

## **Vocabulary acquisition and lexical competition in spoken word recognition**

**Gareth Gaskell (University of York)**

There is broad agreement between many theories that spoken word recognition is a parallel process of competition between multiple lexical candidates. The ability to take part in this competition can be thought of as the defining characteristic of a lexical representation. Here, I will discuss the acquisition of novel spoken words, as measured by their ability to enter into lexical competition.

In a typical experiment, participants would be familiarised with a set of nonsense words that diverged from real words in the final segments (e.g., cathedruke, derived from cathedral) over the course of a week. Immediately after initial exposure, subjects show familiarity with the form of the novel words, as tested in a two-alternative forced choice task. The effect of this exposure on lexical competition is examined by presenting the real words (e.g., cathedral) in a lexical decision test or pause detection test. If the novel items have developed lexical representations then the effect on the real words should be inhibitory, due to lexical competition. Over the course of several experiments we show that although direct effects of novel word learning are immediate, inhibitory competition effects (the lexical "footprint") are more delayed, and typically only emerge between a day and a week later.

These findings suggest that words are initially encoded in a short-term, possibly episodic, memory system, and seem to be linked to similar items in the lexicon. Over an extended period of time the representations of these words change, and competition effects only emerge once the items have been fully integrated into the mental lexicon.