Rethinking head vs. dependent marking grammar

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1. Introduction

(1) Nichols (1986)
grammatical relations among heads and dependents may be marked either on the head or on the dependent

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>HEAD</th>
<th>DEPENDENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phrase</td>
<td>possessum</td>
<td>possessor</td>
</tr>
<tr>
<td></td>
<td>noun (N)</td>
<td>attributive adjective</td>
</tr>
<tr>
<td></td>
<td>adposition (P)</td>
<td>complement of P</td>
</tr>
<tr>
<td>Clause</td>
<td>verb (V)</td>
<td>arguments, adjuncts</td>
</tr>
<tr>
<td></td>
<td>auxiliary verb (AUX)</td>
<td>main verb</td>
</tr>
<tr>
<td>Sentence</td>
<td>main clause predicate</td>
<td>relative or subordinate clause (CP)</td>
</tr>
</tbody>
</table>

Table 1

(2) a. the man-'s house
   English, dependent marking
    man-POSS

b. az ember haz-a
Hungarian, head marking
    the man house-3SG

    [in the examples, the head is underlined and the element marking the dependency relation is in italics]

(3) simplifying somewhat
    a. dependent marking = case
    b. head marking = agreement

(4) a. boku-ga tomodati-ni hana-o ageta
    Japanese, dependent marking
    I-SUB friend-IO flower-DO gave
    ‘I gave my friend flowers.’

    b. a-xàc’a a-pʰʰè’s a-šʰ’qʰ’è ø-l ø-y-te-yt’
    Abkhaz, head marking
    the-man the-woman the-book it-to.her-he-gave-FIN
    ‘The man gave the woman the book.’

(5) Nichols (1986)
    • dependent marking is slightly more frequent
    • head marking is the unmarked type
    • the theoretical apparatus of classical, traditional, structural and formal grammar is heavily based on dependent-marked syntax (and so are ideas about Universal Grammar)
Proposal

1. subject-verb agreement is dependent-marking, not head-marking
2. languages differ not in head vs. dependent marking, but in the morphological expression of dependent marking (on DP, V, on both, or on neither)

Theoretical background

dependency invariably reduces to sisterhood, and within each pair of sisters \( \langle \alpha, \beta \rangle \), \( \beta \) is invariably the dependent of \( \alpha \)

2. Subject-verb agreement

Nichols (1986:66)
a language is likely to make a consistent choice as to marking type throughout its morphosyntax

But...

Nichols (1986:77)
person, number, and/or gender agreement on heads is common, even in otherwise dependent-marking languages (e.g. German, Russian)

The subject and object are not dependents of the verb

(10) No privileged relation between the subject and the verb
a. the subject may be an internal/external argument of the verb (passive)
b. the subject of one clause may be an argument of the verb of another (raising)
c. the subject position is external to the maximal projection of the verb

(11) No privileged relation between the object and the verb
d. the object position may be external to the maximal projection of the verb
e. the object of one clause may be an argument of the verb of another (ECM)

Subject/object are clause level notions

→ what kind of dependency relation involved in subject-verb agreement?

3. Types of dependencies

(12) a. head-complement
b. subject-predicate NB predicate = the phrase that is the sister to the subject, not V

(13) common property: sisterhood

(14) sisterhood is a function of Merge
Merge \( \alpha \) and \( \beta \) yielding \( \gamma = \{ \alpha, \beta \} \)

(15) asymmetry between sisters
a. labeling (Chomsky 1995): \[ \delta (\alpha, \beta) \]
b. ordered pair (Zwart 2003): \( \langle \alpha, \beta \rangle \)

(16) Merge transfers elements one at a time from a resource (the pool of elements eligible for inclusion in the derivation) to a work space (the current derivation)
(17) step 1

step 2

(18) In step 2, α is new to the derivation, β is the ‘elder sister’

(19) Dependency relations
   a. α is in a dependency relation with β iff α is merged to β
   b. when α is merged to β, β is the dependent of α (α is the ‘nondependent’)

(20) The core dependency relations
   a. head-complement: the complement is the dependent of the head
   b. subject-predicate: the predicate is the dependent of the subject

<table>
<thead>
<tr>
<th>prosody</th>
<th>weak</th>
<th>strong</th>
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</thead>
<tbody>
<tr>
<td>order</td>
<td>‘left’</td>
<td>‘right’</td>
</tr>
<tr>
<td>merge</td>
<td>new</td>
<td>old</td>
</tr>
<tr>
<td>dependency</td>
<td>nondependent</td>
<td>dependent</td>
</tr>
<tr>
<td>SUBJECT/HEAD</td>
<td>(√ subject/√ head)</td>
<td>(√ predicate/√ complement)</td>
</tr>
<tr>
<td>PREDICATE/COMPLEMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table 2</td>
<td></td>
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</tbody>
</table>

4. Subject-verb agreement again

(21) A dependency relation between α and β may be marked on γ, a term of β

(22) Ich liebe meinen Garten-zwerg

(23) In (21), nothing excludes that γ is the head of β

(24) Morphological marking on a head may in fact be dependent marking
Subject-verb agreement is the marking of the predicate's dependency of the subject on a verb contained within the predicate (i.e. dependent-marking).

Languages like German, Russian, restored to typological harmony (consistent dependent-marking) [but what about case...?]

5. Dependent-marking through case

Objective case is the marking of the predicate's dependency of the subject on a grammatical function expressing noun phrase contained within the predicate (i.e. dependent-marking).

Opposition NOMINATIVE (unmarked, null case) — OBJECTIVE (marked, dependent case) as in Jakobson 1935, except that the object is not dependent of the verb, but (in a way) of the subject.

The opposition in (29) is absent in ergative languages, where the ergative subject is marked with inherent case (instrumental, possessive, etc.; cf. Nash 1995).

Ergative case-marking: the object surfaces in the unmarked case (object case cannot be used to mark the dependency of the predicate w.r.t. the subject).

6. Is there any nondependent-marking?

Possessor—possessum

If the possessor is the 'subject' of the noun phrase, (33b) reduces to (25) = dependent marking.
(35) ‘s looks like a (functional) head: a soldier’s wife = the wife of a soldier

adjective—noun

(36) a. zelen-yj dom
green-NOM.SG.MASC house

b. wist t-ciix”
high REL-house

Case and number (and person = possessor agreement) are not inherent features of the noun, suggesting (37), with the adjective (Adj) spelling out the dependency of the noun phrase on the functional elements for case (K), number (Num), and person (Agr) (cf. Déchaine 1999):

(37)

KP
  K
    AgrP
      Agr
        NumP
          Num
            NP
              Adj
                NP

(38) Adjective agreeing with functional elements (definiteness)

a. een oud-∅ huis
   a old-INDEF.NTR house

b. het oud-e huis
   the old-DEF.NTR house

(36b) may be dependent-marking, if the adjective is merged to the noun phrase, cf:

(39) a. calay a-monit
    funny REL-person ‘funny person’

b. monit calay
    person funny

(40) the izafet construction

a. kuñ-e bolānd
   mountain-IZAF high ‘high mountain’

b. ki-ti ch-a m-ti
   7-chair AGR7-IZAF 3-wood ‘wooden chair’

c. the city of Boston
   English

adposition—complement

(41) a. bez brat-a
    without brother-GEN

b. ruu-maik jar aachi
   3SG-because.of the man

(41b) is actually a possessive construction, with maik a ‘relational noun’. Possibly jar aachi is the subject, with raising of the relational noun. Variant without raising:
Spurious head-marking examples (two sisters are united—by cliticization, presumably—rather than that their dependency is expressed by marking either one):

(42) a. i'-ma b. te'-ma c. po'le-ma
    for me for him for the boy

(43) a. (‘ab) t-wui b. (‘am) ‘em-wui
    toward us toward you (pl.)

[‘ab and ‘am specify motion towards or away from the speaker, wui is the adposition]

(44) a. Waraka hyaye k-omok-no
    Waraka from 1SG-come-IMM.PAST
    ‘I have come from Waraka.’

b. i-hyaye k-omok-no
    3SG-from 1SG-come-IMM.PAST
    ‘I have come from him.’

Conclusion:

- configurational languages are dependent-marking languages
- real issue: are configurational languages and ‘non-configurational head-marking languages’ comparable as to form and function of verbal inflectional morphology?

References


Origin of the data, if not from Nichols (1986, 1992) or from Germanic:


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