

Do nouns affect the order of premodifying adjectives? An experimental approach to adjective orders.

This paper investigates potential noun influence on the preferred adjective order of attributive adjectives in English. It is known that there is a preferred order when multiple adjectives that modify the same noun appear consecutively, in English and other languages. There are many different hypotheses as to why this may be the case. Semantic, syntactic and syntactic-semantic approaches have attempted to account for adjective order preferences, and they all seem to share a general idea of what expected order looks like. In (1) we see the expected order of *fat* and *old* when they modify the noun *pig*. Yet, even though there is general agreement that there is a preferred order, there are suggestions that the expected order of adjectives is reversed for some modified nouns, e.g., *man* in (2). Currently, there are no conclusive answers as to if this reversal can truly be attributed to a property of the noun.

(1) old fat pig

(2) fat old man

(3) Example item

a. The farmer saw that the fat old **man** was eating carrots. (special noun – unexpected order)

b. The farmer saw that the old fat **man** was eating carrots. (special noun – expected order) c.

The farmer saw that the fat old **pig** was eating carrots. (regular noun – unexpected order) d.

The farmer saw that the old fat **pig** was eating carrots. (regular noun – expected order)

In order to investigate the potential influence of the noun on adjective order we conducted two experiments: one Self-paced reading task and one Acceptability judgement task using a seven-graded Likert scale. In the experiments, 32 items (excluding filler sentences), consisting of four sentences each, exemplified in (3), were tested. The participants were 26 self-reported native speakers of English. Within every item, two sentences contained unexpected adjective order, (3a and 3c) and two contained expected adjective order (3b and 3d). Furthermore, the four sentences also contained two different nouns. The difference between the nouns was that one may be preferred with the unexpected order (special noun, 3a and 3b), given the discussion in the literature, and one should be preferred with expected order (regular noun, 3c and 3d). The sentences were distributed across four lists in a Latin Square design. The findings of the two experiments were seemingly contradictory. Fitting the results to linear

mixed effects models, we found no significant differences between the conditions in the Acceptability task. However, by measuring the reading times on the two adjectives, the noun and its spillover region (the following word) in the Self-paced reading task, we found significant differences on the second adjective between the expected and the unexpected orders. Additional differences were also found between regular and special nouns in phrases with expected adjective order and with unexpected order. We discuss these results, their possible causes, and their implications for theoretical approaches to the (fixed) order of attributive adjectives in English.