## 25. Locus of Marking: Whole-language Typology

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#### 1. Definitions and values

Locus is a convenient one-word term for what is also known as head/dependent marking. In any kind of phrase, overt morphosyntactic marking reflecting the syntactic relations within the phrase may be located on the head of the phrase, on a non-head (i.e. on a dependent), on both, or on neither. In possessive phrases, the possessed noun is head and the possessor is dependent. Examples illustrating marking of various kinds in possessive phrases are given in chapter 24. In clauses, the arguments are dependents and the verb is the head. Examples of the locus types in clauses are given in chapter 23. The division into head, dependent, double, and zero marking does not exhaust the possible types; see the same chapters for examples of additional minor locus patterns.

The maps in this chapter are based on the locus of marking in both the possessive NP and the clause. More specifically, we looked at marking of:

- Possessor and possessed in the NP. If there was more than one marking pattern, we chose whichever is default or has the fewest restrictions. (See chapter 24.)
- Direct or primary object (i.e. P) in the transitive clause. Again, it is only the default form of marking that is mapped. (See chapter 23.)

Each of these two studies is an *exemplar-based* survey which seeks a cardinal representative of locus marking for each relation, a representative which maximally reflects type and minimally reflects universals. (For discussion of the exemplar-based approach see the section "Defining locus types" in chapter 23.) We combine these two here to produce an exemplar-based definition of whole-language types, which is simply the

intersection of the definitions for NP and clause locus: the consistently head-marking type has head-marked P and possessor, and analogously for the consistently dependent-marking and double-marking types. That is, a language displaying the cardinal type shows the same kind of marking in both relations.

@	1.	Consistently head-marking		47
@	2.	Consistently dependent-marking		46
@	3.	Consistently double-marking		16
@	4.	Consistently zero-marking		6
@	5.	Inconsistent marking or other type		120
			total	235

Examples of the various types follow.

# 1.1. Head-marking language, with head marking in both NP and clause:

- (1) Tzutujil (Mayan; Guatemala; Dayley 1985: 286)
  - a. r-k'aajool n-b'esiino3sG-son 1sG-neighbor'my neighbor's son'
  - aak'aalaa7 x-Ø-kee-k'ag aab'aj b. jar the COMP-3SG-3PL-throw rock boys ра rwi7 ja jaay top.of the house on 'The boys threw rock(s) on top of the house.'

# *1.2. Dependent–marking language*, with dependent marking in both NP and clause:

- (2) Chechen (Nakh-Daghestanian; Nichols, own data)
  - a. *loem-an k'orni*lion-gen baby.animal

'lion cub', 'lion's cub' (lit. 'of-lion cub')

b. *mashien-an maax* car-GEN price

'the price of a car' (lit. 'of-car price')

c. oox-a cha-ca txou-Ø qeelira

1 PL-ERG straw-INSTR roof-ABS cover.PST

'We thatched the roof/we covered the roof with straw.'

- 1.3. Double-marking language, with case marking on possessors and objects as well as agreement on possessed nouns and verbs. In the following examples the relevant markers are in boldface.
- (3) Mangarrayi (northern Australia; Merlan 1982: 30, 64)
  - a. Ø -ni-nawu na-murimuri-wunyan-gu-bayi

    N.ABS-name-his M.NOM-father's father-3PL-GEN-FOC

    'their paternal grandfather's name'
  - b. *nan-yaba* ga-na-danidba
    M.ACC-brother TNS-1SG>3SG-wait
    'I'm waiting for my brother.'
- (4) Jivaro (Jivaroan; Peru; Pellizzaro 1969: 14-15, Gnerre 1999: 61)
  - a. wi-na nua-r

    1sG-GEN woman-1sG
    'my wife'
  - b. tarách-ru-mi-n nawánt-an su-Ø-sá-ja-i garment-POSS-2SG-OBJ son-OBJ give-3-ASP-1SG-DECL 'I gave your garment to (my) son.'
- In (4b), the zero suffix is unambiguously third person and fits into a larger paradigm whose other members are overt, so it counts as a kind of marking.

1.4. Zero-marking. In contrast, in a zero-marking language there is no marking on either object or possessor, for third person singular or any other person-number combination:

- (5) Pirahã (Mura; Brazil; Everett 1986: 272, 201, 206)
  - a. *ti kaiíi* 
    - 1 house

'my house'

- b. *ti xíbogi ti-baí* 
  - 1 milk drink-intensifier

'I really drink milk.'

- c. ti gí kapiigaxiítoii hoa-í
  - 1 2 pencil give-PROX

'I give the pencil to you.'

### 2. Geographical distribution

The exemplar-based definitions used here pick up only the most committed languages, as it were, of each type, giving geographical distributions that are the set intersection of those generated from just one syntactic relation and hence sparser but cleaner and more useful to historical linguistic geography. The distributions of the head-marking and dependent-marking types are sharper versions of those shown in chapters 23 and 24: the head-marking type is well attested in the Americas and Melanesia but vanishingly rare elsewhere; the dependentmarking type is strongest in Africa, Eurasia, and perhaps Australia-New Guinea and infrequent (though not rare) elsewhere. The double-marking type is rare overall; its decimated distribution, the set intersection of double marking in chapters 23 and 24, is a Pacific Rim distribution showing an enclave effect in the Himalayas, and one outlier in Modern Greek.

Only the zero-marking type has a distribution that is not simply a thinner version of that in chapters 23 and 24: zero-

marked P and zero-marked possessors appear in languages of very different types and usually not in the same languages, perhaps because zero-marked possession is much like compounding or incorporation, phenomena often associated with morphological complexity, while zero-marked clause arguments are part of the signature of the isolating morphological type. Only six languages fall into the zero-marking type as defined on P and possessor. Hence zero marking as shown on the map here has a scant and vaguely southern distribution of no particular areality.

The inset map shows zero marking defined entirely on the clause, as zero marking of both the A argument and the P argument.

@	1.	Zero marking		16
@	2.	Other (non-zero marking)		219
			total	235

Values of Map 25A. Zero Marking of A and P Arguments

#### [Map 25A about here]

Here the geographical result is two prominent clusters in well-known hotbeds of the isolating morphological type, West Africa and Southeast Asia, and a distribution that is overall a sparser version of those in chapters 23 and 24. (Defining the whole-language type on A and P is not typologically very satisfactory, as it properly describes only the clause. For all four cardinal types on the main map, and not just for the zero-marking type shown in the inset, the number of languages falling into the type as defined for A and P is larger than as defined for P and possessor.)

About half of the languages in our sample fall into one of these four consistent locus types; the others have different kinds of marking for each of the two syntactic relations that define the types. Of the four whole-language types, the polar ones - the consistent head-marking and consistent dependent-marking types - emerge rather clearly even from small samples and almost regardless of exemplar-based vs. proportion-based definitions. The double-marking and zero-marking types, in contrast, are less frequent overall, and coherent geographical patterns for them emerge only with a sample of comfortably over 200 languages and on exemplar-based definitions.

Furthermore, the distributions of the polar types have emerged clearly in previous work not based on exemplars: the American and Melanesian preponderance of head marking and the Old World preponderance of dependent marking are clear from the smaller sample and non-exemplar definition of Nichols 1986 and 1992 and from Cysouw 2002, where head marking and dependent marking are tracked as independent features. The double-marking and zero-marking types have not been previously mapped (or, more precisely, they are not numerous enough to show up on samples much smaller than this one: see Cysouw 2002: 96-97 for some discussion).

Locus can vary considerably within old families: in these maps, for example, the Uto-Aztecan family includes the consistently head-marking Pipil, spoken in El Salvador, and the consistently dependent-marking Tümpisa Shoshone, spoken in the southwestern United States; the Austronesian family includes the consistently head-marking Acehnese, spoken in Indonesia, and the consistently dependent-marking Maori, spoken in New Zealand. In general, though, locus is of good durability in language families. It appears to be of great durability in areal populations, for the clear Pacific Rim distribution of head marking evidently reflects colonization movements around the Pacific Rim and founder effects in the American linguistic population, and both of these result from population movements that began tens of thousands of years ago. In line with this, we find traces of Pacific Rim locus trends in the Himalayan or Caucasian mountain enclaves that preserve typological profiles antedating the great spreads of interior Eurasian language families. The dependent-marking type is decently attested everywhere but rare in the Americas, where its low frequency must be another result of founder effects. In the Americas, all four types are attested along the Pacific coast but only the head-marking type is common to the east. Whether the diversity of types along the Pacific coast reflects great age for that linguistic population or rather originates in an overlay of recent Eurasian colonizations on an earlier American stratum still remains to be seen.

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