In this talk I argue that the so-called linking phoneme (LP) which is attested in Dutch compounds, as in (1), is a noun class marker belonging to the compound’s non-head:

(1)  kat-en-staart
    cat-MARKER-tail
    ‘cat tail’

This analysis accounts for the fact that LPs are restricted to nominal non-heads, that experiments show that native speakers associate LPs with plural markers, although they are not realizations of the feature [plural] and that LPs and plural markers are formally and distributionally related. It further explains why the distribution of LPs is determined by conceptual notions such as animacy, countability, edibility, … (see Mattens 1970, 1984). Such notions are the hallmark of noun classes. I further focus on the fact that these markers are syncretic with the Dutch plural markers -en and -s. I analyze this syncretism by arguing that plurality in Dutch is not derived from a feature [plural], but from a class extension. Finally, I discuss the fact that class marking in Dutch co-exists with gender marking.