 Competition in Danish noun plural acquisition

This study focuses on competition between different morphemes in relation to Danish noun plural (PL) acquisition.

In Danish, noun PL can be formed in four different ways, departing from the singular (SG) form, by:

- adding a PL suffix (including zero suffix, Ø) (e.g. *bil [biːl] ‘car’ – *bil-er [biːlə] ‘car-s’);
- changing a phoneme of the stem (e.g. *mand [manˀ] ‘man’ – *mænd [menˀ] ‘men’);
- combining suffix addition and stem change (e.g. *fod [foðd] ‘foot’ – *fødder [ˈfʊdər] ‘feet’);
- changing or adding nothing, viz. PL = SG (e.g. *mus [muːs] ‘mouse’ – *mus [muːs] ‘mice’).

The Danish PL markers thus consist of a combination of suffix addition (incl. Ø) and stem change (incl. no change). We consider each PL marker a single PL morpheme (although there are, of course, other logically possible interpretations). The Danish noun PL system consists of 23 competing PL markers (Basbøll et al. 2011).

For productivity, we use a three graded scale proposed by Kjærbæk et al. (2014):

1) **FULLY PRODUCTIVE** PL markers involve addition of the -s-suffix without phonemic stem change;
2) **SEMI-PRODUCTIVE** PL markers involve addition of the -er-suffix or Ø-suffix without phonemic stem change;
3) **UNPRODUCTIVE** PL markers involve phonemic stem change or addition of one of the foreign PL suffixes /s/, /a/ and /i/.

The -s-suffix occurs as a PL suffix in 87% of all Danish nouns (Basbøll et al. 2011). Since the -s-suffix is by far the most frequent PL suffix in Danish, we will investigate which nouns do NOT take the -s-suffix, and why. Furthermore, we will investigate Danish children’s production of noun PL and present a detailed analysis of their produced PL error forms. We will propose answers to the following questions:

1) *What types of nouns do not take a fully productive PL marker?*
2) *Why do these nouns not take a fully productive PL marker?*
3) *Which parallels can be drawn between the answers to question 1 and 2 and Danish children’s production of noun PL (error) forms?*

Question 1 and 2 will be answered based on the description of the Danish noun PL system from a sound perspective presented in Basbøll et al. (2011). Question 3 will be answered based on empirical data from typically developing monolingual Danish children: 1) 160 children between the ages of 3-10 years who participated in a picture-based elicitation task inspired by Berko (1958); 2) 80 children in the ages of 3-9 years who participated in a structured interview. The children’s produced forms are coded phonologically with regard to both stem and suffix, and we are therefore able to compare each child’s produced PL form with the adult standard pronunciation. That way we can investigate which principles Danish children use in order to solve the problem of competing PL markers when producing a PL form.

In the talk, we set out to investigate the principles followed by Danish children when they are to select a PL marker among several competing PL markers. The children’s error forms are particularly relevant to tackle this issue. Earlier studies show that overgeneralization errors are characterized by going from less productive towards more productive plural markers (e.g. Laaha et al. 2006), and we expected to see the same pattern in Danish. But we didn’t. In the structured interviews 47% of all error forms went from a FULLY PRODUCTIVE to a SEMI-PRODUCTIVE PL marker, 19% from a SEMI-PRODUCTIVE to another SEMI-PRODUCTIVE PL marker – only 20% went
from an UNPRODUCTIVE or SEMI-PRODUCTIVE to a FULLY PRODUCTIVE PL marker (Kjærøe & Basbøll, submitted). We will present similar results for the picture based elicitation task.

We will take into account stem transparency, suffix predictability, gender and stem final phonology, and we will include other data material in order to shed light on ‘pure zeroes’ (PL = SG) – both methodologically and theoretically.

References
Kjærøe et al. (2014). Sound structure and input frequency impact on noun plural acquisition: hypotheses tested on Danish children across different data types. *Nordic Journal of Linguistics* 37, 47-86.