

# Word order freezing in spoken Dutch

**Word order freezing** In much cited work, Jakobson (1936) observes that the Russian sentence (1) can only be interpreted as SVO.

- (1) Mat'                      ljubit doč'  
mother.NOM/ACC loves daughter.NOM/ACC  
'Mother loves daughter' (SVO) *Not*: 'Daughter loves mother' (OVS)

Russian normally readily allows word order variation, including SVO/OVS alternation. With the case ambiguity of the forms *mat'* and *doč'*, one might expect (1) to be fully ambiguous. According to Jakobson this ambiguity is not observed. In the LFG and the OT literature, the absence of ambiguity in cases like (1) is known as *word order freezing* (due to T. Mohanan, 1992, talk). In general, word order freezing refers to the exceptional enforcement of strict word order in a free word order language. The circumstances under which freezing occurs are typically described in terms of the absence of distinguishing morphological marking of the function of a constituent (e.g., because of case syncretism as in (1), or because two arguments receive the same case). Freezing observations have been made for a range of case marking languages, including Japanese, Hindi and German (see Lee, 2001, for references). The formalization of freezing triggering circumstances poses a challenge for many theories of word order. Some researchers have chosen to take a construction-based approach (Tonoike, 1980; Bloom, 1999) to capture freezing. In the OT literature, freezing has been taken as an argument in favour of a bidirectional architecture (Lee, 2001; Kuhn, 2003; Vogel, 2004; Morimoto, ms), or in favour of OT extensions that allow for specific anti-ambiguity constraints (Zeevat, 2006; Flack, 2007). In either OT approach, freezing is analyzed as falling back to canonical word order when there is not enough word order independent information (typically: case) distinguishing the arguments. Note however that freezing examples are often disputed: There may be inter-speaker variation and a context or a special intonation may make the freezing disappear. Some researchers therefore do not consider freezing grammatically relevant at all.

**Word order variation in Dutch** Dutch word order in the main clause can be described in terms of fixed verbal positions: The finite verb sits in second position, any further verbs cluster towards the end of the sentence. Apart from these fixed positions, Dutch allows for some variation. Most prominently, there can be variation in the choice of the initial, directly preverbal constituent – the *Vorfeld occupant* – as illustrated in (2):

- (2) a. **Ze** kennen Popla allemaal.  
they know.PL Popla all  
b. **Popla** kennen ze allemaal.  
Popla know.PL they all  
'All of them know what Popla is.'

Dutch only shows case in parts of the pronominal paradigm. A natural question to ask then is whether freezing effects with respect to *Vorfeld* occupation exist in Dutch, and, if so, whether they are common. An example in isolation like (3) suggests

that freezing might exist in Dutch. There is no morphological information (case or agreement) that says that (3) should be either SVO or OVS.

- (3) Fitz ziet Gerald  
Fitz sees Gerald  
'Fitz sees Gerald' (SVO) *Not or hardly*: 'Gerald sees Fitz' (OVS)

The OVS reading of (3) can however be brought out by context or intonation. Moreover, manipulating definiteness and animacy properties of the argument NPs, but not the morphological marking, may also make the OVS reading available.

**Freezing in a corpus** On the basis of intuition data, the extent of freezing in Dutch is hard to gauge. If we were able to investigate freezing in a corpus, we could add a much needed empirical dimension to the discussion. To do so, we need to decide when we expect freezing to occur in Dutch. It is likely that case does not play the most prominent role in this. In this talk we will argue that we can look at *relative definiteness* and *animacy* instead. Consider the former: As subjects tend to be highly definite, and (direct) objects tend to be indefinite (e.g., Aissen, 1999), relative definiteness can often be used as word order independent information about the correct function assignment – the most definite NP is subject. If it happens that in a sentence the subject is not more definite than the object, we have a situation comparable to the absence of distinguishing case in a case marking language and, if Dutch shows freezing, the chance of observing non-canonical word order in the corpus should be lower than otherwise. An analysis of direct-object fronting in ~16k transitive sentences from the spoken Dutch corpus CGN shows that this is borne out: The odds of object fronting are at least 55% higher when the subject is more definite than the object. Preliminary results from an analysis of ~2k5 sentences annotated for animacy show that similar observations can be made for relative animacy. Importantly, these effects can be observed even though all sentences were spoken and uttered in contexts that typically provide enough information to make them completely unambiguous. Still, Dutch speakers rely on canonical word order more when the chance of incorrect function assignment by the hearer is higher.

The corpus study presented in this talk therefore adds to the word order literature by showing that word order freezing is a measurable trend in spoken Dutch that is not confined to constructed sentences in isolation, and by demonstrating that an account of freezing should not only focus on morphology but also take other aspects of arguments such as definiteness and animacy into account. At the end of the talk, we will discuss some of the consequences of the latter point for a model of word order.

### Selected references

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