49. Number of Cases

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1. Defining the values

Morphological case on nominals is a common device to express the syntactic and semantic relationships between clausal constituents. However, the languages of the world that use this strategy vary greatly with respect to the number of case categories represented in their inflectional system. It is the purpose of this map to display this numerical variation in the **productive** case paradigms of **substantives** (full nouns) in 261 languages. Deviant case inventories found in minor word classes of particular languages are dealt with in chapter 50.

@	1.	No morphological case-marking		100
@	2.	2 case categories		23
@	3.	3 case categories		9
@	4.	4 case categories		9
@	5.	5 case categories		12
@	6.	6-7 case categories		37
@	7.	8-9 case categories		23
@	8.	10 or more case categories		24
@	9.	Exclusively borderline morphological		24
		case-marking		
			total	261

The feature values are largely self-explanatory. In the languages lacking morphological case (e.g. Vietnamese), grammatical relations are expressed by word order and/or morphologically and prosodically independent function words (in general, prepositions and postpositions), and partly also by morphological devices on the verb.

The minimal case paradigm contains **two members**, since **paradigmatic relationships** between word-forms are ultimately based on **binary oppositions** (minimal pairs). This implies that whenever a language has an overtly marked case category expressing a specific function, a corresponding zero-marked base form is counted as a case ("default case", or "direct case") even if it has no specific function describable in positive terms. In such instances, the base form receives its case status only by virtue of contrasting with a functionally and formally marked case category. An example in point is Mapudungun (Araucanian; Chile), which has only one overt case suffix *-mew ~ -mu* expressing diverse oblique functions such as place, cause and instrument. This suffix also occurs on syntactically demoted core arguments. Hence, Mapudungun exhibits the following case system, exemplified by the word *peñi* 'brother'.

(1) Mapudungun (Smeets 1989: 77)

Direct: *peñi*

Oblique: *peñi-mu*

A language with **three cases** is the Obdorsk dialect of Khanty (Uralic; western Siberia). Apart from the unmarked direct case, there is a locative and a translative (encoding the goal of movement and change of state as well as secondary predicates). The model word is *xo:t* 'house'.

(2) Obdorsk Khanty (Nikolaeva 1999: 13)

Direct: xo:t

Locative: xo:t-na
Translative: xo:t-ti

While two or three cases constitute small paradigms, languages with four or five categories may be considered to have mid-

sized inventories. **Four cases** are found in Icelandic. The table lists the paradigm of *hestur* 'horse'.

(3) Icelandic (Thráinsson 1994: 153)

Nominative: hest-ur
Accusative: hest
Genitive: hest-s
Dative: hest-i

An example of a **five-case** language is Trumai (isolate; Mato Grosso, Brazil). Trumai has two different dative markers applying to full nouns: -atl, used with identifiable referents, and -ki, used with less identifiable referents. Although the selection of the two endings is clearly governed by semantic criteria, this meaning difference does not affect the case relation per se expressed by the markers; hence, there is only one dative category in Trumai. The example word is axos 'child' except in the locative, which does not occur with animate nouns in this language, and is thus represented here by esak 'hammock'.

(4) Trumai (Raquel Guirardello, p.c.)

Absolutive: axos

Ergative: axos-ak

Dative: axos-atl, axos-ki

Genitive: axos-kate
Locative: (esak-en)

Languages with six through nine case categories have large inventories. Russian exemplifies the value **six to seven cases**. It has six productive cases (there are secondary genitives and locatives occurring only in some declension classes; these have not been judged productive). Russian case inflection is characterized by a high degree of declension-specific

allomorphy and syncretism (see chapter 28 for case syncretism). Two word paradigms belonging to two different declensions (*zavod* 'factory' and *karta* 'map') are given here.

(5) Russian (Wade 1992: 53, 69)

Nominative:	zavod	kart-a
Accusative:	zavod	kart-u
Genitive:	zavod-a	kart-y
Dative:	zavod-u	kart-e
Instrumental:	zavod-om	kart-oj
Locative:	zavod-e	kart-e

The feature value of **eight to nine cases** is represented by West Greenlandic (Eskimo-Aleut). The model word is *qimmiq* 'dog'.

(6) West Greenlandic (Fortescue 1984: 206)

Absolutive: qimmiq Ergative: *qimmi-p* Instrumental: *qimmi-mik* Allative: *aimmi-mut* Locative: qimmi-mi Ablative: qimmi-mit Prosecutive: qimmi-kkut Equative: qimmi-tut

Languages with **ten or more cases** show very large paradigms. The languages on the map with the largest paradigms are Hungarian with (under some analyses) 21 productive cases, followed by Kayardild (Tangkic; Queensland, Australia) with 20 and Lak (Nakh-Daghestanian; eastern Caucasus) with 19 cases. The table of example (7) presents the (reasonably) productive case categories of Hungarian on the basis of the example word *hajó* 'ship'.

(7) Hungarian (Tompa 1968: 206–209)

Nominative: hajó hajó-t Accusative: hajó-ban Inessive: Elative: hajó-ból Illative: hajó-ba hajó-n Superessive: hajó-ról Delative: Sublative: hajó-ra Adessive: hajó-nál Ablative: hajó-tól Allative: hajó-hoz Terminative: hajó-ig Dative: hajó-nak Instrumental-Comitative: hajó-val Formal: hajó-képp Essive: hajó-ul Essive-Formal(-Similitive): hajó-ként Translative-Factitive: hajó-vá hajó-ért Causal-Final: Distributive: hajó-nként hajó-stul Sociative:

The feature value **exclusively borderline case-marking** refers to languages which have overt marking only for concrete (or "peripheral", or "semantic") case relations, such as locatives or instrumentals. This type is represented by Plains Cree (Algonquian; Saskatchewan, Alberta), whose only case-inflecting device is the locative suffix *-ehk* (Wolfart 1973: 31). In several descriptive traditions such paradigmatically isolated adverbial categories are considered derivational rather than inflectional. The functional core of case morphology is the expression of the specific syntactic relations of clausal arguments. Hence,

languages like Cree do not participate in "genuine" casemarking. In practical terms, delimiting case markers from other morphological-functional entities is often particularly difficult in such languages. However, a rather generous stance is adopted for the present map: as soon as one single morphological category is significantly involved in some kind of argument encoding, the entire set of forms is considered a "genuine" case paradigm. Thus Abkhaz (Northwest Caucasian; Georgia) is listed as a two-case language because its adverbial case suffix -s is used to render secondary predicates ('to consider somebody as...') and thereby has a grammatical function, even if its impact on the overall argument structure of the language is somewhat marginal (Hewitt 1989: 101). It must be pointed out that full case-marking paradigms may contain categories that would be considered borderline cases if taken in isolation. Thus the borderline feature value has rather to be viewed as a threshold beyond which all categories, regardless of their semantics, are counted as true cases.

2. Theoretical issues

For the purposes of this chapter Blake's (1994: 1) general definition of case has been adopted:

"Case is a system of marking dependent nouns for the type of relationship they bear to their heads. Traditionally the term refers to inflectional marking, and, typically, case marks the relationship of a noun to a verb at the clause level or of a noun to a preposition, postposition or another noun at the phrase level."

Since case is by definition **dependent-marking**, **head-marking** nominal morphology remains outside the limits of case even if it encodes case-like functions (e.g. possessive marking on the possessed instead of the possessor noun; see chapters 23-25).

Morphological case is a combination of **form** and **function**, but distinctiveness of formal expression will be taken as criterial here. Hence, if in a language two or more unrelated functions are consistently expressed with the same marker, this is counted as only one case. The complete **syncretism** of dative and locative in Serbian–Croatian is thus considered as a single category. On the other hand, **allomorphic** case markers and **free variants** are not counted as separate cases as long as they are not associated with a discernible difference in meaning. In allomorphy–rich languages like Russian (see (5)) the general case paradigm is found by comparing the distinctive distribution patterns of markers across all productive declension classes. If in a language animate and inanimate nouns show divergent case inventories (as in Trumai (4)), the cases are added together even though no nominal is capable of inflecting for all of them.

The functional part of the above definition entails a number of stipulations. Categories with pragmatic (nonsyntactic) functions, such as vocatives or topic markers, are not counted as case even if they are morphologically integrated into case paradigms. Genitives are counted as long as they do not encode categories of the possessum like number or gender as well, if they do not show explicit adjective-like properties. However, genitives may take additional case affixes agreeing with the head noun case ("double case", Plank 1995); in that case they are not regarded as adjectival. Case-stacking, i.e. the obligatory affixation of certain case markers to already caseinflected bases (e.g. in Imonda (Border family; Papua New Guinea; Seiler 1985: 73), where the ablative marker is added to the locative form: sagl-ia-nèi 'from the festival'), has been dealt with by counting the markers separately if both markers contribute to the combined meaning of the resulting word form (cf. Comrie 1999). Case-like markers with derivational character are not taken into account. This excludes, for example, the "locative" suffixes in Oneida (Iroquoian; Ontario) from being counted as case, since they can derive body-part nouns which may occur in all semantically permitted syntactic positions (i.e. not only as locational adverbials).

In a departure from Blake and partly also from chapter 51 of this atlas, a more generous stance has been taken with regard to clitic and adpositional case marking. A marker does not necessarily have to be attached to the phrasal head to be counted as nominal case; it is only required that the marker a sufficient degree of **bondedness** (phonological integration) with its host noun in basic syntactic constructions i.e. in non-expanded, head-only NPs. The reason for doing this is that postpositions (independent words), phrasal clitics and inflectional case morphemes are diachronically interconnected on a grammaticalization cline, and it seems rather arbitrary to set up cut-off points on it. Furthermore, it is often problematic to decide whether in a given language a pre-specified cut-off point has or has not been crossed (given the particular morphosyntactic properties of the language or the shortcomings of the extant descriptions). Finally, taking the semantic side of the case categories into account, there is little reason to keep clitic case marking separated from affixal marking only because differences in bondedness, while functionally of gradual representing different categories in two languages morphological types may be straightforwardly comparable.

3. Geographical distribution

The map reveals some significant areal patterns. Large and very large inventories are common in northern and central Eurasia (extending to the Eskimo languages of North America), Australia and the Caucasus. South Asia is characterized by mid-sized or large inventories; and large or mid-sized systems are also typical of eastern Europe, east-central Africa (i.e. Nilo-Saharan and Cushitic languages) and California. Borderline case-marking systems occur especially often in South and North America, New Guinea, and occasionally in the central belt of Africa. Western

Europe has no case marking, or only minimal inventories (with the striking exception of Basque). Caselessness is even more typical of Southeast Asia and the Pacific, and is also widespread in large parts of sub-Saharan Africa and in Mesoamerica. Perhaps the least uniform macro-area is South America (where large inventories show a regional concentration in the Andean and sub-Andean areas); but New Guinea too is quite diverse.