## On the role of the input in the acquisition of determiners by bilingual children

When introducing the notion of "theoretical bilingualism", Roeper (1999) allowed us to account for the fact that children may produce utterances such as (1a) and (1b) during one and the same acquisition stage, without applying to the recurrent notion of optionality.
(1) a. that's car.
b. that's a car

According to theoretical bilingualism, the variation between (1a) and (1b) reflects the access to two coexistent grammars, one in accordance with (a), the other in accordance with (b). Even adults whose target language generally disallows bare count nouns are capable of understanding (1a). Thus, they seem to have access to a grammar that they normally do not use. Assuming further that (1a) and (1b) differ along the dimensions of explicitness and economy, it appears plausible that children tend to produce (1a) because they prefer to be economical and project the least possible structure, while adult tend to produce (1b), favouring explicitness over economy. What we still cannot account for, however, is why children with some target-languages start to reject economy earlier than children with other target-languages. In other words, why do we find cross-linguistic differences in the acquisition of determiners?

The present study will approach this issue by looking at the acquisition of the DP in three languages differing in their determination patterns: German, French, and Italian. It proceeds from an empirical study of the adult languages, comparing the licensing conditions and token frequency of bare nouns. It is true, as observed by many scholars, that French displays the least number of contexts for bare nouns, while they are most frequent in German. Italian, a language that has often been said to differ from French only in licensing bare nouns in lexically governed positions (e.g. Chierchia 1998), takes an intermediate status between French and German. This tripartition is reflected in the acquisition data. The finding that German children cease to omit determiners later than children with a Romance target-language, reported and predicted in earlier studies (e.g. Chierchia et al. 1998), is confirmed. However, we also find a dissociation between the two Romance languages.

Our empirical results match the variational approach to language acquisition (Yang 2000), according to which language acquisition involves a population of grammars, made available by UG, that compete to match the linguistic environment. Following Yang, we assume that each grammar is paired with a weight that changes according the its compatibility with incoming sentences. If a grammar can successfully parse a sentence, it is rewarded while at the same time the other grammar is punished. Learning stops when the weights of the grammars are stabilized. According to the variational approach, the rate of development is determined by input patterns. The more frequent evidence there is for one of the grammars, the faster the target weight can be established. The child data is taken from 4 longitudinal studies of bilingual children. Their acquisition patterns match the input data and thus confirm the predictions derived from the variational approach.

Chierchia, G. (1998) Reference to kinds across languages, Natural Language Semantics 6, 339405.

Roeper, T. (1999). Universal bilingualism. Bilingualism, Language \& Cognition 2 (3), 169-186 Yang, C. (2000). Language Acquisition as grammar competition: A synthesis of universal grammar and learning, Ms., MIT.

