic (quantificational) interpretations

(19)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonso</td>
<td>Ø-na-aka-t</td>
</tr>
<tr>
<td>woman</td>
<td>3P-DECL-COP-NFT</td>
</tr>
<tr>
<td></td>
<td>PART-know-NFT</td>
</tr>
</tbody>
</table>

kinda.haraj-ty
thing.good-OBL

‘Women know about the good things.’
Subject position – generic (kind?) interpretations

(20) Ø-Pyry-pyky-n  ombaky.

3P-ASST-disappear-NFT jaguar

‘Jaguars are extinct.’/ ‘Jaguars have disappeared.’
Summing up...

- Bare Nouns in argumental positions in Karitiana have:
  - definite interpretations;
  - indefinite interpretations;
  - generic interpretations.
4. COVERT DETERMINERS IN KARITIANA?
Many languages of the world do not have articles: Korean, Japanese, Chinese, Croatian, Russian, Hindi, Karitiana, ...
Questions:

• Could a language do without article semantics?

• Could a language do without uniqueness and/or existence presuppositions/entailments?
Goal:

- Present extra evidence that NPs in Karitiana are unmarked for the definite (specific or generic definites) VS indefinite (existentially or generically quantified) distinction.
• And therefore provide evidence that languages can do without articles (overt or covert).
EXTRA EVIDENCE
Indefinites:

• Do not entail or presuppose uniqueness or familiarity.

• Introduce novel entities into the common ground of discourse.

(Heim 1982, 1991)
Definites:

• Entail or presuppose uniqueness or familiarity.

• Do not introduce novel entities into the common ground of discourse.

(Heim 1982, 1991)
Evidence 1:

Pairs of co-referential BNs:

- the same NP is used to refer both to novel and to familiar entities of the common ground of discourse.
Familiarity VS non familiarity

(21)a.

Professor enfermera Ø-na-aka-t
teacher nurse Ø-DECL-COP-NFT

koot i-ambyk-t y-ambip.
ystday PART-come-ABS.AGR 1p-house

‘A teacher and a nurse came to my house yesterday.’
b. **Professor** \(\emptyset\)-na-aka-t i-le-t

   teacher 3-DECL-COP-NFT PART-read-ABS.AGR

   livro-ty y-’iti hot.

   book-OBL 1p-daughter to

   ‘The teacher read a book to my daughter.’

c. **Enfermera** \(\emptyset\)-na-aka-t i-so’kyn-\(\emptyset\)

   nurse 3-DECL-COP-NFT PART-take.care-ABS.AGR 1p-mother

   ‘The nurse took care of my mother.’
Literally:

‘Teacher and nurse came to house of mine yesterday. Teacher read book to my daughter. Nurse took care of mother of mine.’
Evidence 2:

- BNs in Karitiana are used both in situations in which the referent is unique and in situations in which the referent is not necessarily unique.
Non-uniqueness:

(22)

∅-Pyry-kii-n geladera akan pip.
3-ASST-COP.PL-NFT frige village POS

‘There are refrigerators in the village.’
Uniqueness:

(23)

a. Yn i-so’oot-t ombaky-ty.  
   I PART-see-ABS.AGR jaguar-OBL

   ‘I saw a jaguar.’

b. Yn i-so’oot-t sojxa ombaky i-’y.  
   I PART-see-ABS.AGR pig jaguar 3p-eat

   ‘I saw that the jaguar was eating a pig.’
Evidence 3:

- Definites force anaphoric readings, whereas indefinites force disjoint readings.

- Both anaphoric and disjoint interpretations are possible for Karitiana BNs.
Anaphoric interpretation:

(24)

a. Yn i-so’oot-t ombaky-ty.
l 3p-see-NFT jaguar-OBL

‘I saw a jaguar.’

b. Yn i-so’oot-t sojxa.ty ombaky i-’y.
l 3p-see-NFT pig.large jaguar 3-eat

‘I saw that the jaguar was eating a boar.’

c. Y-pon tykiri Ø-naka-pyky-t i.
1s-shoot when 3-DECL-disappear-NFT it

‘It ran away when I fired.’
Disjoint interpretation:

(25)

a.  ∅-Pyry-’a tyka-n  irip  akan.
    ASS-have  IMPF-NFT  tapir  village
    ‘There is a tapir in the village.’

b.

∅-Pyry- ’a tyka-n  irip  akan  gooto  pip  tyym.
ASS-have  IMPF-NFT  tapir  village new in too
‘There is a tapir in the new village too.’
Therefore...

• Based on grammar, one cannot tell apart definite from indefinite readings in Karitiana.
• Can we tell apart generic/kind readings from existential - definite or indefinite - readings?
Generic VS existential readings

(26)    Ombaky    i-pykyn<a>t.
jaguar    PART-run<TV>ABS.AGR
‘Jaguars run’
‘The jaguar’/ ‘A jaguar/Some jaguars ran.’

(27)    Ombaky    i-pykyn<a>t    tyka-t.
jaguar    PART-run<TV>ABS.AGR    IMPF-NFT
‘The jaguar/a jaguar/jaguars is/are running/have been running.’

existential
So...

- Aspect may favor one or the other interpretation.

- But:

  - There is nothing in the morphosyntax or in the distribution of the BN that can do that.
Are Bare Nominals full DPs with ambiguous empty determiners?
Longobardi – variation lies in D

- Problems:
  - A three-way ambiguous determiner.
  - Impossible to test since the three readings are always available.
Chierchia:

- BNs denote kinds in Karitiana.

- Problems:
  - Three type-shifters possible in all argument positions (no blocking).
  - Impossible to test since the three readings are always available.
5. ANALYSIS
Claim:

- BNs in Karitiana are predicates.
  - They get bound by sentencial quantifiers (Krifka et al 1995, Heim 1982).
Generic subjects

- *Ombaky na-aka-t i-pykyn<a>t.*

![Diagram showing the structure of the sentence with 'Jaguars run' as the output.](image-url)
Generic subjects

(28) Ombaky  Ø -na-aka-t  i-pykyn<a>t
jaguar  3-DECL-cop-NFT  PART-run<VT>ABS
‘Jaguars run’

• Genx,e [jaguar x & Cx,e] [runx,e]
  “Generically, if x is a jaguar and x is in C, x runs in C.”
Existential subjects

- *Ombaky na-aka-t i-pykyn*}, \( a \) \( t \).

\[
\begin{array}{cccccc}
\exists & \text{NP} & x & \rightarrow & \text{S} \\
\text{S} & \rightarrow & \text{NP} & x \\
\rightarrow & \text{Jaguar} & x & \rightarrow & x \text{ is running} \\
\end{array}
\]

‘Jaguars are running’
Existential subjects

(29)

Ombaky na-aka-t i-pykyn<a>t.
jaguar 3-DECL-cop-NFT PART-
run<VT>ABS

‘Jaguars are running’

• $\exists e, \exists x \ [\text{jaguar } x \ & \text{running } x, e]$
  “There are jaguars and they are running”
Predictions

Karitiana Bare Nouns...

✔ should be able to occur in both definite and indefinite contexts without restrictions.

✔ should be able to occur with both existential and generic (universal) interpretations with no restrictions.

➢ should not behave as kind-denoting NPs.
Evidence of non kind-denoting behavior:

(i) Bare Nouns in Karitiana have both narrow and wide scope readings.
Wide & narrow scope

(30)

Enfermera otãm tykiri Ø-na-osedna-j Luiz.
nurse arrive when 3-DECL-be.happy-FUT Luiz

✓ ‘Luiz will be happy if any nurse arrives.’
✓ ‘Luiz will be happy if a certain nurse arrives.’
(ii) Narrowest scope possible, but not obligatory.

(31)
Onibus  Ø-na-aka-t  i-ampip<o>-t
bus  3-DECL-COP-NFT  PART-burn-<VT>ABS.AGR

São.Paulo  Rio.de.Janeiro  pip
São.Paulo  Rio de Janeiro  in

• ‘Buses were burnt in São Paulo and in RJ’
• #‘The same buses were burnt in SP and RJ’
(32)

Onibus  Ø-na-aka-t  i-pykyn<a>-t

bus   3-DECL-COP-NFT   PART-run-<VT>ABS.AGR


São.Paulo  Rio de Janeiro   in

• ‘Buses run in São Paulo and in RJ.’
• ‘The same buses run in SP and RJ.’
(iii) Generic interpretation not necessarily favored or unfavored

(33)
Him.bi na-aka-t i-akyno-t
meat.place DECL-COP-NFT PART-close-ABS.AGR NFT
domingo pip
Sunday on

✓ ‘BBQ places close on Sundays’
✓ ‘Some BBQ places close on Sundays’
generic existential
Since...

Karitiana BNs...

• occur in both definite and indefinite contexts;

• have both existential and universal interpretations;

• do not behave like kind-denoting terms; ...
I conclude that:

Karitiana BNs:
• are unmarked for the definite VS indefinite distinction;

Therefore:

• Their quantified readings (existential or generic) must come from the sentence (e.g. aspect, adverbials, incorporation).
• How does one account for the definite readings?
Argument (Matthewson 1996):

- Familiarity/uniqueness are properties of definite NPs.

But:

- Non-familiarity and non-uniqueness are not properties of indefinite NPs.

⇒ Indefinite (existential)NPs are neutral in this respect.
Non-familiarity and non-uniqueness are implicatures of indefinite NPs, which are raised by the existence of definite determiners in languages that have them.
These implicatures are not expected in languages that do not mark the definite vs. indefinite distinction.
6. Conclusions
Conclusions:

- Karitiana BNs are unmarked for the definite VS indefinite distinction.

- Karitiana BNs are best analyzed as predicates.
ABBREVIATIONS
Abbreviations:

- 1s = 1\(^{st}\) person singular agreement, 2s = 2\(^{nd}\) person singular agreement, 3 = 3\(^{rd}\) person agreement;
- ANAPH = anaphoric;
- ABS.AGR = absolutive agreement;
- ASST = assertive;
- COP = copula;
- DECL = declarative;
- DEIC = deictic;
- FUT = future;
- IMPF = imperfective;
- NEG = negation
- NFT = non future;
- OBL = oblique;
- PART = participle;
- POS = postposition;
- SUB = subordinator
- TV = thematic vowel.


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MERCI!!!