Looking for the governor, or the problem of argument status in double-marking languages: a Construction Grammar perspective

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Overview

- Problems for mainstream lexicalist approaches to argument structure in accounting for double marking (head-marking + dependent-marking) languages

- Alternative CxG approach based on independent argument structure constructions and unification

- Application of CxG analysis to "conflicting" evidence for argument status in Jaminjung (Mirndi, Non-Pama-Nyungan, Australia)

Jaminjung

- Victoria River District, Northern Australia
- Western branch of the geographically discontinuous Mirndi family (Non-Pama-Nyungan)
- No longer acquired by children; approx. 30 speakers > 60 years
- Data from own fieldwork since 1993

Jaminjung: main grammatical characteristics

- Free word order

- Double marking (head and dependent marking)

- Ergative-absolutive case system (with complications)

- Prevalence of complex predicates (treated here like simple lexical verbs)

Part I

The problem of argument status in double-marking languages

Double marking

(in the traditional sense of Nichols (1986), Nichols and Bickel (2008 [2005])):

- Obligatory pronominal affixes (cross-reference markers) plus co-referential case-marked noun phrases

Double marking in Jaminjung

- Pronominal prefixes mark
  - the single argument (S) of (morphologically) intransitive verbs
  - both arguments (A and P) of (morphologically) transitive verbs

  Gujarding=biya   *ga-ngga*   **murdab**.
  mother ᵢ=SEQ   **3SGᵢ**-go.PRS   forage
  'The mother then goes hunting.'

  Gugu=biyang   *burrb*   ***gani-minda-ny***   *jalig-ni.*
  waterᵢ=SEQ   finish   **3SGⱼ>3SGᵢ**-eat-PST   childⱼ-ERG
  'Then the child drank up all the water.'

Clitic doubling

- Clitic pronominal indices "doubling" a coreferential NP are present optionally, or only in certain constructions
  - e.g. depending on referential properties (animacy) or accessibility (specificity, givenness) of the argument (Bynon 1992; Anagnostopoulou 1999; Kallulli & Tasmowski 2008; Gabriel & Rinke 2010)

Clitic doubling in modern Greek

- E.g. variable clitic doubling of indirect object

  a. *Edhosa*   *tu*   *Jani ta*   *lefta*
     gave:1SG   DEF:GEN   Jani DEF money:ACC
     'I gave Jani the money'

  b. ***Tu***   *edhosa*   *tu*   *Jani ta*   *lefta*
     3SG:GEN   gave:1SG   DEF:GEN   Jani   DEF   money:ACC
     'I gave Jani the money' (Papangeli 2000: 496, 497)

Clitic doubling in Jaminjung

- Enclitic oblique (dative) pronouns can cross-reference arguments and adjuncts encoding e.g. beneficiary, recipient, purpose, location and goal
  - NPs marked dative, allative, or locative
- Clitic doubling restricted to higher animate referents

  a. *wurdbaj*   *ba-wuny-ijga*   *thanthu-wu*   *jimindirr-u*
     look.for   IMP-2DU-go   DEM-DAT   knife-DAT
     'You two look for that (specific) knife (that you lost).'

  b. *nga-jga-ny=**nu***   *wurdbaj*   *yina-wu*   *janyungbari-wu*
     1SG-go-PST=**3SG.OBL**   look.for   DIST-DAT   another-DAT
     'I was looking for that other person.'

The problem of argument status

- In double-marking and clitic doubling languages, which constituents have argument status: pronominal indices or NPs (DPs)?
- The problem arises because of specific assumptions of lexicalist approaches to argument structure
  - to be avoided in the construction-based approach endorsed here

Assumptions of lexicalist approaches

1. Verbs have a syntactic valency which determines their argument structure, directly (giving rise to the notions of "government" and "subcategorisation") or via linking hierarchies

   GOVERNMENT
   - e.g. German *zeig*- 'show' (SUBJ_NOM, IO_DAT, DO_AKK)

Assumptions of lexicalist approaches

2. Arguments of verbs can only be expressed once in a clause
   - Fillmore (1968)
   - Theta Criterion (Chomsky 1981)
   - Bi-uniqueness condition / Functional Uniqueness
- To preserve this principle, various different solutions have been proposed for double-marking languages ...

Solution I (traditional): Agreement

Case-marked NPs: arguments
Pronominal indices: agreement markers

(Good) criteria (e.g. for English verb agreement):
- Argument NPs are obligatory
- Pronominal indices are redundant in the sense of not adding any information
- Pronominal indices, unlike "true" pronouns, can be non-referential (Evans 2002; Corbett 2006: 103)

Solution I (traditional): Agreement

Case-marked NPs: arguments
Pronominal indices: agreement markers

Problems:

In languages where NP arguments are not obligatory, pronominal indices are not dependent on the presence of NPs (= no surface agreement)

burrb	*gani-minda-ny*
finish	$3SG_i > 3SG_i$ -eat-PST

'He/she drank it up.'

Solution I (traditional): Agreement

Problems (cont.)
- Pronominal indices can express features which are not expressed in the (supposedly) controlling NP (e.g. number)

Gugu=biyang	*burrb*	*burru-minda-ny*	*jalig-ni.*
water$_i$=SEQ	finish	$3PL_j > 3SG_i$-eat-PST	child$_j$-ERG

'Then the **children** drank up all the water.'

Solution I (traditional): Agreement

Problems (cont.)
- Pronominal indices can even express features which clash with features of the NP
  - e.g. in the inclusory construction, widespread in Australian languages (Singer 2001)
  - Two argument expressions are in a superset-subset relationship: the reference of one (any sg NP) is properly included in the other (non-sg pron. index)

Ngiya	*[gujang Nangari]*	*warduj*	*gulujab*	*yiny-irdba-ny.*
here	[mother <name>]$_{i'}$	get.lost	nearly	1DU.EXCL$_i$-fall-PST

'Here Mummy Nangari (and I), we two nearly got lost.'

Solution II: Pronominal arguments

Pronominal indices: arguments
Case-marked NPs: adjuncts / secondary predicates, coreferential with pronominal arguments

(Good) criteria:
- "Argument" NPs are clause-external, e.g. dislocated topics, especially when case marking deviates from that of clause-internal NPs
- ?? "Argument" NPs are optional

Solution II: Pronominal arguments

Problems:

- Unsatisfactory definition of adjunct / secondary predicate (cf. Schultze-Berndt 2006a), lumping together prosodically integrated with dislocated phrases
- Unsatisfactory for clitic doubling when occurrence of clitics is variable and depends e.g. on animacy or discourse status of the referent
- Completely different mechanism required for case assignment in "pronominal argument" and "NP argument" languages

Solution II: Pronominal arguments

Problems (cont.):

- Not all core arguments are pronominal arguments
  - o cf. for Australian languages Austin & Bresnan (1996), Nordlinger (1998: 34-43)
  - o Jaminjung: ditransitive predicates allow for two absolutive objects, but only one is also cross-referenced on the verb

Ngayug=biya	*ti*=binji	ba-wu*n*-ngarna	*burlug.*
1SG$_i$=SEQ	tea$_k$=only	IMP-2DU$_j$>**1SG**$_i$-give	drink

'Me, give me only tea to drink, you two.'

Solution III: Basic grammatical relations

Assumptions:

- Verbs assign fundamental grammatical relations ("Subject/Object"; "S, A, O") which are independent of morphological marking
- Case marked NPs and pronominal indices may jointly indicate grammatical relations, but are neither necessary nor sufficient to identify them

Problem:

- How are grammatical relations to be defined to ensure cross-linguistic applicability? (Croft 2001)

Part II

Double marking in a (radical) construction-based model

Basic assumptions of CxG (general)

- Monostratal approach
- Constructions are conventionalized, language-specific symbolic associations of (partially templatic) form and meaning
  - o All constructions have a constructional meaning, however abstract
- The grammatical structure of a language can be described entirely in terms of constructions and restrictions on their fillers
  - o Morphology is represented in terms of word-internal constructions

Argument structure constructions

(Only assumed by some proponents of CxG, e.g. Goldberg 1995, 2005)

- o Argument structure constructions exist independently of the valency of lexical items
- o Linking is based on compatibility of verb-specific semantic participant roles with the semantics of a given argument structure construction

Form:	SUBJ$_{NOM}$	IO$_{DAT}$	DO$_{ACC}$	} Constr.
Sem.:	Macro-Agent	Macro-Recip	Macro-Pat	

Sem. Valency: *zeig*- <shower, recipient, shown.thing>

„Radical Construction Grammar"

→ Radical Consequence (Croft 2001): no general grammatical relations, only
  → constructions with specific syntactic roles
  → semantic relations between sem. components of constructions

Figure 5.1. The internal structure of a construction (exploded diagram)

based on Croft (2001: 176, 204)

Application to Double Marking

- A semantic participant can be encoded by more than one syntactic argument as long as the expressions involved
  o allow unification to jointly encode a single conceptual entity – thus excluding multiple conflicting arguments, e.g. *the child ate the bananas the peas the sausage*
  o have different functions – thus excluding mere repetition, e.g. *the child ate the peas the peas the peas*
- Pronominal indices and case-marked NPs may individually or jointly represent semantic participants of a predicate

Application to Double Marking

Consequences

- Pronominal indices and case-marked NPs both have "argument status" in the sense that they constitute argument slots in two distinct types of constructions
- No grammatical relation of "government" – since argument slots combine with verbs on the basis of semantic compatibility / collocational co-dependency
- No grammatical relation of agreement between a given NP and a pronominal index; the relationship is an indirect one in that both can represent the same semantic participant.

  "'Agreement' is (…) simply double indexation, by the independent argument phrase and by the agreement affix." (Croft 2001: 229)

Advantages

- Accounts for the fact – long recognised in typology – that pronominal indexing and case marking are structurally and semantically distinct, and have grammaticalized from different origins (e.g. Lehmann 1988; Bickel 2000)
- Accounts for degrees of grammaticalization of pronominal indices, including variable "clitic doubling" (e.g. Givón 1976; Mithun 1991; Bynon 1992; Corbett 2006: 107; van Gijn 2011) without a need for a radical change of status at any given stage of the grammaticalization cline

Advantages

- Accounts for a number of language-specific "mismatches" between argument NPs and pronominal indices

Part III

"Mismatches" between pronominal indexing and case marking in Jaminjung: advantages of the construction-based account

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1. Inclusory Construction

Nangari	warduj	**yiny**-irdba-ny
name(ABS)	get.lost	**1DU.EXCL**-fall-PST

Constr. I — NP ABS+3SG — V'

Unification of features – resolution of clash: referent has to be 1DU.EXCL, i.e. referent of NP$_{ABS}$ plus speaker

Sem. — <theme> — **warduj + -irdba** ‚get lost'

Constr. II — S $_{DU+1.EXCL}$ V$_{Stem}$

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2. „Syncretism" of Ergative and Instrumental

- "Ergative" and "instrumental" case are identical in form in Jaminjung as in many other Australian (and other) languages

jalig-ni	*digirrij*	*gani-mangu*	*julag*	***wagurra-ni***
child-ERG/INST	die	3SG>3SG-hit.PST	bird	stone-ERG/INST

'The child killed a bird with a stone.'

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2. „Syncretism" of Ergative and Instrumental

Analysis I: "Deep case"

- Ergative and instrumental may be formally identical but mark two distinct grammatical roles (Blake 2001 [1994]: 49-50)
  - necessary if functional uniqueness needs to be preserved
- "Evidence": only ergative NP, not instrument NP, triggers agreement on the verb

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2. „Syncretism" of Ergative and Instrumental

Analysis II: Monosemy

- The "ergative/instrumental" case has a single meaning, that of marking the role of "Effector" (Van Valin & Wilkins 1996)
- Constructional meaning of Effector case:
  - Argument which is involved as Causer in an event (subsuming agent, force, and instrument)
- Contrasting constructional meaning of A pron. index:
  - Argument which is the ultimate cause (first cause) of an event (DeLancey 1991; Van Valin & LaPolla 1997: 146)

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2. „Syncretism" of Ergative and Instrumental

jalig-**ni**	julag	wagurra-**ni**	digirrij	**gani**-mangu
child-**EFF**	bird	stone-**EFF**	die	3SG.A>3SG.P-hit.PST

Constr. I — NP-EFF — V'

Constr. II — NP-EFF — V'

Sem. — <hitter, (instrument), hittee> — ***-mangu***

Constr. III — A : P — -V$_{Stem}$

2. „Syncretism" of Ergative and Instrumental

Crucial evidence:

- One morphologically intransitive verb, *-irna* 'burn, be affected by heat', allows an ergative-marked NP to be present
- The fire as heat source qualifies as an Effector, but not as an ultimate cause, i.e. it is not compatible with the A pronominal index of a transitive verb
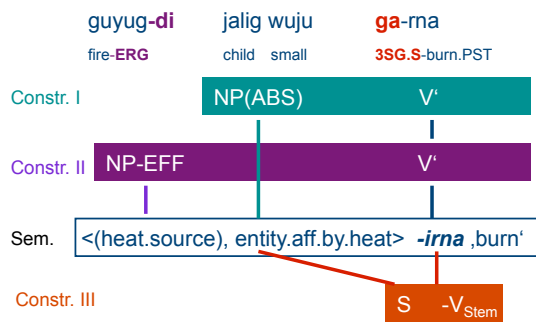
> *jalig*   *wuju*   *ga-rna*   *guyug-di*
> child   small   3SG-burn.PST   fire-EFF
> 'The little child got burnt by the fire'

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2. „Syncretism" of Ergative and Instrumental

- If an ultimate cause is present in addition to the heat source, the transitive verb *-irriga* 'cook, burn' has to be chosen instead

> *(yurlgi)*   *guyug-di*   *burru-rriga=nu,*   *jag-gu*
> leech   fire-ERG/INST   **3PL>**3SG-cook.PST=3SG.OBL   go.down-DAT
> 'They burnt (the leech) with fire for her, to make it come down.'

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2. „Syncretism" of Ergative and Instrumental

guyug-**di**	jalig wuju	**ga**-rna
fire-**ERG**	child small	**3SG.S**-burn.PST

Constr. I   NP(ABS)   V'

Constr. II   NP-EFF   V'

Sem.   <(heat.source), entity.aff.by.heat> *-irna* ‚burn'

Constr. III   S   -V_{Stem}

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3. Variable agent marking: optional ergativity

- No clear-cut split system (though problems posed by those are rather similar)
- Rather, ergative-marking of agents is optional in Jaminjung, as e.g. in Gooniyandi (McGregor 1992, 1998)
- In a text count (Schultze-Berndt 2006b), more than 30% of overt A noun phrases were not marked for ergative

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3. Variable agent marking: optional ergativity

- Factors are not clear-cut but include factors also observed for split systems, i.e.
  - verb class (less "effective" verbs, e.g. 'have', 'see', are less likely to appear with ergative-marked As)
  - tense/aspect, animacy of A,
  - but also information structure, discourse pragmatics

> ***Malara**=biya*   *dibard*   *ganuny-ngunga-m,*   *ba-ngawu.*
> frog=SEQ   jump   3SG>3DU-leave-PRS   IMP-see
> 'The frog now is leaving the two jumping away, look.' (Frog Story)

> *Majani*   ***gujarding-ni***   *waj*   *gan-unga-m.*
> maybe   mother-ERG/INST   leave.behind   3SG.A>3SG.P-leave-PRS
> 'Maybe the mother leaves her (a child).'

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3. Variable agent marking: optional ergativity

Analysis in terms of Constructional meanings:

- Absolutive (unmarked, default) case: Argument is centrally involved in an event (core participant)
- Non-specific as to the actual role of the argument, thus compatible with
  - agents, experiencers, etc.
  - patients, themes etc.
  - any single participant of intransitive verbs
  - both theme and recipient of ditransitive verbs, etc
- Ergative case on agent NPs is only used when Effector nature of this argument is made explicit

3. Variable agent marking: optional ergativity

malara	(jalig + wirib)	dibard	**ganuny**-ngunga-m
frog	(child + dog)	jump	3SG.A>3SG.P-leave.PRS

Constr. I   NP(ABS)   V'

Constr. II   NP(ABS)   V'

Sem.   <leaver, entity.left>   *-ngunga*

Constr. III   A   :   P   -V$_{Stem}$

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3. Variable agent marking: ablative agent

- In Jaminjung, the ablative case can (rarely) replace the ergative/instrumental case with agents
- Proposed constructional meaning (highly specific) of ABL in secondary meaning
    a. Metaphorical "Source" = Participant which is the ultimate cause of an event (Sem. Role component); **same as A prefix**
    b. Contrast (Information Structure component)

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3. Variable agent marking: ablative agent

"nanggayan   guny-bi-yarluga?"   gani-yu=bunyag,
who   2DU>3SG-POT-spear   3SG>3SG-say/do.PST=3DU.OBL

***yangarra-ngunyi**=marlang*
kangaroo-ABL=GIVEN

'"Who do you want to spear?" the kangaroo said to the two (hunters).' (From a story about two kangaroos who start behaving in human-like fashion, to the surprise of the men hunting them.)

*"nganthu-rum"   **warnanggal-ni**   gani-yu=rnu*
2SG:POT-come   doctor-EFF   3SG>3SG-say/do.PST=3SG.OBL

'"You should come here", the doctor said to her.'

Summary and outlook

- A radical CxG approach to argument structure gets by without the notion of government
- Instead: bi-directional „collocational dependencies" (Croft 2001) between argument structure constructions and verbs
    ○ based not on syntactic relations, but on semantic relations between constructional meanings and verbal participants
- Constraint of functional uniqueness / theta-criterion can be replaced with unification requirement

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Summary and outlook

- This approach accounts straightforwardly for double marking and clitic doubling
    ○ NPs and pronominal indices are each argument structure constructions in their own right
    ○ Independent instantiations of verb's semantic participants, no relationship of agreement needed
    ○ optionality or variable occurence of one or the other do not require fundamentally different treatment as arguments / non-arguments

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Summary and outlook

- Well-defined constructional meanings serve to constrain the occurrence of argument structure constructions; these can include constraints on
    ○ argument role (any core arg, effector, ultimate cause, ...)
    ○ **(non-valency based)** referential properties of argument NPs (e.g. animacy in clitic doubling and split systems)
    ○ **(non-valency based)** information structure values, e.g. contrast for ablative agents in Jaminjung

Summary and outlook

- Additional language-specific constraints may be of a pragmatic nature, e.g.
  - specification of degrees of semantic coercion (forced feature clash resolution) permitted in unification (as for the inclusory construction in Jaminjung)
  - possibility of choice between competing markers for a given argument (e.g. Ergative vs. Absolutive vs. Ablative agents in Jaminjung)