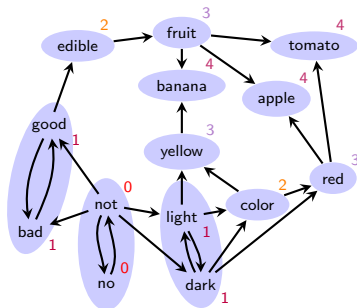
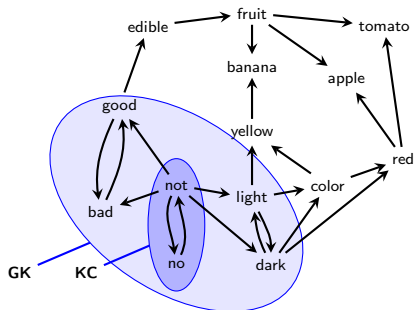


Dictionary, Grounding Kernel, Kernel Core and Hierarchy



left: Compressing an artificially constructed mini-dictionary:

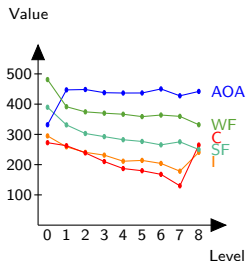
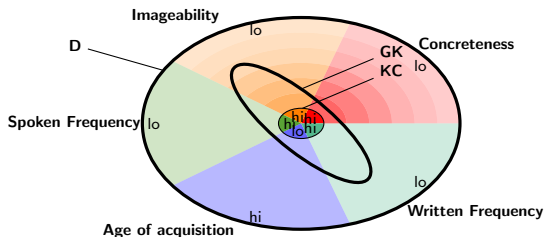
First remove all words reachable by definition alone.

That leaves Grounding Kernel (GK) and Kernel Core (KC).

right: Definitional distance hierarchy:

KC is 0 level. Furthest definitional distance is 4

Results



left: Summary schema for compressed real dictionary:

Definitional distance is correlated with 5 psycholinguistic variables.

Words in KC are acquired at younger age.

Correlation with age and oral/written frequency is dichotomous.

Correlation with concreteness and imageability is continuous across all 8 levels of the definitional distance hierarchy.

right: Mean values for 5 psycholinguistic correlates

The 3 dichotomous correlates (AOA, WF, SF) and 2 continuous correlates (C, I) at each definitional distance. (8th level spurious; sample too small.)