

## What are your values?

In intensionalist approaches to syntactic variation, meant to overcome the difficulties of classical Principles & Parameters theories (Longobardi 2017, Biberauer 2019, Crisma et al. 2020), parameters are not a predefined list available at the initial state of the mind, but are additions of structure to the mental grammar, within a variability range produced by a generative mechanism of the Faculty of Language (FL): the language learner who encounters in the PLD positive triggering experience that ‘sets *parameter P* to [+]’ adds a structure to her/his grammar; otherwise nothing is added to the then current state of the mind. Thus, [−*parameter P*] is a linguist’s metaphor for the *default* state, that ‘literally requires the acquirer to do nothing’ (Biberauer 2019: 60).

These approaches lead one to expect asymmetries in the manifestations of the two values [+*parameter P*] and [−*parameter P*]: the former must always have visible manifestations (p-expression, Clark & Roberts 1992) in the PLD, the latter need not (default state).

Here we will combine synchronic considerations with diachronic evidence, deriving from the experience of setting ancient languages’ parameters from corpora, to test the prediction of the intensionalist approaches. The main question is whether there are different classes of parameters, distinguished in this case by the evidence for the default states, and whether this is a random property of single parameters or rather of a definable class of parameters.

In theory, one can conceive of two types of alternative situations:

- 1) parameters for which PLD can display positive evidence for [+*parameter P*], but it is also possible to construct positive evidence incompatible with [+*parameter P*], i.e. also for the default state.
- 2) parameters for which PLD can display positive evidence only for [+*parameter P*], and there is no conceivable structure that would be compatible with [−*parameter P*] but not with [+*parameter P*], i.e. the default state is not p-expressed in the data.

Both types are in fact encountered, and they raise different theoretical and practical issues.

In type (1) parameters, the possible availability of positive evidence for either value poses a serious *theoretical* challenge: if both values for a given parameter are associated with positive evidence in the PLD, how can one decide if one value requires triggering experience in order to be set, while the opposite for the learner is just a default state? In this respect, we found that this group is split into two subgroups, those where there is a natural answer to this question, and those that raise more intricate problems.

The first subgroup comprises parameters of the formats (i.e. schemata, in Longobardi’s 2005 terms) governing the grammaticalization of certain features and their spread to other categories through agreement. These are cases where the presence or absence of a given formal feature F is manifested by visible morphological alternations, say Number distinctions (e.g. opposing English to French nouns, or German to English adjectives, or European to Chinese nominal arguments altogether); here, one can very naturally assume that for the acquirer it is necessary to be presented with alternations that manifest the feature in order to incorporate it into his/her grammar, thus the presence of the feature corresponds to the [+] value of that parameter, its absence to the default value. Note that the absence of F, in this case Number distinctions, is equally obvious from the viewpoint of the linguist, as revealed by the fact that e.g. the same form of a given Chinese nominal can normally be associated with singular or plural interpretations. However, it is possible and natural to assume that the acquirer of a language (or category) displaying a grammaticalized feature sets the parameter neglecting this kind of evidence.

In the other subgroup one finds parameters defining some crosslinguistic differences in word order, which under Kayne’s (1994) LCA/Universal Base Hypothesis, should all be reduced to presence/absence of overt movement. Examples are whether a given language has prepositions or postpositions, or whether determiners are DP-initial, as in all IE languages, or DP-final, as

e.g. in Basque: here the positive evidence is perfectly comparable for either choice, especially considering that such head-complement orders sometimes harmonically extend across categories, and no morphological markedness is often associated with either alternative. Deciding that one order requires positive evidence to be acquired and the other is the default choice comes with the burden of maintaining that the acquirer uses the triggering experience in one case (say, prepositions) and is simply blind to it, although so salient, in the symmetrical case (say, postpositions), which would be the default. The alternative is to postulate a specific class of parameters that do not have a default state, and both values are set based on the PLD: this may be a plausible assumption, especially in light of the possible role of prosody in the very early setting of directionality parameters (Langus et al. 2017).

Parameters of type (2), on the other hand, represent the ideal case for intensionalist approaches, which assume that [*-parameter P*] does not need to be set and therefore does not need to be manifested in the PLD: in type (2) this kind of evidence is simply non-existent. An example is the parameter that distinguishes languages where a head noun can take more than just one argument (e.g. Indo-European, Semitic) from languages in which nouns can only take one argument (e.g. Hungarian); dyadic nouns are positive evidence for the [+] value of this parameter, but nouns with just one argument are compatible with both values, therefore the only evidence for [-] is negative evidence ('there are no dyadic nouns').

We will show that this ideal case of the asymmetry predicted by intensionalist models is in fact rather common: a careful analysis of some cases of synchronic and diachronic variation leads one to the somewhat surprising conclusion that also certain movement parameters fall into this category and that positive evidence is available only for the *absence* of overt movement, which must then be the default option.

One example is that of the movement of N over some adjective positions in Romance. Certain lexical classes of adjectives can occur in higher or lower positions in the extended projection of N, and whether N raises over all of these positions or only the lower ones is parametrized across Romance varieties (a cluster of parameters of partial N-movement). Given this state of affairs, the order N-A would not be evidence for the scope of N movement, because it may result from the noun crossing over the lower but also the higher position available for this kind of adjectives; the order A-N, on the other hand, shows that N has *not* moved to the higher position. Thus, for this parameter, the PLD provides positive evidence for the absence of movement but not for its presence, therefore the inevitable conclusion is that overt movement is the default value. A strictly parallel argument can be made with respect to the parametrization of raising of proper names to D in Romance vs. Germanic: there is unambiguous positive evidence for the absence of overt movement in Germanic, but not for its presence in many Romance languages. The conclusion that, counter to a possible null hypothesis, it is overt movement that represents the default state, while its absence must be set from evidence, is supported by diachronic generalizations: the expansion of the scope of partial N-movement in the development from Latin to Romance (Crisma & Gianollo 2006) and from Ancient Greek into Standard Modern Greek and Italo-Greek (Guardiano & Stavrou 2019, 2021) suggest precisely that whenever evidence for the absence of overt N movement disappears, as a result of independent changes (in these cases mainly the loss of prenominal inflected Genitive), the default choice by learners is assuming a longer scope of N-raising.

In sum, many/most parameters can be assigned a default state as expected by intensionalist theories; the nature of the evidence for the default state classifies parameters into qualitatively different classes; the default state of a parameter is not necessarily the one with fewer visible (overt) operations.