Head-marking vs. dependent-marking (Nichols 1986): agreement = prototypical head-marking.

Today: marking does not express dependency in any straightforward way.

1. Concealed dependent-marking

- affix migration
- dependent head-marking
- floating agreement

1.1 Affix migration

(1) head dependent

a. kop koffie no dependency marking
b. cup of coffee dependent marking
c. cuppa coffee head marking

(2) the morphological marker may simply register the presence of syntactic dependency (Nichols 1986:58)

(3) linkers (izafet elements): marking the presence of syntactic dependency

a. mard-e pir (Persian)
   man-EZ old
   ‘old man’
b. asb-e pedar
   horse-EZ father
   ‘father’s horse’

(4) Agreement

[A] morphological affix may (...) index particular inflectional or lexical categories of either the head or the dependent, marking them on the other constituent (op.cit., 58)

(5) a. kur-ê mezin (Kurdish)
   boyMASC-EZ:MASC.SG big
   ‘the big boy’
b. kec-a baş
   girlFEM-EZ:FEM.SG nice
   ‘the nice girl’

(6) affix migration

if any adposition or piece of affixal morphology moves, it will go from the dependent to the head, not vice versa (op.cit., 84)

(7) head dependent

cup =a coffee dependent marking cum cliticization
mard =e pir

(phonological) head-marking may be (syntactic) dependent marking
1.2 Dependent head-marking

(8) head dependent

ki-ti ch-a m-ti (Swahili)
7-chair 7-LINK 3-wood
‘wooden chair’

(9) N [AP a NP ]

head dependent

(10) ‘dependent head-marking’ = marking of a dependent on its head = dependent-marking

(11) dat wij in het bos wandel-en (Dutch)

that 1PL:NOM in the forest walk-PL
‘that we are walking in the forest’

(12) Agr [TP PP [VP V ]]

head dependent

(13) dependent-marking typically affects a head contained in the dependent

1.3 Floating agreement

(14) a. xinär-en lavaš u-ne-k-sa (Udi)
girl-ERG bread:ABS eat-3SG-$-PRES
‘The girl EATS bread.’

NB, $ designates the part of the stem following the clitic.

b. xinär-en lavaš-ne uk-sa
girl-ERG bread:ABS-3SG eat-PRES
‘The girl eats BREAD.’

(15) realization of agreement is sensitive to focus (Schulze 2004)

(16) if (14b) is not head-marking, then neither is (14a)

(17) Agr [TP NP V ]

marking

head dependent

(18) agreement is typically fixed on one element or the other (not necessarily the verb)

(19) i si cu atavéa eʔhóʔh-i no cmóí
REC.PAST 3SG COMPL.ASP finally tear off-LT SU:INVIS bear
na sapcí-si
OB:INVIS face-POSS

‘The bear finally mauled his face.’
2. The expression of dependency

(20) Dependency is a semantic relation e.g. predication which must be syntactically realized, sisterhood can be morphologically marked, by agreement and phonologically expressed via cliticization.

(21) The relations 

\[
(((\text{SEM} \rightarrow \text{SYN}) \rightarrow \text{MORPH}) \rightarrow \text{PHON})
\]

need not be homomorphic.

(22) Disturbances

a. \(\text{SEM} \rightarrow \text{SYN}\) movement \(\left[ S \right]^{*} \rightarrow \left[ V O \right] \rightarrow V \left[ S \right]^{*} \rightarrow \left[ t O \right]

b. \(\rightarrow \text{MORPH}\) dependent head-marking (1.2), floating agreement (1.3), multiple agreement

c. \(\rightarrow \text{PHON}\) affix migration (1.1)

(23) What are the syntactic relations we wish to mark?

a. classical view: X*-relations: head-complement, head-specifier, head-adjunct

b. minimalist view: merge relations: sisterhood

THE MINIMALIST DEFINITION OF SYNTACTIC DEPENDENCY REVOLVES AROUND SISTER PAIRS, NOT HEADS

(24) New opposition: dependent-marking vs. nondependent-marking

3. How much nondependent-marking is there?

(25) Relations to consider (sample)

a. possessor—possessum

b. adposition—complement

c. noun—adjective

(26) possessor—possessum

a. poss/or poss/um possessor = subject = nondependent

i (Ewe) fia dadâ no marking

\[\text{chief, mother}\]

ii (Ewe) fia fé \(\left[ S \right]^{*} \rightarrow \left[ t O \right]\) dependent marking

\[\text{chief, POSS house}\]

iii (English) the chief \(=s\) house dependent marking, affix migration

iv (Abkhaz) à-ç‘k"æn \(yø-y"nø\) dependent marking

\[\text{DEM-boy, his-house}\]

v (Lezgian) Ahmeda-n \(\text{wan} \rightarrow \text{Ahmed-GEN voice}\) nondependent marking?

b. poss/um poss/or possessor = complement = dependent

i (English) the house of the chief dependent marking

\[\text{the chief, house}\]

ii (Persian) asb \(=e\) pedar dependent marking, affix migration

\[\text{horse, EZ father}\]
(27) adposition—complement
a. standard cases adposition = nondependent
   i. (Russian) bez brat-a without brother-GEN
   ii. (Hixkaryana) i-hayaye dependent marking, cliticization 3sg-from ‘from him’

b. relational noun constructions reduce to possessive constructions
   i. (Burushaski) ja a-pači poss/or-poss/um, dependent marking 1sg:obl 1sg-side ‘with me, beside me’
   ii. (Tz’utujil) r-umaal aa Yaax poss/um-poss/or, nondependent marking? 3sg-by cl Yaax or movement? ‘by Yaax’

(28) noun—adjective
a. adjective as complement adjective = dependent, noun = nondependent
   i. (Swahili) ki-ti ch-a m-ti dependent marking 7-chair 7-link 3-wood ‘chair of wood, wooden chair’
   ii. (Kurdish) kur =ē mezin dependent marking, affix migration boy ez:masc.sc big boy 

b. adjective as modifier adjective = nondependent, noun = dependent
   i. (Russian) zelen-yj dom nondependent marking for gender green-nom.sg.masc houseMASC (other features not inherent to N)
   ii. (Shushwap) wist t-clítx high REL-house

4. Agreement theory

(29) Chomsky (2001): probe-goal relation

\[
\begin{array}{ccc}
\text{PROBE} & \text{GOAL} \\
T_i & [_{\text{xp}} & \text{DP} & [_{\text{yp}} & V_i & ]] \\
[_{\text{up}} & [_{\text{p}}] \\
\end{array}
\]

(30) problems
a. Probe and goal are not in a minimalist dependency relation (are not sisters)
b. The probe’s sister (XP) arguably lacks the relevant \( \phi \)-features
c. Status of unvalued features on \( T \) unclear
d. Agreement marking on \( V \) can be a function of the direct dependency of \( DP \) and its sister \( YP \).

AGREEMENT IS NOT MEDIATED BY FUNCTIONAL HEADS
5. Complementizer agreement

(31) Van Koppen (2005) adopts the probe-goal mechanism

\[
\text{PROBE} \quad \text{GOAL}
\]
\[
C_i \quad [_{xp} \quad \text{DP} \quad [_{vp} \quad V_i \quad ]]\]

(32) additional problem
Not easy to identify a semantic/syntactic relation underlying the dependency between C and DP (= subject)

complementizer agreement = agreement of monosyllabic V in inversion followed by clitic

(34) analogy
\[\text{*het vè : hedde vè} :: \text{dat vè : dadde vè}\]
(Brabantish)
have you that you

(35) funny properties of complementizer agreement
a. late emergence (Goeman 1997)
b. (sometimes) optionality (Vanacker 1949)
c. generalization to [monosyllabic] wh-specifiers/relatives (Van Haeringen 1939, Den Besten 1977)
d. generalization to conjunction (Cremers and Van Koppen forthcoming)
e. adjacency requirement (Ackema & Neeleman 2002)
f. no tense features (Hoekstra & Smits 1997)
g. (quite generally) only with [weak] pronoun subjects (Vanacker 1949, Goeman 1980, 2000)
h. first conjunct agreement (Van Koppen 2005)

(36) complementizer agreement with wh-elements
a. wenn-st komm-st (nonstandard German)
when-2SG come-2SG

b. jonge-s die-e werk-e wil-le (South Hollandic)
boy-PL REL-PL work-INF want-PL


a. Volgens miej lop-e wiej noar 't park (Hellendoorn Dutch)
according to me walk-PL.INV we to the park

b. dar-re wiej noar 't park loop-t
that-PL.INV we to the park walk-PL

c. Volgens miej loop-t op den wärmsten dag van 't joar ook wiej noar 't park
according to me walk-PL on the hottest day of the year also we to the park

d. dat op den wärmsten dag van 't joar ook wiej noar 't park loop-t
that on the hottest day of the year also we to the park walk-PL

(38) first conjunct agreement (Van Koppen 2003)

a. de-s [doow en ich] òs kenn-e treff-e (Tegelen Dutch)
that-2SG youSG and I 1PL can-PL meet-INF
‘that you and I can meet’

b. Ontmoet-e / *-s [doow en Marie] uch voor de kerk?
meet-PL/2SG youSG and Mary youPL in front of the church
‘Are you and Mary meeting in front of the church?’
(39) a. verbal agreement determined by rule (dependent head-marking plus movement)
   b. complementizer agreement determined by analogy \(\rightarrow\) overgeneralization possible

6. Conclusion

- agreement is not head-marking but dependent-marking
- complementizer agreement does not fit into the picture at all
- possibly, complementizer agreement is an analogical extension of the morphology of auxiliaries in inversion contexts when followed by a weak pronoun

References

Ackema, Peter and Ad Neeleman. 2002. Interfaces in word-formation. Ms., Nijmegen and UCL.