Colonnata and the syntax/lexicon interface

The Colonnata variety of Italian opens a window on the relationship between syntax and inflectional morphology. F.pl nouns in this dialect end in –ia, transparently a plural affix –i followed by the feminine gender marker –a also found in the sg. The order of the two affixes is the opposite of the one expected, since gender, selected by the root, should be closer to the noun, as in Spanish, if only roll-up derivations were allowed, enforcing mirroring. Thus, putting Spanish and Colonnata side by side, we see that the movements (phrasal in our analysis) bringing a root across functional heads merged on top of it in principle have the option of pied-piping the root (a Spec) or not at the second step. This demonstrably endows the system controlling affix placement with the same generative power as the movement rules employed in Cinque's account of UXX, and so, it must reined in by the same syntactic constraints, i.e. must be part of syntax.

This conclusion dovetails with the view that morphemes can lexicalize non-trivial syntactic constituents under the superset principle: A morpheme M can lexicalize the subtree T iff the features corresponding (one to one) to the terminal nodes of T form a subset of the features of M. That is, syntax feeds lexicalization directly, without the intermediary of a DM-style readjustment component. We will show that fairly straightforward evidence for this is provided by a second peculiarity of Colonnata morphosyntax.

When a f.pl noun cooccurs with a determiner, number is marked on the determiner, but not also on the noun, i.e. a f.pl is pronounced exactly like its sg counterpart, retaining only the –a. We can account for that in a natural way by saying that the pl head associated with the noun is not pronounced in this context, simplifying for now the more precise analysis. But then, it comes as a surprise that the –i of m.pl nouns is in fact pronounced even in the neighborhood of a determiner.

The account of this is based on the fact that although the inflected determiner forces the noun's pl-marker to be silent, it does not warrant not pronouncing the gender head. As we saw, -a is retained on the f.pl nouns even in this context. Thus, we conclude that the gender head must always be pronounced on masculine nouns too.

At this point, it becomes important that Colonnata m.sg nouns look like bare stems, i.e. there is no separate affix lexicalizing a masculine geneder head. Rather, this gender head is lexicalized by the root itself, under lexicalization of a phrasal constituent. That is, the Colonnata lexicon must associate masculine roots with a constituent whose terminals are the features m(asculine) and S, where S is the set of features occurring in a noun below the gender head, or m, sg and S, under a non-privative view of number.

Suppose now that the syntax delivers [S [pl [m]]] for lexicalization. Whether or not the pl head is marked as silent (in the context of a determiner) the gender head m must be lexicalized and pronounced. But it cannot be lexicalized by the root together with S, because S and m do not form a subtree, due to the presence of pl. Hence it can lexicalize S, by the superset principle, but m will still be left hanging. (Given the superset principle, we will also have to say that a morpheme cannot be activated twice in the same cycle of lexicalization, to block S and m from being lexicalized by the root separately.)

This is where –i kicks in. Being associated with a subtree with terminals pl and m, it can lexicalize the subconstituent [pl [m]] of [S [pl [m]]] (or, under the superset principle, just m, if we want to take the silence of pl induced by an inflected determiner to mean that pl is not lexicalized at all in this context, rather than not pronounced). Lexicalizing both pl and m, it is then pronounced even in context where pl is not.

Notice that this account of m.pl –i is compatible with the use of the same –i as a pure pl-affix in f.pl nouns, given the superset principle. It is also consistent with the fact that it never occurs on m.sg nouns: Given [S [m]] there are two candidates for the lexicalization of m: -i and a root. By the "elsewhere principle", the candidate that lexicalizes the most features of the input tree, will win. In our case, that is the root, which can lexicalize the whole input tree.

By contrast, it can be shown that there is no DM-account which will capture the intuition that –i is retained on m.pl nouns in the context of a determiner, because it must lexicalize the gender feature, essentially just because –i doesn't also lexicalize the gender head of m.sg nouns.