The crosslinguistic distribution of polydefinites: case and expletive determiners

1. Existing accounts of determiner spreading (DS)/the polydefinite construction (see e.g. Alexiadou & Wilder 1998, Campos & Stavrou 2004, Lekakou & Szendrői 2007, Ioannidou & den Dikken 2009) do not satisfactorily address two issues: the compositionality problem that multiple determiners pose, and the cross-linguistic distribution of the phenomenon. As Alexiadou (2003) demonstrates, DS of the Greek type, in (1), displays different properties from apparently similar constructions in e.g. Hebrew, Albanian and Scandinavian. In this talk we address these two issues, and derive the (un)availability of DS in a particular language from two factors: the presence of (i) expletive determiners and (ii) case morphology.

(1) a. to kokino to podilato
   the red bicycle
   the bicycle the red

   b. to podilato to kokino
       ‘the red bicycle’
       ‘the bicycle the red’

2. Following Lekakou & Szendrői (2007), we take DS to be an instance of close apposition (henceforth CA) as in (1) (cf. Kolliakou 2004, Stavrou 1995). Apart from the freedom in word order that both CA and DS enjoy (see (1) and (2)), both constructions are restricted to definite DPs (Stavrou 1995) and both involve an obligatorily restrictive interpretation (Kolliakou 2004). In (3), DS is not licensed because the adjective ‘poisonous’ cannot be interpreted restrictively, since all cobras are poisonous.

(2) a. o aetos to puli (oxi to simvolo)
   the eagle the bird not the symbol

   b. to puli o aetos (oxi to simvolo)
       the bird the eagle not the symbol

   ‘the eagle that is a bird (not a symbol)’
   ‘the eagle that is a bird (not a symbol)’

(3) i dililitiriodis (#i) kobres
    the poisonous the cobras

   (Kolliakou 2004)

On Lekakou & Szendrői's approach, both DS and CA involve a big DP consisting of two DPs, with DS, but not CA, additionally containing noun ellipsis. The essence of CA/DS is an operation that identifies two distinct R(eferential) roles (see Williams 1989, Baker 2003), namely the ones originating within the nominals inside the sub-DPs. R-role identification is reminiscent of theta-role identification as proposed by Higginbotham (1985) for adjectival modification, where a theta role of the adjective becomes identified with the R-role of the noun. The outcome of R-role identification is that the large, complex DP will act as a single argument within the clause, receiving a unique theta-role of the clausal predicate. Like Higginbotham’s identification, R-role identification is interpreted as set intersection (see Heim & Kratzer 1998 on predicate modification). We impose a restriction on the application of R-role identification via complex DP-formation, namely a ban against vacuous application: the operation cannot apply if the resulting set would be identical to one or both of the original intersecting sets. This rules out cases where, for instance, sub-parts of CA have independently identical R-roles: *i sikaminja i marja ‘the blueberry.tree dialectal the blueberry.tree standard’ (Stavrou 1995:225). Moreover, this ban derives the obligatoriness of the restrictive interpretation. For instance in (3) above, the set of poisonous entities properly contains the set of cobras. So, intersecting the two sets yields the set of cobras.

For this account to be feasible, DPs in Greek must be taken to denote in <e,t>. In fact, the very existence of DS and CA in the language makes the conclusion inescapable that at least some definite determiners are not interpreted as such, and hence that DPs do not always denote individuals, i.e. in type e. However, instead of positing massive, ad hoc lexical ambiguity (i.e. expletive and non-expletive incarnations of D), we propose, much in the spirit of Zeijlstra (2004), that in fact all definite determiners in Greek are semantically expletive, and thus do not yield an individual. Instead, the semantics of D in Greek is that of the identity function: whichever type is its input will also be its output. The source of semantic definiteness (e.g. contribution of uniqueness presupposition) is located in a distinct, phonologically null functional head, call it Def, which c-commands and scopes over DP (see (4) below).

That definite determiners in Greek can be expletive is suggested by the fact, exploited below, that in Greek, proper names in argument position are obligatorily preceded by the definite determiner.

The existence of DS/CA thus depends on a Def-D split: only in languages with expletive determiners will R-role identification, operating on set-denoting DPs, exist. The next question then is how the Def-D split comes about. Putting languages with no overt D’s aside—they are not relevant as candidates for DS/CA—we argue that what is crucial here is the existence of morphological case in the language.

3. We assume that the highest member of the extended nominal projection, Kase, is responsible for marking the nominal as an argument of the clausal predicate (Öztürk 2005; also Bittner & Hale 1996 for a precursor). We take the definite article as normally (i.e. in non Def-D split systems) responsible for rendering a nominal element argumental (i.e. type e), while Kase is responsible for marking it as such for the clausal predicate. But in some languages the two roles are performed by a single, fused functional
head, say K+D. Whether a particular language has fused K+D or has separate K and D-type heads depends on the presence of case morphology in the following way.

Pannemann (2007) and Neeleman & Szendrı́i (2007) argue that language acquisition of the nominal category is top down: the lack of negative evidence in language acquisition dictates that for any new element, the child assumes a rule that associates the given element with the highest category compatible with the feature specification of the element (e.g. /him/ [+arg][+pronoun][+sg][+masc] = KP) An insurmountable problem arises if the child hypothesizes that the given form realizes a lower category, say D, while in the adult grammar it stands for a larger category, say KP. Under such circumstances, adult speakers will never produce data that can persuade the child to abandon his or her initial (incorrect) hypothesis. On the other hand, it is harmless for the child to hypothesize that the given form realizes the highest category KP, even if in the adult grammar it stands for a lower category. Adult speakers will produce data in which this form is combined with other KP-internal material, and this input will force the child to reassociate the form with a lower-level category. In general then, for any nominal category, first KP is posited in argumental positions, endowed with a [+argumental] feature. But a K-head is only projected separately from a D-head if there is morphological evidence for case: [KP [K[arg]] [DP D[+def] ... NP]]. If there is no evidence for a separate Kase-head in the form of case morphology on nominals, K and D are projected as a single functional head with composite features: [K[+DP] K+D[+def][+def] ... NP]. Once the status of Kase is determined by the child, she can consider structure lower in the tree—in particular, whether to posit a split Def-D structure. Given the top-down nature of ‘structure unravelling’ she is only free to do so in a language with morphological case, i.e. only when a separate Kase head is projected. In other words, the possibility for a split Def-D structure is dependent on the presence of a D-type head distinct from Kase, which, in turn, depends on the presence of morphological case.

4. Let us illustrate the process for Greek. A child learning Greek quickly establishes that the language has morphological case marking, as it is apparent on nouns, determiners and even adjectives. As a result, the child will assume that Kase projects separately from D. The child also realizes that proper names take determiners obligatorily. So she has positive evidence to distinguish the source of semantic definiteness from the phonologically realized D head. She will, thus, assume that the overt realisation of the definite article is semantically inert. The [+definite] feature with its associated semantics is elsewhere, on a separate, higher projection, Def. Note that we take proper names to be rigid designators (Kripke 1972 contra e.g. Elbourne 2005): they are of type e and inherently bear the feature [+definite], so the latter cannot be contributed by the definite determiner.

(4a) [KP -θK [DP OθD [TP T [NP θ]]]]

In the talk we will explicate the process for the remaining three typological possibilities: languages without morphological case and no obligatory determiners on proper names (English, Italian); languages with no morphological case and obligatory determiners on proper names (Catalan); and languages with morphological case but no obligatory determiners on proper names (Standard, Northern German).