The development of the collectivization construction in English

Kurt Erbach, erbach@uni-duesseldorf.de

In this paper, I argue that productivity of individual morphemes is what drives the creation of new morphological constructions, and therefore that expansion in the lexical network drives further expansion in the form of a feedback loop. In support of this argument, I discuss the development of what I call the collectivization construction in English, which is the morphological construction in which collective nouns are derived. I argue that the collectivization construction was developed via abstraction over several other morphemes whose productivity arose in late Middle English/early Modern English. I show that two suffixes in particular (*-age, -ry*) arose via reanalysis, and this process of abstraction was the first in several steps of network expansion.

I show novel empirical evidence that object mass nouns (e.g. *stoneware, luggage*) were rare in Old English but became a large word class in Modern English. Before the Modern period, there were few object mass nouns in English, the oldest known being *bedding* and *clothing* (c1000). This evidence suggests that, even early on, derivational morphology was used to create object mass nouns, in line with the analysis of this class of nouns in Greek in Alexiadou (2015). Within the construction morphology framework of Booij (2010, p. 546), this use of the *-ing* suffix could be analyzed as in (1), where *a* is an arbitrary noun sequence, *X* is a variable over major lexical categories, k, i, and j are lexical indexes on the phonological, syntactic, and semantic (SEM) properties of words, and N stands for noun. In (1) the suffix *-ing* is shown to combine with lexical items, and COLL is the semantic operation that collects otherwise disconnected entities related by relation R to the semantics of the lexical item *a;* for example *bedding* being the collective materials (blankets, pillows, etc.) used to make a bed.

(1) $[[a]_{Xk}[\text{-}ing]_i]_{Nj} \leftrightarrow [\text{COLL}_i \text{ with R to SEM}_k]_j$

While other object mass nouns appeared around 1300, (*apparel, armor, merchandise*), I argue that the rise of object mass nouns was made possible with the development of what I call collectivization construction, which I argue came from the abstraction over two collectivization with *-ing* and two other morphemes (*-age, -ry*) that first appeared in English via borrowed lexical items that referred to collective artifacts (e.g. *baggage,* 1430, Old French; *artillery,* 1405, French). The reanalysis of these words from whole lexical items to those respectively containing the suffixes *-age* and *-ry,* allowed for the development of further collectivizing constructions (2) and (3).

(2) $[[a]_{Xk}[\text{-}age]_i]_{Nj} \leftrightarrow [\text{COLL}_i \text{ with R to SEM}_k]_j$

(3) $[[a]_{Xk}[\text{-}ry]_i]_{Nj} \leftrightarrow [\text{COLL}_i \text{ with R to SEM}_k]_j$

The expansion resulting in (2) and (3) allowing productive use of both *-age* and *-ry* in English giving rise to nouns like *luggage* (1596) and *cutlery* (1624). The regular use of (1), (2), and (3) together allowed for the further abstraction resulting in the development of the collectivization construction in (4).

(4) $[[a]_{Xk}[b]_{Yi}]_{Nj} \leftrightarrow [\text{COLL}_i \text{ with R to SEM}_k]_j$

This further abstraction allowed for nominal compounds to form with collective nouns *ware* and *wear,* resulting in nominals like *tableware* (1772) and *underwear* (1872). On the assumption (1) existed in Old English but was not widely used to derive object mass nouns, the gradual development of (2) and (3) and eventual development of (4) is exemplary of network expansion, given (4) constitutes a new schema, and this expansion is accompanied by the borrowing and coinage of a large number of new lexical items. In other words productivity was perceived as possible via the borrowings that shared the endings *-age, -ry* and collective reference (*baggage,*

bondage, plumage, artillery, inventory, etc.), leading the way for the change from (1) to (4). More generally, productivity on the level of individual suffixes sets the stage for abstracting over the independent morphemes and the creation of a novel morphological construction.

What also warrants discussion is the extent to which this data corresponds to other changes in the English nominal system over time. Namely, it has been argued that Old English was a classifier language, meaning that nouns were treated uniformly, all being counted with (null) classifiers, as in Mandarin (Toyota, 2009). This stands in contrast to present day English which fully differentiates between count nouns (e.g. *chair, table*) and mass nouns (e.g. *mud, sand, furniture*); count nouns denote stable atoms and mass nouns the supremum of unstable atoms, while all nouns in classifier languages denote kinds (Chierchia 2010). Chierchia (2010) has also claimed that classifier languages cannot have object mass nouns on the assumption that object mass nouns refer to stable atoms and denote the supremum thereof as a matter of lexical choice. Because all nouns denote kinds in classifier languages this sort of lexical choice does not exist and subsequently, neither do object mass nouns. Though *clothing* and *bedding* constitute two object mass nouns in Old English, the general lack of object mass nouns does fit with the idea from Toyota (2009) that Old English was a classifier language. Moreover, what also fits is the idea that English became a number marking language in the late Middle English/early Modern English period, and the fact that so many object mass nouns were borrowed and coined at this time. Further research and discussion is needed to explore the connection between these two characteristics of the English nominal system and their possible relation via network properties.

References

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