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TYOLOGICAL AND AREAL TENDENCIES IN EVALUATIVE MORPHOLOGY: SOME PRELIMINARY RESULTS*

Abstract

Il campo di studi della morfologia valutativa è relativamente giovane, ma già piuttosto ricco. Tuttavia, mancano studi sistematici sulla dimensione tipologica e areale della morfologia valutativa. Lo scopo di questo articolo è quello di proporre alcune prime correlazioni significative tra l'occorrenza della morfologia valutativa e alcuni dei più significativi parametri della tipologia linguistica, sulla base di un campione di circa cento lingue.

Parole chiave: evaluative morfologia valutativa, *suffixing preference*, universali statistici, ordine dei costituenti, tipi morfologici

The field of evaluative morphology is quite young, but current literature on it is quite rich. Nevertheless, what is still missing is a clear picture of how evaluative morphology is distributed world-wide and of how evaluative morphology correlates with other relevant typological parameters. The aim of this article is to identify some significant correlations between evaluative morphology and some of the main parameters of linguistic typology, surveying a sample of about 100 languages.

Keywords: phraseology, evaluative morphology, suffixing preference, statistical universals, word order, morphological types

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* The authors have worked out every part of this paper together and share the views here presented, but as far as academic requirements are concerned F. Costantini takes official responsibility for sections 2, 3.1, 3.2, 3.3., and 3.4, and N. Grandi for sections 1, 3.5, and 4. The tables in the appendix should be divided according to this attribution. The data discussed in this paper were originally presented in a workshop in Naples (May 4th 2017) and in the international congress 'Word-Formation Theories III & Typology and Universals in Word-Formation IV', in Kosice (July 27th 2018). The following abbreviations are used in this article: AM(eliorative), ATT(enuative), AUG(mentative), DIM(inutive), END(earring), Fr(ench), INT(ensive), It(alian), O(bject), Ot(her), PEJ(orative), Pr(eposition), Po(stposition), Port(uguese), S(ubject), Sp(anish), V(erb).

1. The state of the art

Although the field of evaluative morphology¹ is quite a recent one, scholars are currently paying more attention to the topic, and the literature thereon has significantly increased in the last few years. On the one hand, researchers have addressed many relevant theoretical issues, such as the place of evaluative morphology within morphology (Grandi 2001 and 2015); the possible phonetic iconicity in evaluative morphology (Bauer 1996, Körtvélyessy 2011); the presence of universals in evaluative morphology (Bauer 1997 and Körtvélyessy 2015b); the relation between evaluative morphology and pragmatics (Dressler / Merlini Barbaresi 1994); etc. On the other hand, literature on the subject includes a number of descriptive studies on evaluative morphology in single languages or language families: Baltic languages (Ambranzas 1993); Romance languages (Hasselrot 1957, Ettinger 1974); English (Schneider 2003); Slovak (Böhmerová 2011); Sardinian (Grandi 2005); etc.

A clear picture of how evaluative morphology is distributed worldwide and of how it correlates with other relevant typological parameters is however still missing. The only partial exceptions are Štekauer / Valera / Körtvélyessy (2012), Körtvélyessy (2015a), and the work of Grandi / Körtvélyessy (2015), which in the second part includes more than 50 monographic descriptions of single languages or of groups of

¹ We will adopt the definition of evaluative constructions proposed by Grandi (2002) and Grandi and Körtvélyessy (2015). In short, evaluative constructions can express both descriptive (or quantitative) and qualitative evaluation, depending on whether an entity is 'evaluated' according to its objective characteristics (its size, its shape, etc.) or to the speaker's feelings towards it. In both cases, a deviation from a standard or a default value may be observed. A construction falls into the scope of evaluative morphology if it satisfies two conditions: (i) a linguistic construction can be defined as evaluative if it assigns a description of a qualitatively different value from the 'standard / default'; (ii) an evaluative construction must include at least the explicit expression of the standard value (by means of a linguistic form which is lexically autonomous and is recognized by the speakers as such) and an evaluative mark (a linguistic element specifically devoted to express this shift). The expression of such a standard form / concept usually coincides with the base of a synthetic construction and with the head of an analytic construction. The evaluative mark can be a suffix, a prefix, the reduplication of the lexical morpheme, a circumfix, etc.

related languages (apart from 13 theoretical chapters in the first part). These chapters make available to the scientific community a large amount of typological data and can provide the foundation for a first wide-ranging comparative and typological survey on evaluative morphology.

The aim of this article is precisely to sketch a preliminary picture of some areal and typological tendencies in evaluative morphology, using, as a sample, the languages described in the second part of Grandi / Körtvelyessy (2015)².

2. Language sample and methodology

The descriptive chapters included in the second part of Grandi / Körtvelyessy (2015) allow us to build a sample of almost 90 languages, distributed as follows³:

² The sample includes not only the languages to which the chapters are dedicated, but also the related languages mentioned in the chapters themselves for which sufficient data are presented.

³ The six areas are those adopted in WALS at the start of the Handbook project. We decided to maintain this subdivision, even if, in the meantime, the structure of the WALS has changed. The sample languages are the following:

Eurasia:

Agglutinative and SOV: Basque, Georgian, Svan, Megrelian, Laz, Ket, Nivkh, Tatar, Telugu, Udihe, Evenki, Even, Negidal, Oroquen, Oroch, Nanai, Orok, Ulcha, Manchu

Agglutinative and SVO: Hungarian

Fusional and SVO: Catalan, Hebrew (non-concatenative), Latvian, Luxembourgish, Modern Greek, Slovak, Swedish

Fusional and SOV: Persian

SE Asia and Oceania:

Isolating and SVO: Apma, Mandarin Chinese, Lisu

Agglutinative and SVO: Muna

Agglutinative and SOV: Tibetan

Agglutinative and VSO: Balangao, Tagalog, Romblomanon, Ilocano, Tausūg, Ibaloi, Bikol, Yami

Agglutinative and VSO / VOS: Mansaka

Australia and New Guinea:

Agglutinative and SOV: Dalabon, Iatmul

Agglutinative and SVO: Jingulu, Rembarnga, Yukulta, Lardil

Area	Languages
Eurasia	28
South East Asia and Oceania	14
Australia and New Guinea	9
Africa	10
North America	20
South America	8
Total	89

Table 1. The language sample.

As Körvelyessy (2015c) underlines, the descriptions of evaluative morphology in the languages included in the second part of Grandi / Körvelyessy (2015) were written by linguists who are native speakers or experts of the languages described and in the majority of cases the data were specifically collected for the purpose. In the (rare) cases of

Agglutinative and no dominant order: Kaurna, Kayardild

Polysynthetic and no dominant order: Warlpiri

Africa:

Fusional and VSO: Berber, Classical Arabic, Moroccan Arabic

Isolating and SVO: Ewe, Kɔnni

Agglutinative and SVO: Buli, Shona, Zulu

Agglutinative and SOV: Selee, Somali

North America:

Fusional and SOV: Cabécar

Agglutinative and SOV: Choctaw, Creek, Chickasaw

Agglutinative and SVO: Huave

Polysynthetic and SOV: Koasati, Dena'ina, Slavey, Dene Suliné, Dane-zaa, Ahtna, Upper Tanana, Witsuwit'en, Navajo, White Mountain Apache, Mattole

Polysynthetic and no dominant order: Huautla Mazatec, Inuktitut, Plains Cree, Hupa

South America:

Polysynthetic and SOV: Jaqaru, Kawki, Lule

Polysynthetic and SVO: Toba, Wichi

Agglutinative and SOV: Aymara

Polysynthetic and no dominant order: Kwaza, Yurakaré

The indication of the morphological and syntactic type indicates, as usual, a prevailing tendency in the language. It should therefore not be understood as a categorical indication.

data taken from grammars, they have been subjected to further verification. Therefore, these data are an original and reliable source of information about evaluative morphology on a great number of languages.

This sample cannot obviously be considered as representative of the world's languages; consequently, the generalisations presented and discussed in this study need further investigation through the analysis of a larger database. Nevertheless, since, as stated above, the typology of evaluative morphology is a completely unexplored field and this research is the very first attempt to sketch a typological and areal picture of evaluative morphology, this distortion is hardly avoidable. However, we are firmly convinced that even an incomplete representative sample can offer interesting hints and suggestions for future research.

The 89 sample languages have been inserted in a database⁴ and classified according to areal, genealogical, and typological parameters. For each language we have provided the following information: area, language family, genus, morphological type, order of subject, object, and verb. Moreover, for each language we have recorded the morphological strategies used to express seven values that we consider typical representatives of evaluative morphology: diminutive; augmentative; ameliorative; pejorative; intensive; attenuated; endearing⁵.

3. The results

3.1. Cross-linguistic diffusion of evaluative morphology

In our survey, we have initially focused on the distribution of the seven evaluative values in the 89 sample languages. In doing so, the very

⁴ The database is available on request to the authors.

⁵ The strategies used to express the other evaluative values (authenticity, social position, etc.) have been grouped in a category classified under the label 'other' which has not been considered for this research. We are aware that, by selecting only seven values, the whole range of evaluative constructions is not covered. However, the values considered here are the most consistent ones from a cross-linguistic perspective, thus offering the possibility of a broader comparison between the languages.

basic question we have addressed was the following: how many languages make use of a specific morphological device to express the seven typical evaluative values? Table 2, in the appendix at the end of the study, summarises the data concerning this first step of the research. The most relevant information arising from Table 2 is the asymmetry between the occurrence ratio of diminutives and of the other evaluative values. Diminutives are by far more frequent from a cross-linguistic perspective than other evaluative values, which is a well-known and widely described phenomenon. There is usually a significant gap between the occurrence ratio of diminutives and of the other evaluative values per area, with the only exception being intensification, which displays a particularly high level of frequency in South America and Asia, and Oceania. The other evaluative values occur in less than half of the languages of each area. In absolute terms, the cross-linguistically rarest value is the ameliorative one, followed closely by the pejorative one.

Table 2 also shows that diminutives are far from being a universal: they are available in more than 80 % of the sample languages with respect to four areas: Eurasia (all languages but one, Nivkh, have diminutives), Africa, South America and North America (in decreasing order), but they are rather infrequent in the languages of South East Asia and Oceania, and Australia and New Guinea.

As for the relationship between the individual values and the areas, Eurasia is the area with the highest degree of saturation for four of the values. Quite a high degree of saturation is also observed in the Americas (South America above all) and in Africa, while Australia and New Guinea is the only area where each evaluative value is represented in less than 50 % of the languages.

These data confirm the conclusion reached by Körtvélyessy (2015b and c), that is, that evaluative morphology is far from being a universal. It is rather an areal phenomenon and particularly a 'euiversal', since it appears as an inherent feature of the morphological systems of Standard Average European languages.

3.2. Evaluative morphology and morphological types

Our database also allows us to draw some observations with respect to possible connections between the level of evaluative morphology saturation and the morphological type of the languages.

Although the sample is clearly unbalanced (47 languages out of 89 are agglutinative, while about 20 are polysynthetic languages and 12 are fusional languages; in some cases, it is not easy to establish with certainty the morphological type of languages), fusional languages appear to display a high rate of evaluative morphology saturation (3.1 evaluative values per language on average), polysynthetic languages have 2.6 evaluative values per language on average, and agglutinative languages show the lowest rate of evaluative morphology (2.2 evaluative values per language on average).

Thus, evaluative morphology is usually more frequent in fusional languages. Next in line in the frequency of evaluative morphology are the polysynthetic languages and the agglutinative ones respectively.

3.3. Co-occurrence of individual evaluative values

The preceding remark introduces another typologically relevant aspect concerning evaluative morphology, namely the co-occurrence of individual evaluative values. In every typological investigation it is expected that not all parameter combinations are attested at the same frequency rate. This is exactly what happens with evaluative morphology, at least with respect to the values that it can express.

If we consider how the seven evaluative values under investigation combine with each other, it is apparent that none of the languages in the sample expresses all the seven evaluation values with a specific dedicated morpheme. Only two languages have six values out of seven; five languages have dedicated affixes for five evaluative values; fourteen languages have affixes for four evaluative values; sixteen languages have affixes or formal strategies for three evaluative values; more than half of the sample languages express only one or two evaluative values: 29 languages have two evaluative strategies; the remaining 21 lan-

guages have only one evaluative value (cf. Table 3 in the appendix). Thus, in a wide cross-linguistic perspective, the default situation is to have a very poor evaluative morphology.

If we now match the occurrence of semantic values with the subdivision in the six areas, we observe that, quite unsurprisingly, the languages that combine different evaluative values are concentrated in areas with a high degree of evaluative morphology saturation: in Eurasia one language has six evaluative values, three have five evaluative values, and seven languages have four evaluative values. That is to say that 53 % of languages with four or more evaluative values are spoken in the area with the highest degree of evaluative morphology saturation. Eurasia is followed by the Americas as for the number of evaluative values expressed. If we finally consider Africa, the third area, where evaluative morphology is quite widespread, we observe that, quite surprisingly, the languages are on average rather poor in terms of expressed evaluative values: typically, two per language. Thus, Eurasia is not just the area where we find the majority of the languages with evaluative morphology, but it is also the area where evaluative morphology is richer.

As for the combinations of evaluative values, an extreme variety of combinations arises, but without a clearly prevailing combination for frequency (cf. Table 4 in the appendix). Thus, it is almost impossible to sketch even a provisional typology. The most frequent ‘types’ are the following:

- DIM and AUG (14 % of the sample languages)
- only DIM (11 % of the sample languages)
- only INT (8 % of the sample languages)
- DIM and ATT and INT (8 % of the sample languages)

The percentages are, however, too low to consider these generalisations as significant.

As for the most frequent combinations between two evaluative values within the types identified in Table 4, the database provides the data listed in Table 5 (cf. appendix). Quite surprisingly, diminutives com-

bine more often with intensives than with the evaluatives having the opposing value, i.e. augmentatives.

3.4. Implicational correlations (statistical universals)

The most popular implicational correlation in the literature on evaluative morphology is that between augmentatives and diminutives (Bauer 1997 and Körtvélyessy 2015b), which is supposed to be universal:

- (1) augmentatives \supset diminutive

In our sample, as shown in Table 4, there are two languages, Athna and Mansaka, which violate this correlation. Thus, the correlation should probably be stated as a statistical rather than an absolute universal.

Our database also suggests the existence of other possible statistical universal correlations (cf. table 6): seventeen languages out of eighteen that have pejoratives, have morphological diminutives too. Thus, we can hypothesise an implicational tendency as in (2).

- (2) pejorative \supset diminutive

Our database also shows that twenty-two languages display some kind of endearing formation. All of them have diminutives too. Once again, an implicational universal or tendency such as the following may be hypothesised:

- (3) endearing \supset diminutive

Moreover, in most cases (sixteen languages out of twenty-two) the endearing meaning is an extension of the diminutive meaning. Therefore, we can hypothesise a tendency where, if an affix or a morphological device has an endearing meaning, then the same affix or morphological device probably has a diminutive value too.

Finally, in only three languages the endearing, pejorative, and ameliorative values do not co-occur with diminutives and/or augmenta-

tives. Therefore, we can hypothesise a statistical implicational tendency as the following:

- (4) qualitative evaluation \supset descriptive evaluation

Thus, the qualitative side of evaluation could be a sort of secondary evaluation; we can assume that if a language displays some form of qualitative evaluation, then it has also some kind of descriptive evaluation, but not vice versa.

3.5. Formal strategies: the suffixing preference

If we now turn to the formal strategies employed to form evaluative constructions, we observe that suffixation prevails on other formal tools, such as prefixation, reduplication, etc. This phenomenon is widely and extensively described in the relevant literature (Štekauer 2015: 47)⁶. The sample languages confirm this tendency: suffixation is largely prevalent in the expression of six out of seven values; it does not occur in the majority of surveyed languages only in the case of intensification, where reduplication is the most frequent morphological tool (cf. Table 7 in the appendix).

In this respect, evaluative morphology is perfectly consistent with word formation in general: it is well known that languages display an asymmetry in the use of the different morphological strategies they have at their disposal. This is an often discussed issue in morphology, and particularly in morphological typology, at least since Greenberg's (1963) seminal work on language universals. This asymmetrical distribution of suffixes and other morphological devices is usually called 'suffixing preference', and has been related to two relevant parameters from a typological point of view: the use of prepositions vs. postpositions and VO vs. OV basic word orders (cf. Hawkins / Gilligan 1988: 219).

⁶ Cf. also "evaluative constructions are derived mainly by means of suffixation" (Körvelyessy 2015b: 70).

(5)	Prefixes	Suffixes
VO/Pr	X	X
OV/Po	∅	X

So, “the suffixing preference results from the occurrence of both prefixes and suffixes in head-initial languages” where we should expect to find only prefixes (Hawkins and Gilligan 1988: 234). The table in (5) has been drawn up on the basis of a wide cross-linguistic survey on inflectional categories, such as aspect, plural, gender, case, etc., which are cross-linguistically more consistent than derivational ones. However, if derivation had been taken into account too, the table would probably not have an empty slot, as is shown in (6) (cf. Grandi / Montermini 2005).

(6)	Prefixes	Suffixes
VO/Pr	X	X
OV/Po	(X)	X

The generalisation (6) shows that derivational prefixes are attested even in some OV languages, although they are rarer than in VO languages (as indicated by the round brackets).

Both for inflection and derivation there are two possible interpretations of the first lines of (5) and (6): an intra-linguistic interpretation, according to which a specific language can have both inflectional/derivational prefixes and inflectional/derivational suffixes⁷; and a cross-linguistic interpretation, according to which a specific derivational category can be cross-linguistically expressed both by prefixes and suffixes⁸.

⁷ For example, in Berber verbs the third person singular is marked by a prefix (*y/i-* for masculine and *ta-* for feminine), but the third person plural is marked by a suffix (*-an* for masculine and *-an(t)* for feminine); in Romance languages, relational adjectives are formed by adding a suffix to the base-word (sole 'sun' > solare 'solar'), but negative adjectives are formed by adding a prefix to the base-word (utile 'helpful' > inutile 'useless'), etc.

⁸ For example, number is marked by suffixes in Italian (*alber-o* 'tree' vs. *alber-i* 'trees') and by prefixes in Swahili (*m-tu* 'man' vs. *wa-tu* 'people'); agent nouns are

A third possible interpretation is in principle available, although it is very rare within the world's languages: in a single language, an inflectional or a derivational category is always expressed either by prefixes or by suffixes, but almost never by both⁹. Evaluative morphology represents a remarkable exception with respect to the latter interpretation: in many genetically and typologically unrelated languages the very same evaluative function is formally expressed by different formal strategies (for example, in Italian *appartamento*, 'flat', can be diminutivised by a suffix in *appartamentino* and by a prefix, *miniappartamento*, 'small flat').

So, if we move from inflection (and derivation, although to a lower degree) to evaluative morphology, the 'suffixing preference' sometimes becomes a sort of 'prefix-suffix neutrality'¹⁰. This typologically unusual situation is exemplified both by Indo-European languages (compare examples in (7)a) and by languages belonging to other families (compare examples in (7)b-d):

- (7) a. Romance languages
 Diminutive prefixes: It., Sp., Port., Fr. *mini-*, *micro-*, etc.
 Diminutive suffixes: It. and Sp. *-ino*, Port. *-inho*, It. *-etto*, Fr. *-et(te)* etc.
 Augmentative prefixes: It., Sp., Port., Fr. *maxi-*, *macro-*, *mega(lo)-*
 Augmentative suffixes: Sp. *-ón*, It. *-one*, Port. *-ao* etc.
- b. Finnish
 Diminutive prefix: *pikku-*
 Diminutive suffix: *-nen*

formed by suffixes in English (i.e. *sing* > *sing-er*) and by prefixes in Malay (*nyanyj* 'sing' > *pe-nyanyj* 'singer').

⁹ Hawkins and Gilligan (1988) list 749 inflectional constructions in a sample of 113 languages, and only in 49 cases (less than 7 % of the whole) a single language has both prefixes and suffixes or infixes and suffixes to express the same category. For example, Zapotec has prefixes and suffixes which express possession; the same happens for negation; Burushaski has prefixes and suffixes which express voice; Sotho has prefixes and suffixes to express tense, etc.

¹⁰ Cf. Grandi / Montermini (2005) and Grandi (2015).

- c. Berber
 Diminutive suffix: *-ush*
 Diminutive circumfix: *t__t*
- d. Bantu languages
 Diminutive prefixes: usually class 12/13 (but also 2, 7, 8, 11, 14, 19, and 20)
 Diminutive suffix: *-ana*
 Augmentative prefixes: class 3, 4, 5, 10, 21, 22, etc.
 Augmentative suffix: *-hadi / -kati* etc.

In our sample, in twenty-three languages the diminutive value can be expressed by means of different formal strategies; as for augmentatives and pejoratives, this situation occurs in eight and six languages respectively; as for intensification and attenuation, the instances of neutrality between different formal strategies are twelve and nine respectively; in six languages the endearing value is formed by different morphological devices; finally, no language has the ameliorative value when such situations occur.

These data can be combined with those discussed in Grandi and Montermini (2005), based on a sample of 55 languages belonging to different families: Grandi and Montermini show that the meanings 'small' and 'big' are often expressed both by prefixes and by suffixes (not only in European languages); the meaning 'good' is often expressed by prefixes; the meaning 'bad' is primarily expressed by suffixes. Therefore, the so-called 'prefix-suffix neutrality' mainly concerns the quantitative side of evaluation, and to a lesser extent the qualitative side (and this could confirm the prominence of quantitative evaluation mentioned in (4)).

The data presented in the appendices of Grandi and Montermini (2005) can also be integrated with the ones presented here to build further significant generalisations on the distribution of suffixes and other morphological strategies and on their correlation with typologically relevant parameters. These parameters can be chosen by taking into account the 18 implicational universals listed in Hawkins / Gilligan (1988), who relate the choice of prefixes or suffixes to express inflectional cate-

gories to the presence of prepositions or postpositions and to the relative order of verb and direct object.

In Grandi and Montermini's (2005) sample, 52 % of VO / Pr languages exhibit some kind of affixal neutrality (mostly between prefixes and suffixes, but also between infixes and suffixes). As for OV / Po languages, the situation is radically different: in their sample, the only language which displays a prefix-suffix neutrality is Hindi. It is not surprising that suffixes are the most favoured strategy in evaluative morphology of OV / Po languages (they are attested in 66 % of the languages in their sample). Thus, the cross-linguistic distribution of 'affixal neutrality' seems to be asymmetrical, favouring head-initial languages.

This tendency is clearly confirmed by our database, supporting Grandi and Montermini's (2005) results, and allows us to hypothesise some further implicational correlations: first, if a language has only evaluative prefixes or only evaluative infixes, it is VO / Pr with more than chance frequency; second, if a language has only evaluative suffixes, it can be both VO / Pr and OV / Po; third, if a language displays some kind of affixal neutrality, it is VO / Pr with more than chance frequency:

- (8) a. evaluative prefixes or infixes \supset VO / Pr
 b. only evaluative suffixes \supset VO / Pr or OV / Po
 c. evaluative prefixes / infixes and suffixes ('affixal neutrality') \supset VO / Pr

The unusual 'affixal neutrality' can thus be viewed as a typological characteristic of head-initial languages.

We suggest that a possible explanation for this unusual neutrality is to be looked for in the typological outline of morphological systems. It is well known that consistent OV languages tend to be agglutinative in their morphology (Lehmann 1973: 47). As seen above, there is a preferential connection between fusional morphology and the richness of evaluative morphology. This makes fusional languages a potentially ideal habitat for prefix-suffix neutrality: in this case, the richness of evaluative morphology is measured both on the semantic and on the formal level. Moreover, agglutinative languages tend to preserve a one-

to-one correspondence between form and meaning. Prefix-suffix neutrality is a clear violation of this tendency, because more formal items are available to express the same meaning. Therefore, fusional languages are an ideal habitat for prefix-suffix neutrality, while agglutinative languages are an unfavourable habitat for this kind of neutrality.

4. Conclusions

The aim of this article was to present some preliminary generalisations within a typological approach to evaluative morphology. Building on a database created by scrutinising the descriptive chapters of Grandi / Körtvélyessy (2015) and including information on evaluative morphology in 89 languages, our analysis has pointed to the following conclusions. First, in very general areal terms, diminutives are cross-linguistically more frequent than the other evaluative values. Second, when combining the two parameters of the diffusion of the evaluative morphology and its richness, the area that shows the highest level of saturation is Eurasia, as expected in view of previous literature (cf. Körtvélyessy 2015b and c); on the contrary, the area with the lowest saturation level is that of Australia and New Guinea. Other areas, such as Africa and the Americas, have high values as for the availability of the evaluative morphology, but low values as for its richness. Third, as for the richness of evaluative morphology in different languages, low values appear to be the default situation, because the languages in our sample usually display an evaluative morphology limited to one or two evaluative marks. Finally, the database has allowed us to formulate some statistical implicational correlations, which should be checked by resorting to a richer empirical background.

As for the traditional typological parameters, our survey shows that the morphological type and the structure of adpositional and verbal phrases can play a significant role in explaining which typological environments can favour or disfavour evaluative morphology. Moreover, rich evaluative systems often correlate with the fusional type, a generalisation which is also reflected in the property of 'prefix-suffix neutrality': the same evaluative values can be expressed by more than one

strategy in a single language. This property is also favoured by head-initial syntax.

These conclusions suggest that a typological survey of evaluative morphology can form the basis for a deeper analysis in the field and that such a research may allow us to integrate the study of evaluative morphology with that of the most traditionally used parameters in typological research. This would undoubtedly favour a better understanding of evaluative morphology, not only in its internal dynamics, but above all in its relations with the more complex system of languages.

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Appendix

	Total	DIM	AUG	AM	PEJ	ATT	INT	END	Ot
Eurasia	28 (100%)	27 (96,4%)	8 (28,6%)	1 (3,6%)	8 (28,6%)	14 (50%)	14 (50%)	13 (46,4%)	2 (7,1%)
Africa	10 (100%)	9 (90%)	3 (30%)	1 (10%)	1 (10%)	3 (30%)	3 (30%)	0	3 (30%)
SE Asia and Oceania	14 (100%)	8 (57,1%)	3 (21,4%)	1 (7,1%)	2 (14,3%)	7 (50%)	11 (78,6%)	1 (7,1%)	3 (21,4%)
Australia and New Guinea	9 (100%)	3 (33%)	1 (11%)	0	2 (22%)	2 (22%)	3 (33%)	2 (22%)	2 (22%)
North America	20 (100%)	16 (80%)	13 (65%)	1 (5%)	3 (15%)	3 (15%)	3 (15%)	1 (5%)	1 (5%)
South America	8 (100%)	7 (87,5%)	2 (25%)	1 (12,5%)	2 (25%)	4 (50%)	7 (87,5%)	4 (50%)	6 (75%)

Table 2. Ratio of languages displaying evaluative strategies per area.

Number of evaluative values	Number of languages	Languages
7	0	-
6	2	Inuktitut and Catalan
5	5	Even, Georgian, Persian, Warlpiri, Yurakaré
4	14	Evenki, Plains Cree, Telugu, Toba, Latvian, Megrelian, Lule, Muna, Zulu, Basque, Slovak, Bikol, Kwaza, Tatar
3	16	Shona, Dena'ina, Balangao, Wichi, Slavey, Mansaka, Svan, Laz, Mandarin Chinese, Jaqaru, Tagalog, Moroccan Arabic, Ket, Hungarian, Classical Arabic, Tibetan
2	29	Iatmul, Negidal, Ulcha, Navajo, White Mountain Apache, Modern Greek, Lisu, Berber, Dene Suliné, Dane-zaa, Upper Tanana, Witsuwit'en, Hupa, Mattole, Oroquen, Nanai, Dalabon, Choctaw, Cabécar, Swedish, Udihe, Hebrew, Aymara, Ilocano, Kawki, Luxembourgish, Manchu, Yami, Nivkh
1	21	Kaurna, Ahtna, Ewe, Huave, Lardil, Somali, Tausug, Yukulta, Kayardild, Selé, Oroch, Creek, Komasati, Orok, Jingulu, Kōnni, Chickasaw, Apma, Romblomanon, Buli, Ibaloi

Table 3. Number of evaluative values per language.

Evaluative values and combinations	No. of languages	Languages
AUG	2	Kaurna, Athna
DIM	10	Ewe, Selee, Oroch, Creek, Koasati, Orok, Konni, Chickasaw, Buli, Ibaloi
INT	7	Huave, Tausuġ, Yukulta, Kayardild, Jingulu, Apma, Romblomanon
ATT	2	Lardil, Somali
DIM + PEJ	1	Iatmul
DIM + AUG	13	Negidal, Ulcha, Navajo, White Mountain Apache, Modern Greek, Lisu, Berber, Dene Suliné, Dane-zaa, Upper Tanana, Witsuwit'en, Hupa, Mattole
DIM + END	3	Oroquen, Nanai, Dalabon
DIM + ATT	4	Choctaw, Hebrew, Luxembourgish, Manchu
DIM + INT	4	Swedish, Udihe, Aymara, Kawki
ATT + INT	4	Cabécar, Ilocano, Yami, Nivkh
DIM + AUG + PEJ	2	Shona, Dena'ina
DIM + PEJ + ATT	1	Balangao
DIM + AUG + END	2	Wichi, Slavey
AUG + AME + INT	1	Mansaka
DIM + ATT + END	1	Svan
DIM + INT + END	2	Laz, Mandarin Chinese
DIM + ATT + INT	7	Jaqaru, Tagalog, Moroccan Arabic, Ket, Hungarian, Classical Arabic, Tibetan
DIM + AUG + PEJ + END	1	Evenki
DIM + AUG + PEJ + ATT	1	Plains Cree
DIM + PEJ + INT + END	3	Telugu, Toba, Megrelian
DIM + PEJ + ATT + END	1	Latvian
AME + PEJ + ATT + INT	1	Lule
DIM + PEJ + ATT + INT	1	Muna
DIM + AUG + AME + INT	1	Zulu
DIM + AUG + ATT + INT	3	Basque, Slovak, Bikol
DIM + ATT + INT + END	2	Kwaza, Tatar
DIM + AUG + AME + PEJ + END	1	Even
DIM + PEJ + ATT + INT + END	3	Georgian, Persian, Warlpiri

DIM + AUG + ATT + INT + END	1	Yurakaré
DIM + AUG + AME + PEJ + INT + END	1	Inuktitut
DIM + AUG + PEJ + ATT + INT + END	1	Catalan

Table 4. Evaluative types.

Combinations of two values	Number of languages
DIM + INT	29
DIM + AUG	27
DIM + ATT	26
ATT + INT	23
DIM + END	22
DIM + PEJ	17
INT + END	13
PEJ + END	11
INT + PEJ	10
PEJ + ATT	9
ATT + END	9
AUG + INT	8
AUG + PEJ	7
AUG + END	7
AUG + ATT	6
AME + INT	5
AME + PEJ	4
AME + AUG	4
DIM + AME	3
AME + END	3

Table 5. Occurrence of evaluative values combinations.

Language	DIM	AUG	AME	PEJ	ATT	INT	END	Ot
Even	*	*	*	*			*	
Evenki	*	*		*			*	
Inuktitut	*	*	*	*		*	*	*
Catalan	*	*		*	*	*	*	
Shona	*	*		*				*
Dena'ina	*	*		*				
Plains Cree	*	*		*	*			
Telugu	*			*		*	*	
Toba	*			*		*	*	
Georgian	*			*	*	*	*	*
Persian	*			*	*	*	*	
Warlpiri	*			*	*	*	*	*
Latvian	*			*	*		*	
Megrelian	*			*		*	*	*
Balangao	*			*	*			
Iatmul	*			*				
Lule			*	*	*	*		
Muna	*			*	*	*		
Wichi	*	*					*	*
Slavey	*	*					*	
Yurakaré	*	*			*	*	*	*
Zulu	*	*	*			*		*
Negidal	*	*						
Ulcha	*	*						
Mansaka		*	*			*		
Navajo	*	*						
White Mountain Apache	*	*						

Kurna	*							
Modern Greek	*	*						
Lisu	*	*						
Berber	*	*						
Dene Suliné	*	*						
Dane-zaa	*	*						
Upper Tanana	*	*						
Witsuwit'en	*	*						
Ahtna		*						
Basque	*	*			*	*		
Slovak	*	*			*	*		
Bikol	*	*			*	*		
Hupa	*	*						
Mattole	*	*						
Kwaza	*				*	*	*	*
Svan	*				*		*	
Laz	*					*	*	
Tatar	*				*	*	*	
Oroquen	*						*	
Nanai	*						*	
Dalabon	*						*	
Mandarin Chinese	*					*	*	
Ewe	*							*
Jaqaru	*				*	*		*
Choctaw	*				*			
Cabécar					*	*		*
Huave						*		
Lardil			*					

Somali					*			
Tagalog	*				*	*		*
Moroccan Arabic	*				*	*		
Tausūg						*		
Swedish	*					*		
Yukulta						*		
Udihe	*					*		
Ket	*				*	*		
Kayardild					*			
Seleɛ	*							
Hebrew	*				*			
Hungarian	*				*	*		
Classical Arabic	*				*	*		
Oroch	*							
Creek	*							
Koasati	*							
Aymara	*					*		*
Orok	*							
Ilocano					*	*		
Jingulu						*		*
Rembarnga								
Tibetan	*				*	*		*
Kɔnni	*							
Chickasaw	*							
Apma-						*		
Romblomanon						*		
Buli	*							
Ibaloi	*							*

Huautla Mazatec								
Kawki	*					*		*
Luxembourgish	*				*			
Manchu	*				*			
Yami					*	*		
Nivkh					*	*		

Table 6. Distribution of evaluative values in the sample languages.

	Languages in which the evaluative value is morphologically expressed	Languages in which the evaluative value is expressed by suffixes	Percentage
Diminutive	73	55	75%
Augmentative	31	22	71%
Ameliorative	5	4	80%
Pejorative	18	11	61%
Attenuated	33	16	49%
Intensive	43	13	31%
Endearing	22	17	77%

Table 7. Suffixation in evaluative morphology.