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### **Nominal Hierarchies: Preliminary Evidence for the Existence of a hierarchy Bias in Adults on a Novel Word Task**

This research investigates the existence of a new proposed word learning bias, the strict hierarchy bias. A strict hierarchy is one in which properties necessary to an element in the hierarchy are also necessary for any subordinate of that element. A bias toward interpreting hierarchal relationships as strict could potentially aid a child in constructing inter-lexical relationships and determining the real world extensions of new words. In this sense the proposed hierarchy bias would interact with other independent biases previously proposed in the literature (Markman, 1989).

To test this, subjects were shown a pair of novel objects, each given a novel name (e.g. dax and leedle). Subjects were also told explicitly that both objects belong to some superordinate kind ( e.g. both are kinds of blicket). It was then up to them to determine what property was necessary to the denotation of the superordinate kind. They were then given the task of choosing which object out of a set of three was the best example of one of the basic level terms (e.g. "choose the dax") and which was the best example of the superordinate term (e.g. "choose the blicket).

The results demonstrate that adults are very good at abstracting out the property which defines the superordinate class. Furthermore when asked to choose the basic level term, participants favored the object which adhered to the requirements of the strict hierarchy when it was very similar to the target object and experienced competition from that object even in a condition where it was very dissimilar to the target object. These results suggest that adults use the information that they have regarding hierarchical relations coupled with a tacit notion that the hierarchy itself is strict in order to assist them in determining the extension of new words.