

Epilogue: degrees of transparency*

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In this epilogue the results of the analyses of four different languages in the preceding papers are compared. It is shown that the degrees of transparency of these languages can be represented on an implicational scale, and that the features themselves can be ranked on a transparency scale as well. It is furthermore shown that Esperanto occupies a somewhat different position within the sample as it was designed as a phonologically and morphologically transparent language, but lacks transparency in its syntax.

1 Introduction

In the preceding four papers four languages have been tested for their degree of transparency along the parameters defined in the introductory chapter. As announced there, in this short epilogue I try to give a tentative answer to the question whether an implicational hierarchy can be established that expresses the extent to which languages resist opacity as regards these features. Section 2 studies the variation between languages excluding Esperanto, as this language has its own specific design features that require it to be discussed separately. This is done in Section 3, in which Esperanto is compared with the remaining languages. Section 4 concludes this paper.

2 Transparency features of Dutch, Kharia, Quechua and Sri Lankan Malay

Table 1 lists the results of the analyses of Kharia, Quechua, and Sri Lankan Malay as presented in the previous chapters. I have added the details for Dutch as well, based on my native speaker judgements about the various features. The languages are given in alphabetical order, and the features in the order in which they were discussed in the introductory chapter. I leave out one feature here,

* I am indebted to Sterre Leufkens for discussion of the topics dealt within this paper.

which concerns the question whether all semantic units can be used as predicates. The reason for this is that some of the languages studies require the use of a copula, whereas others don't, and it is not entirely clear how this difference should affect the classification.

Table 1: Transparency features of Dutch, Kharia, Quechua and Sri Lankan Malay

Transparent feature	Dutch	Kharia	Quechua	Sri Lankan Malay
No apposition	-	-	-	-
No grammatical relations	-	-	-	+
No discontinuity	-	+	-	+
No sensitivity for nature of input	-	+	-	+
Phonological = Morphosyntactic phrasing	-	-	-	+
No influence of phonological weight	-	-	-	-
No expletive elements	-	+	+	+
No tense copying	-	+	+	+
No raising	-	+	-	+
No grammatical gender	-	+	+	+
No agreement	-	+	+	+
No stem alternation	-	+	-	+
No cumulation	-	-	-	-
No phonological adaptation	-	-	-	-

After sorting the languages as regards the number of transparent features in increasing order from left to right, and the features themselves as regards the number of languages in which they manifest themselves, in decreasing order, the result is as in Table 2.

A first look at Table 2 immediately reveals that the differences between the languages are far from random. On the contrary, they reveal an implicational pattern between the various features that have been discussed in the preceding papers and between the various languages. If a language has a positive transparency value for one of the features lower in the table, it also has positive transparency values for features higher in the table. And if a language more to the left in Table 2 has a positive transparency value for a certain feature, languages more to the right in Table 2 have a positive transparency value for that same feature as well. This leads to two conclusions. First, some transparency features, i.e. the ones lower in Table 2, are more easily overridden in languages in general, while other transparency features, i.e. the ones higher in Table 2, are more difficult to be violated in language in general. Second, some languages, i.e. the ones in the left part of Table 2, are systematically less

transparent than the ones in the right part of Table 2, as they possess several or all of the transparency features that can be identified as the ones that are most unlikely to be violated according to the vertical arrangement of features. It is clear that there are huge differences between languages as regards their degrees of transparency. As transparency is one of the main parameters that determine ease of acquisition (Slobin 1977), it is a small step to conclude from this that (i) some languages, i.e. the least transparent ones, are more difficult to learn than others, and (ii) some features, i.e. the ones that are realized transparently in most languages, are more difficult to learn than others.

Table 2: Transparency features of Dutch, Kharia, Quechua and Sri Lankan Malay reordered

Transparent feature	Dutch	Quechua	Kharia	Sri Lankan Malay
No expletive elements	-	+	+	+
No tense copying	-	+	+	+
No grammatical gender	-	+	+	+
No agreement	-	+	+	+
No discontinuity	-	-	+	+
No sensitivity for nature of input	-	-	+	+
No raising	-	-	+	+
No stem alternation	-	-	+	+
No grammatical relations	-	-	-	+
Phonological = Morphosyntactic phrasing	-	-	-	+
No apposition	-	-	-	-
No influence of phonological weight	-	-	-	-
No cumulation	-	-	-	-
No phonological adaptation	-	-	-	-

If one looks at the features themselves that occur at the two ends of the scale, it is remarkable that those features that are realized transparently in most languages, are the ones that have been identified in the introductory chapter as being internal to morphosyntax: expletive elements, agreement markers, tense copies and grammatical gender are relevant or introduced within the Morphosyntactic Component, and do not originate in an interface between two components. The features that least resist an opaque realization, are ones either internal to the Phonological Component, or originating in an interface. Leufkens (2010) offers a more extensive discussion of the specific types of features that are more likely to be transparent/opaque.

3 Locating Esperanto

Esperanto was specifically designed to be a transparent language. It is therefore interesting to see to what extent this attempt was successful. Table 3 shows how Esperanto compares to the most transparent languages of the sample studied so far.

Table 3: The transparency of Esperanto

Transparent feature	Dutch	Que- chua	Kharia	Sri Lankan Malay	Espe- ranto
No expletive elements	-	+	+	+	+
No tense copying	-	+	+	+	+
No grammatical gender	-	+	+	+	+
No agreement	-	+	+	+	-
No discontinuity	-	-	+	+	+
No sensitivity for nature of input	-	-	+	+	+
No raising	-	-	+	+	-
No stem alternation	-	-	+	+	+
No grammatical relations	-	-	-	+	-
Phonological = Morphosyntactic phrasing	-	-	-	+	+
No apposition	-	-	-	-	+
No influence of phonological weight	-	-	-	-	+
No cumulation	-	-	-	-	+
No phonological adaptation	-	-	-	-	+

What this comparison makes clear is that as regards some features, i.e. the ones at the bottom of Table 3, Esperanto is more transparent than other languages. As regards other features, however, Esperanto is less transparent than other languages in the sample: it displays agreement, raising, and grammatical relations. A closer look at these two sets of features shows that Zamenhof, in designing Esperanto, was very strongly aware of the potential opacity of phonology and morphology, but did not realize that certain syntactic operations lead to opacity as well.

4 Conclusions

This short comparison between five languages shows that indeed an implicational hierarchy can be established as to the degree in which languages resist opacity. These degrees of opacity are defined as sets of transparent versus opaque realizations of grammatical features of languages. As a result, these features themselves can also be ranked hierarchically in terms of their impact on the overall degree of transparency of a language. Given the relation between transparency and ease of acquisition, these results apart from their typological implications offer interesting avenues for acquisitional research.

References

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