21. Exponence of Selected Inflectional Formatives

Balthasar Bickel and Johanna Nichols

Together with fusion and flexivity (i.e. patterns of allomorphy), exponence is one of the parameters of morphological typology. While traditional notions like "agglutinative" and "flexive" conflate these parameters (see Plank 1999, Bickel and Nichols 2005, among others), they are surveyed here separately. For fusion, see chapter 20; for one dimension of flexivity, see chapter 59 (on possessive classification).

1. Defining exponence

Exponence refers to the number of categories that cumulate into a single formative. The universal default is to express each category by a dedicated formative. These are monoexponential (or separative) formatives. **Polyexponential** (or **cumulative**) formatives, i.e. formatives which simultaneously code more than one category, are much rarer. A well-known example is number and case in many Indo-European languages. Marking of case in these languages involves the same formative as marking of number, and it is impossible to identify separate markers of case and number. Thus, in Russian, genitive singular is -i or -a and genitive plural -ej or -ov or -Ø, and there is no element in these forms that exclusively expresses case or number. When categories are not cumulated into a single formative, each has its own separate marker. This is so in Turkish, where number is always expressed on nouns by means of the suffix -ler and for each case there is a separate suffix that can combine with -ler, e.g. genitive -in (plural -ler-in), accusative -i (plural -ler-i), dative -e (plural -ler-e), etc.

Exponence is a purely morphological notion; in particular it is independent of the phonological connection between host and formative. Therefore, monoexponential formatives can combine

with any fusion type (see chapter 20 for the definition of fusion types). Thus, the Fijian past tense formative aa (see example (1) in chapter 20) is monoexponential and isolating. The Turkish past tense formative -ti (and its alternants) is monoexponential and concatenative. The Kisi high tone past perfective formative is monoexponential and nonlinear.

2. Sampling procedure and feature values

We sampled, for each language, one exemplar of a case and one exemplar of a tense-aspect-mood formative, following the procedure set out in the section on "Sampling case and tense formatives" (see box in chapter 20). We were interested in combinations of very different categories in one formative, and not for instance in combinations of some tense value with some aspect value. Thus, for coding purposes we treated tense, aspect, mood, status, and evidentiality as one category, and checked whether or not this cumulates with such categories as agreement, voice or negation. Many such category combinations are possible, but in our sample, we found only those shown on the maps.

2.1. Case exponence. Case exponence has a different distribution than tense-aspect-mood exponence, but in both instances, polyexponence is rare. The main map displays case exponence, with the following feature values:

@	1.	Monoexponential case		69
@	2.	Case+number		8
@	3.	Case+referentiality		6
@	4.	Case+TAM (tense-aspect-mood)		2
@	5.	No case		75
			total	160

Case+number coexponence is illustrated by the Russian example discussed above. By coexponence of case with referential values (case+referentiality) we refer to case markers that specify their host NP as topics or as having specific or definite reference. In our sample, this characterizes the Austronesian nominatives (also called "focus" markers or "triggers"), and the Algonquian and Kutenai proximatives. Each of these case markers not only marks a specific grammatical relation but also signals that the NP so marked is topical and definite. For illustration and discussion, see examples (1) and (2) in the explanation of case sampling (see the box in chapter 20).

While referential values also play a role in differential object (or differential subject) marking (Bossong 1985, 1998), we did not treat such marking as instantiating case+referentiality coexponence. In systems of differential marking, definiteness emerges only secondarily as the result of using or not using a certain case marker in response to the situational salience or referential activation of the object, e.g. using or not using the accusative in Turkish or the bă particle in Mandarin in response to situational salience (see examples (3) and (4) in the explanation of case sampling (cf. box in chapter 20)). Case markers with a true referentiality coexponent are different in that the use of these markers is obligatory: in Tagalog or Plains Cree, one of the NPs in a clause MUST be in the nominative or proximative, respectively. What speakers can choose is on which argument they place the marker, but they cannot choose to simply drop the case-marking altogether. A borderline example of case+referentiality coexponence is Evenki. This language has two accusative forms, one for indefinite objects (2a) and an unmarked one for definite or indefinite objects (2b):

- (1) Evenki (Nedjalkov 1997: 193)
 - a. Beje-l mo:ka-r-e genne:-vki.
 man-PL[-NOM] stick-PL-INDEF.ACC bring-HABITUAL.PTCP
 'The men usually bring firewood.'

b. Tar asi kniga-va tang-d'ara-n. that woman[-NOM] book-ACC read-PRES-3SG 'That woman is reading a/the book.'

This is like true case+referentiality coexponence because case-marking is obligatory with objects, but the functional distribution of the two case markers approximates the differential object marking pattern.

Case+TAM (tense-aspect-mood) coexponence is an extremely rare phenomenon. In our sample (and to our knowledge in general) there are only two instances. One is Kayardild (Tangkic; Queensland, Australia):

- (2) Kayardild (Evans 1995: 404)
 - a. *Ngada kurri-nangku mala-y.*1SG.NOM See-NEG.POTENTIAL Sea-LOC.ACTUAL

 'I could not see the sea.'
 - b. Ngada kurri-nangku mala-wu.
 1 SG.NOM see-NEG.POTENTIAL sea-PROPRIETIVE.FUT
 'I won't (be able to) see the sea.'

The past and future tense values are exclusively established here by the choice of case markers on the object (locative for actual, instantiated events, proprietive for future events). The other instance is Lugbara (Central Sudanic; Uganda). Here, the difference between present and perfect tenses is indicated (at least in some environments) exclusively by the presence vs. absence of the subject case marker. (The case marker also cumulates the expression of number.)

- (3) Lugbara (Crazzolara 1960: 80-83)
 - a. $\Im z \Im j = n \mathring{r}$ $'d \mathring{r} \sim 'd \mathring{l}$. rain=NOM.SG.INCOMPLETE rain~EMPH 'It is raining.'
 - b. Àmbó mu 'dálé.
 bigman go there
 'The Bigman has gone there.'

This is different from TAM-based subject marking splits (split-ergative, split-nominative) because in (3), TAM values are not independently indexed in the clause by the verb form or some particle.

2.2. Tense-aspect-mood (TAM) exponence. The inset map displays exponence of tense-aspect-mood in the same set of languages:

@	1.	Monoexponential TAM		127
@	2.	TAM+agreement		19
@	3.	TAM + agreement + diathesis		4
@	4.	TAM + agreement + construct		1
@	5.	TAM+polarity		5
@	6.	No TAM		4
			total	160

Values for Map 21A. Exponence of Tense-Aspect-Mood Inflection

[Map 21A about here]

TAM+agreement coexponence is well-known from Indo-European and Semitic languages, both ancient and modern. It is also common in Papuan languages, especially in those classified as part of the Trans-New Guinea Phylum (Foley 1986: 137). In Indo-European and in some Papuan languages, the same

formatives expressing TAM+agreement also code diathesis (e.g., active vs. passive vs. middle in Modern Greek, active versus middle in Kewa). In one instance, the TAM+agreement exponence pattern also extends to what we call construct marking. Construct marking is the overt registration on the head of the presence of a dependent (or a particular kind of dependent, or a dependent in a particular position). This phenomenon is best known from Semitic NPs, where construct forms register the overt presence of a dependent possessor. With verbs, the construct form registers the overt presence of particular arguments. It is chiefly found (but variously labeled) in languages of Africa and the Pacific. The only instance in our sample where verbal construct marking is combined with a TAM formative is Lango (Nilotic; Uganda): there is one perfective marker used after the pronominal subject εn 'he, she, it' or with relativized subjects (4a), and another perfective marker used elsewhere (4b):

- (4) Lango (Noonan 1992: 137)
 - a. *én òcámò*s/he 3sG.eat.PFV.CONSTRUCT
 'He ate it.'
 - b. *òcàmò*3sG.eat.PFV
 'He ate it.'

The formatives differ from each other by the tonal pattern; however, the tonal pattern does not exclusively mark the construct vs. non-construct difference but it also encodes (part of) the agreement and aspect features.

TAM+polarity coexponence, finally, is found in languages where the expression of negation in the verb is so tightly interwoven with the coding of TAM values that no morphemes can be extracted for either category.

3. Results and discussion

All instances of polyexponence are singularities, limited to single languages or single families. Polyexponence is extremely resistant to areal spread. In turn, some instances are well-attested throughout many branches of their families. This suggests great genealogical stability, and current distributions across individual families perhaps point to historical relationships beyond the reach of the comparative method.

An example of this is coexponence of case with number. This pattern is a stable feature of archaic Indo-European case systems, represented here by German, Greek and Russian. It is also found in several branches of Uralic (here, in Finnish and Nenets). Apart from this, case+number coexponence shows up in Eskimo, Chukchi (Siberia), Yaqui (Uto-Aztecan; northern Mexico), and Lugbara (Central Sudanic; Uganda). However, on closer inspection, in most of these languages the phenomenon is different from the one in Uralic and Indo-European (e.g., limited to individual cases or subsets of nouns as in Chukchi, or resulting from total case-neutralization in the plural as in Yaqui). This suggests that the distribution in Indo-European and Uralic perhaps reflects a singularity inherited from a common proto-language.

Acknowledgements

This research was supported by U.S. National Science Foundation Grant No. 96–16448 (Nichols, P.I.), Swiss National Science Foundation Grants No. 08210–053455 and 610–062717 (Bickel, P.I.), and the Institute for Slavic, Eurasian, and East European Studies, UC Berkeley. We thank Aimée Lahaussois Bartosik, Dave Peterson, and Suzanne Wilhite for help with data collection.