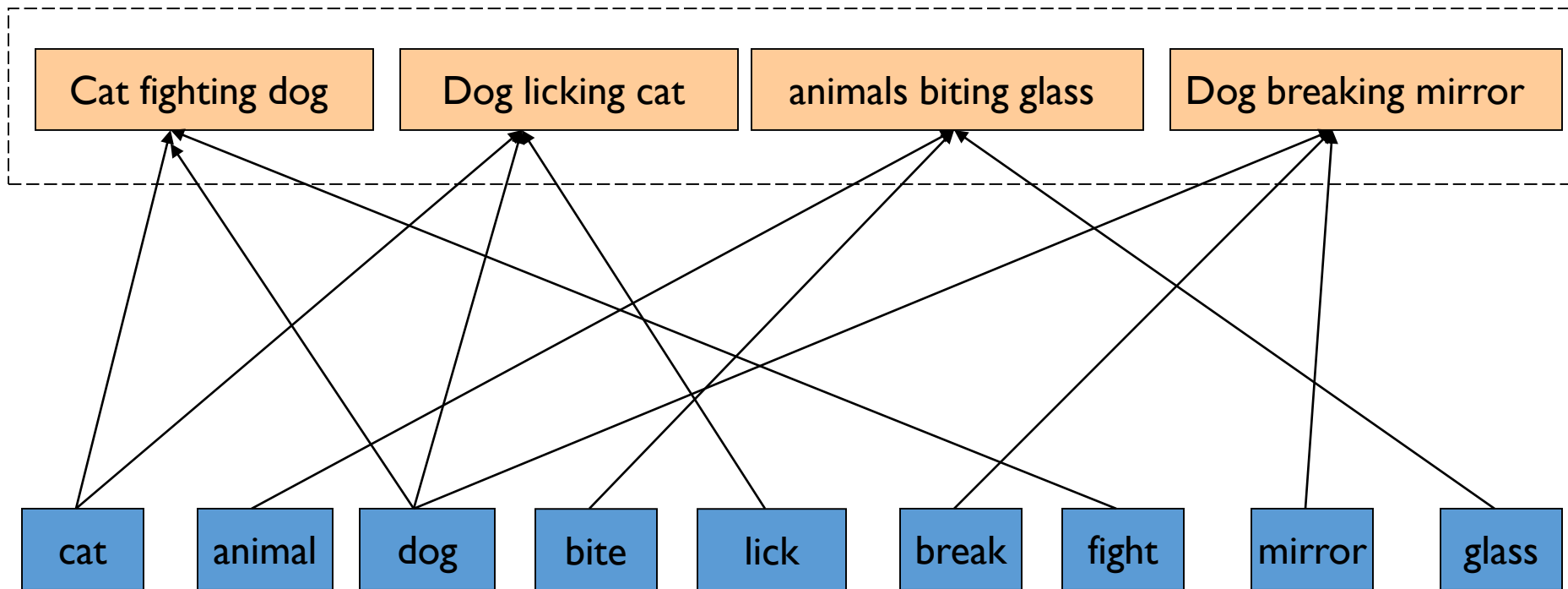
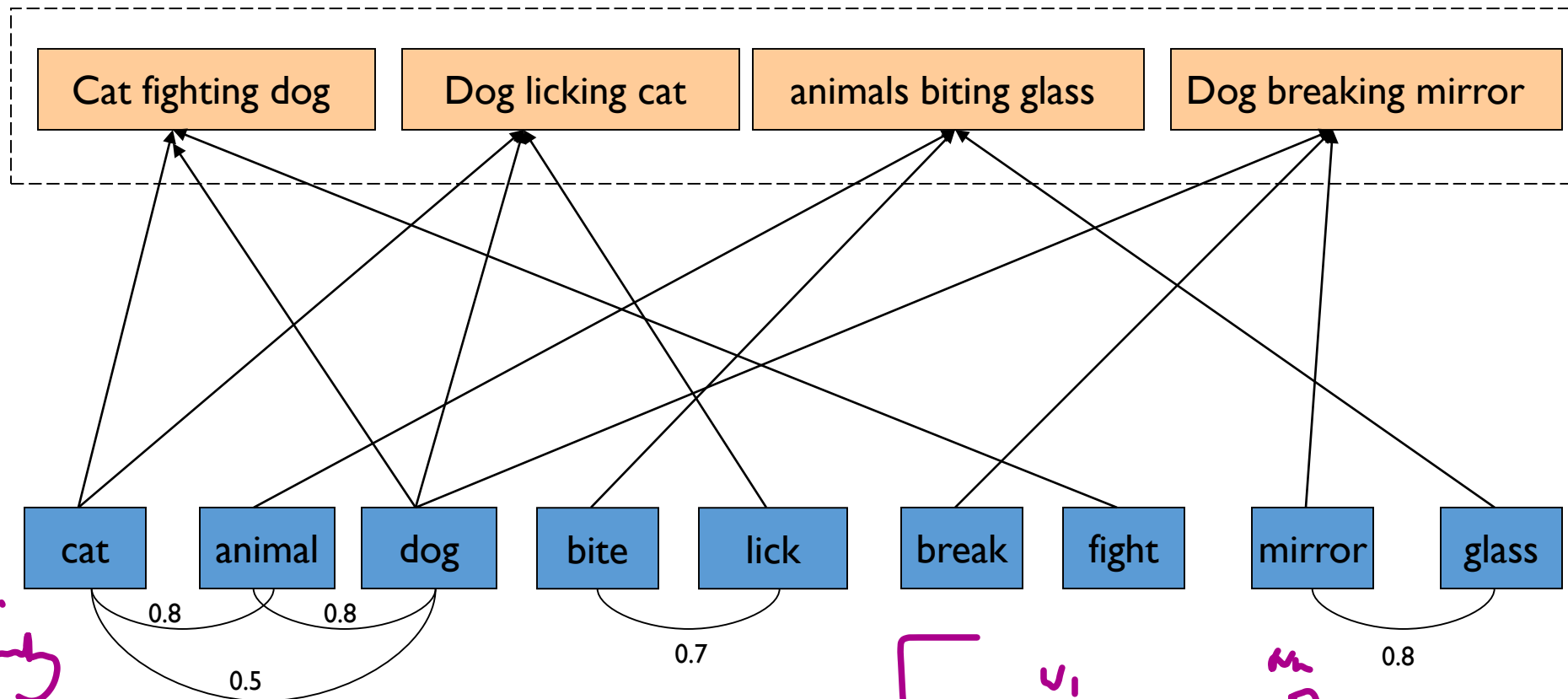


docs

words





Similarity  
axes

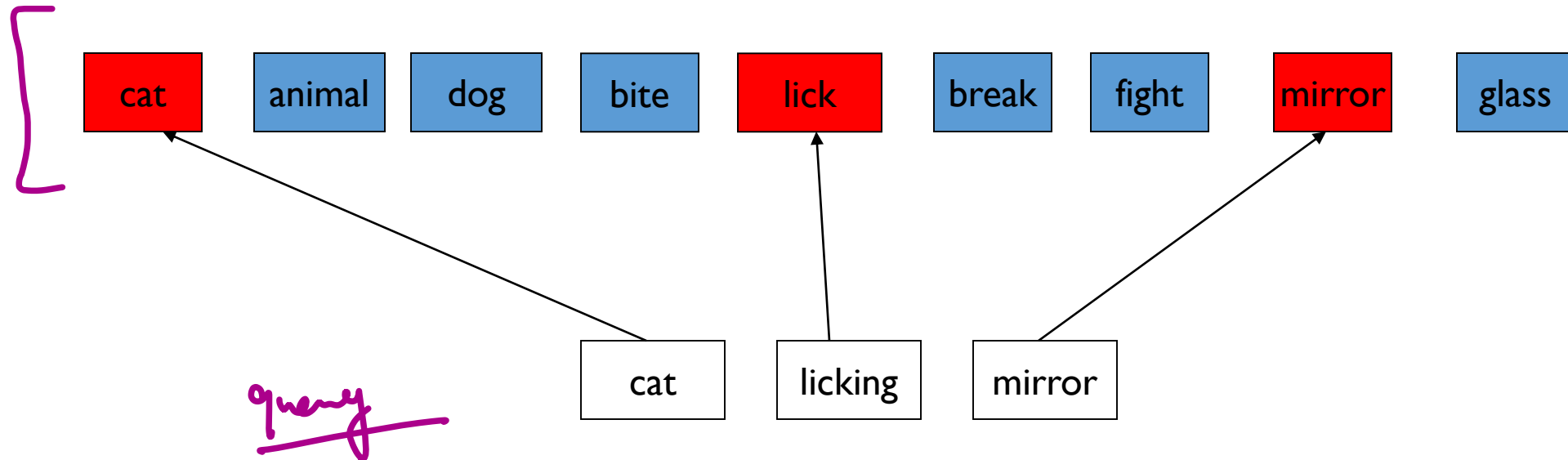
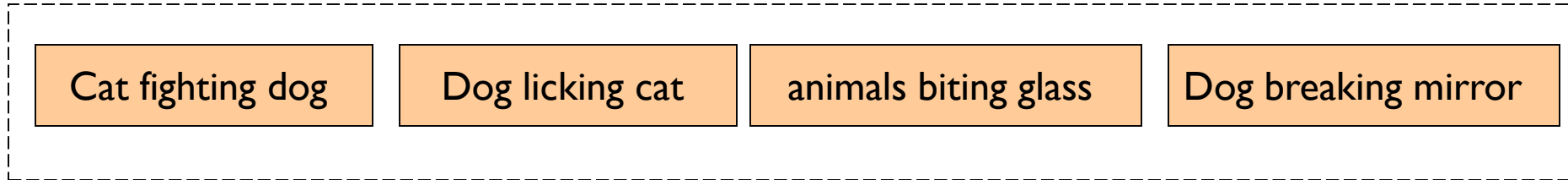
$[0,1]$

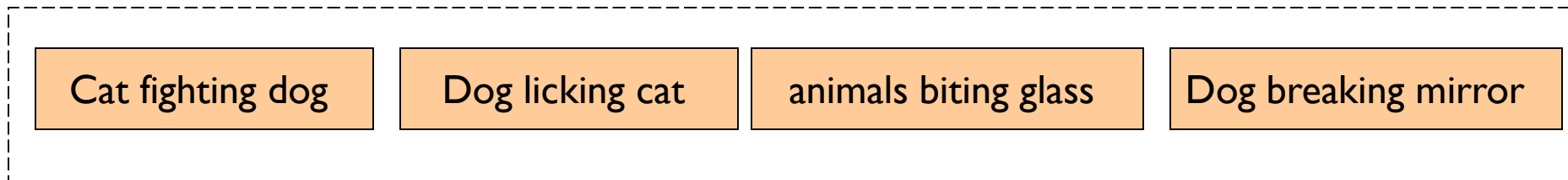
cat → l.b. → 0.8

Handwritten matrix structure:

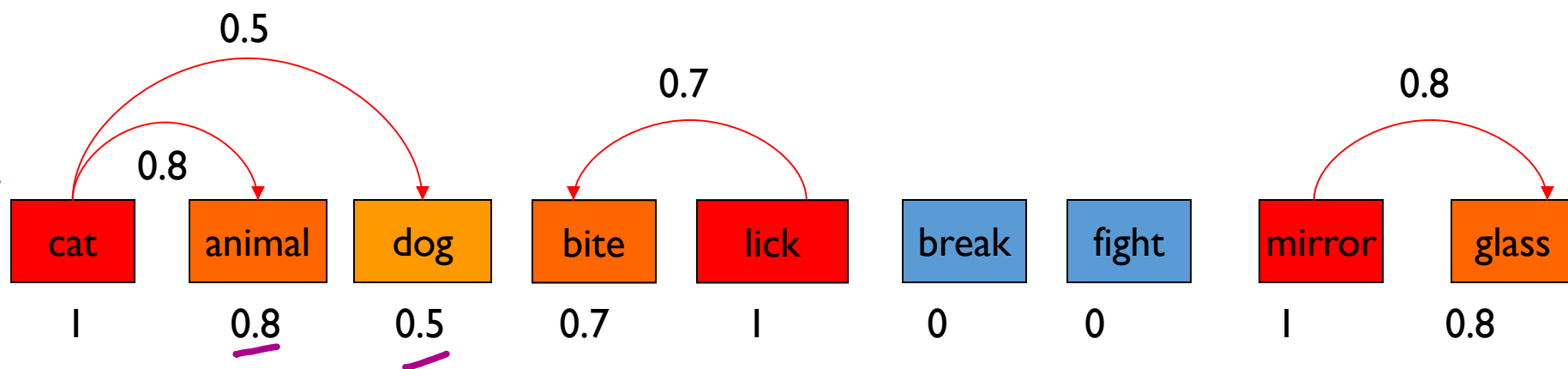
$$\begin{bmatrix} w_1 & v_1 & \dots & \dots & \dots \\ \vdots & \vdots & \ddots & - & \ddots \\ \vdots & \vdots & \vdots & \vdots & \vdots \end{bmatrix}$$

# Spreading activation





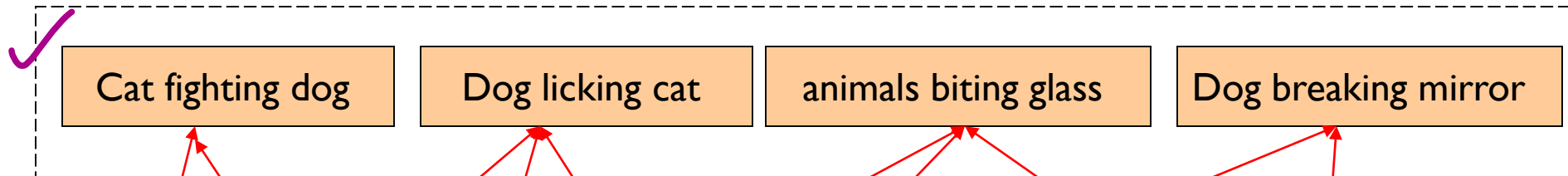
*Similarly  
propagation*



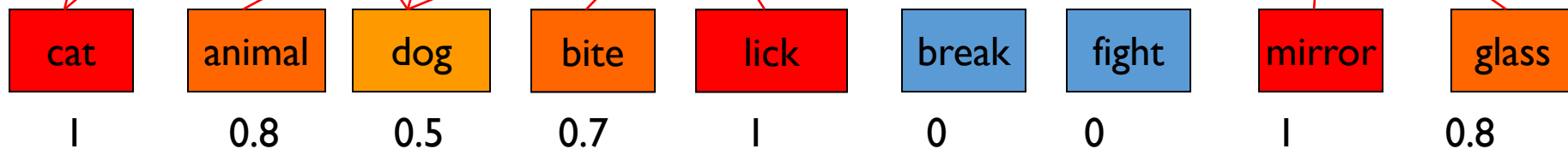
*[Aggregation  
function]*

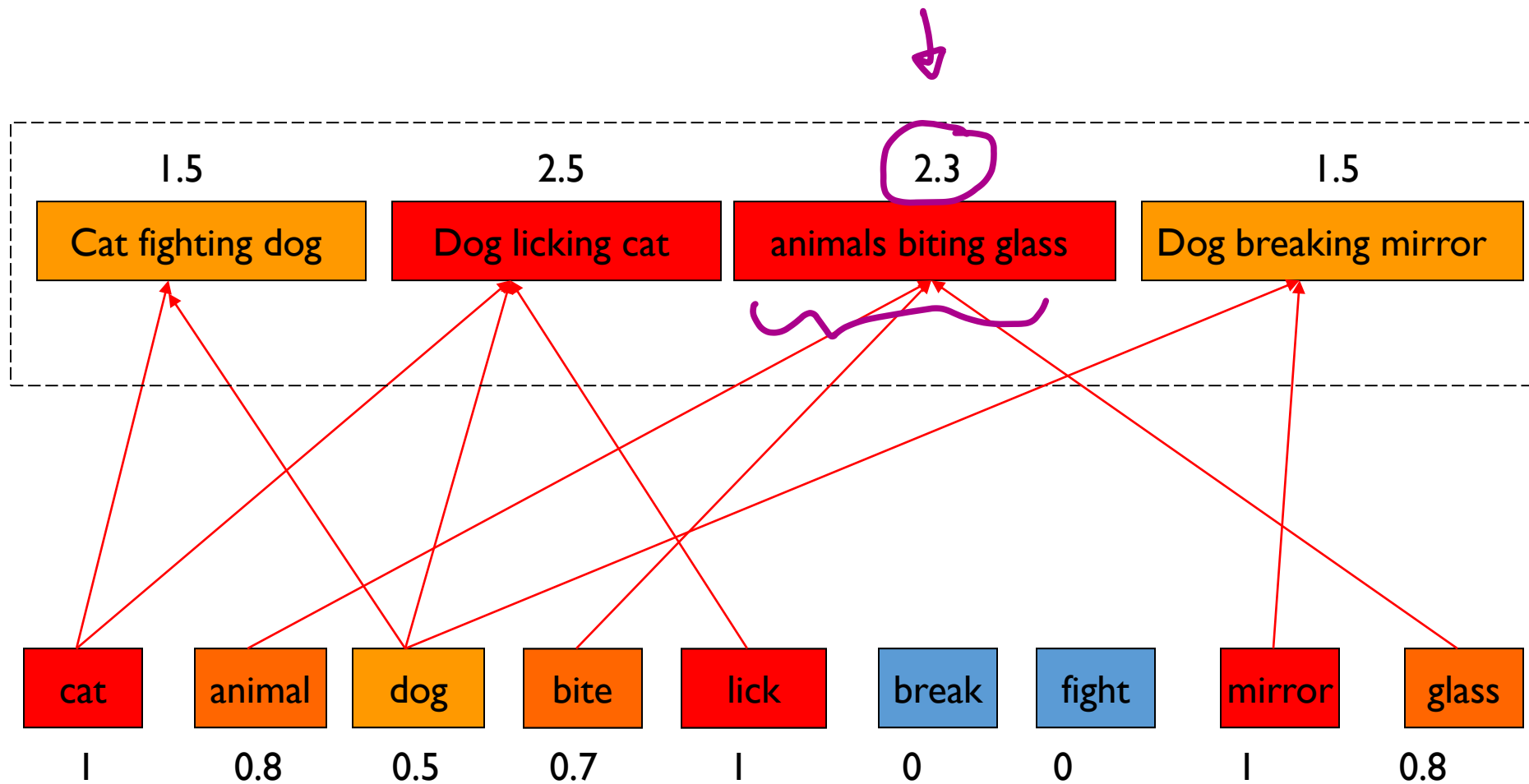


$\pi$

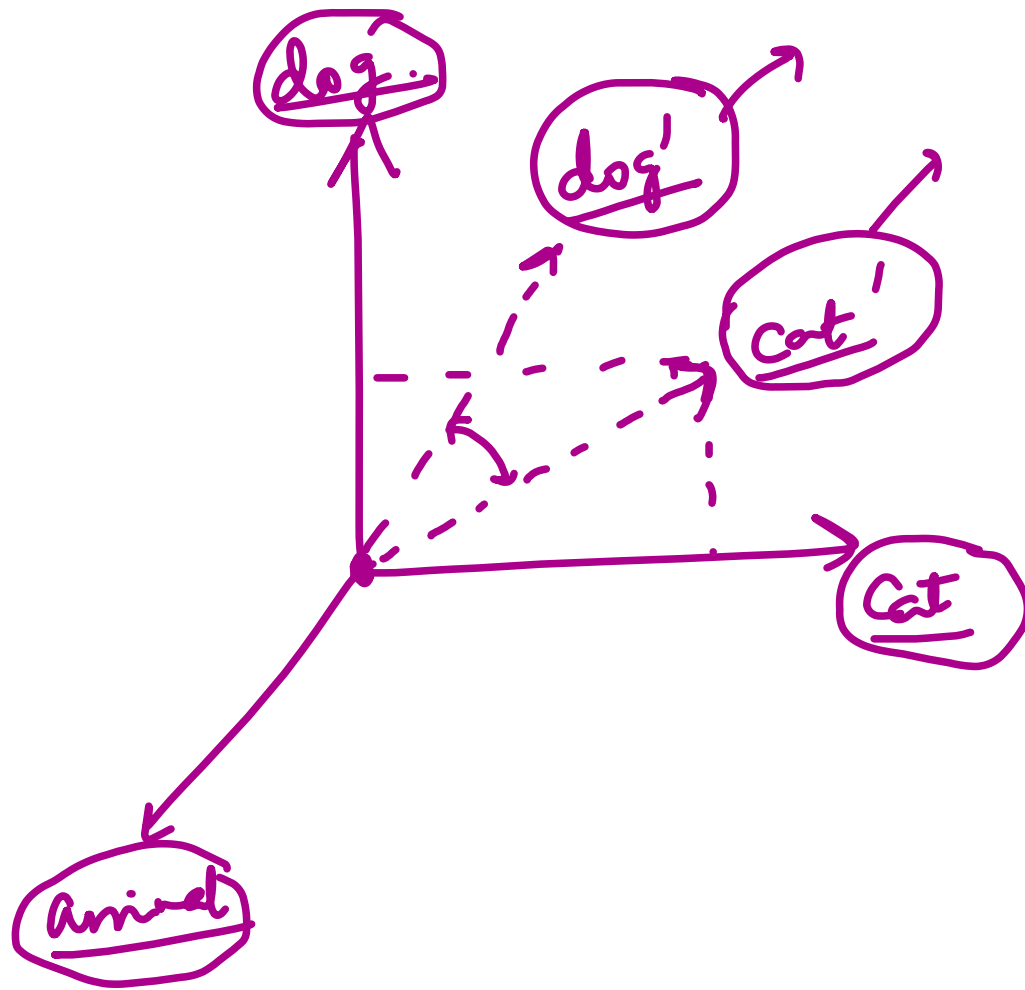


Relevance.  
p propagation





cat      licking      mirror



Cat lick mirror  
→  
Cat' + lick →  
→  
mirror  
→

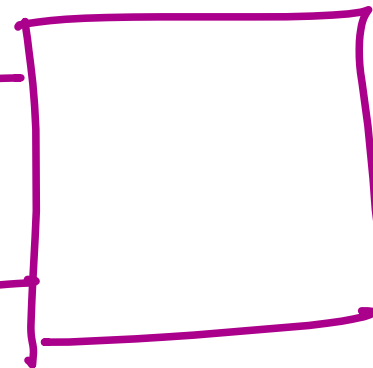
What's inside the black box?

lexical semantics.

{ meanings  
of  
words. }

word<sub>1</sub>

word<sub>2</sub>



Sim(  
word<sub>1</sub>,  
word<sub>2</sub>)

→ External  
knowledge

{ dictionary.  
WORDNET }

Wikipedia

→ Introspective  
knowledge

Corpus.

look within.

[ Semantic relations. ]  
{ ship, ocean }

} distributional  
Semantics.

- - -  
A B C  
~~~~~



# Meanings of words.



language ↔ world

Signs

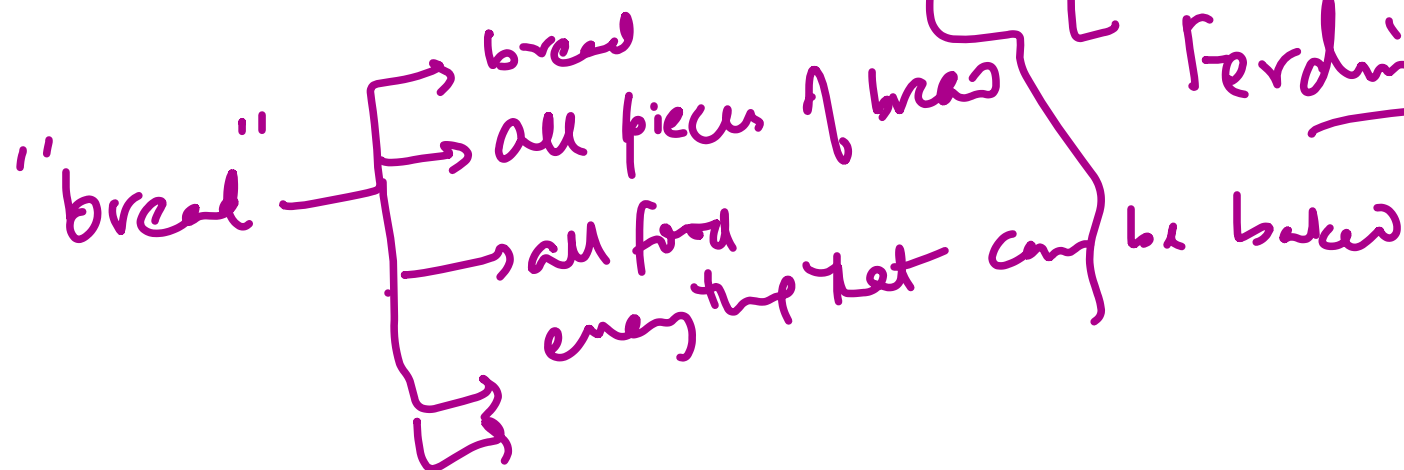
signifier

"book"

signified.

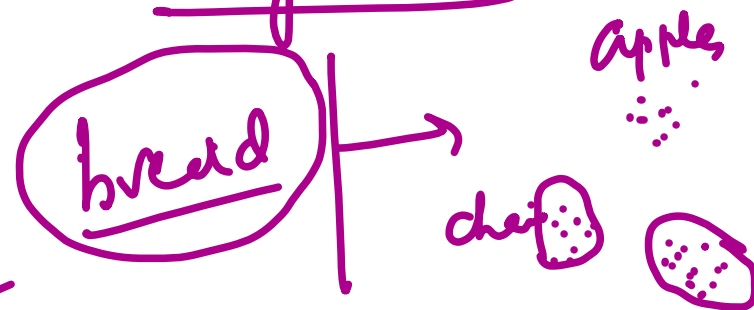
Concept

Ferdinand de Saussure ] linguist

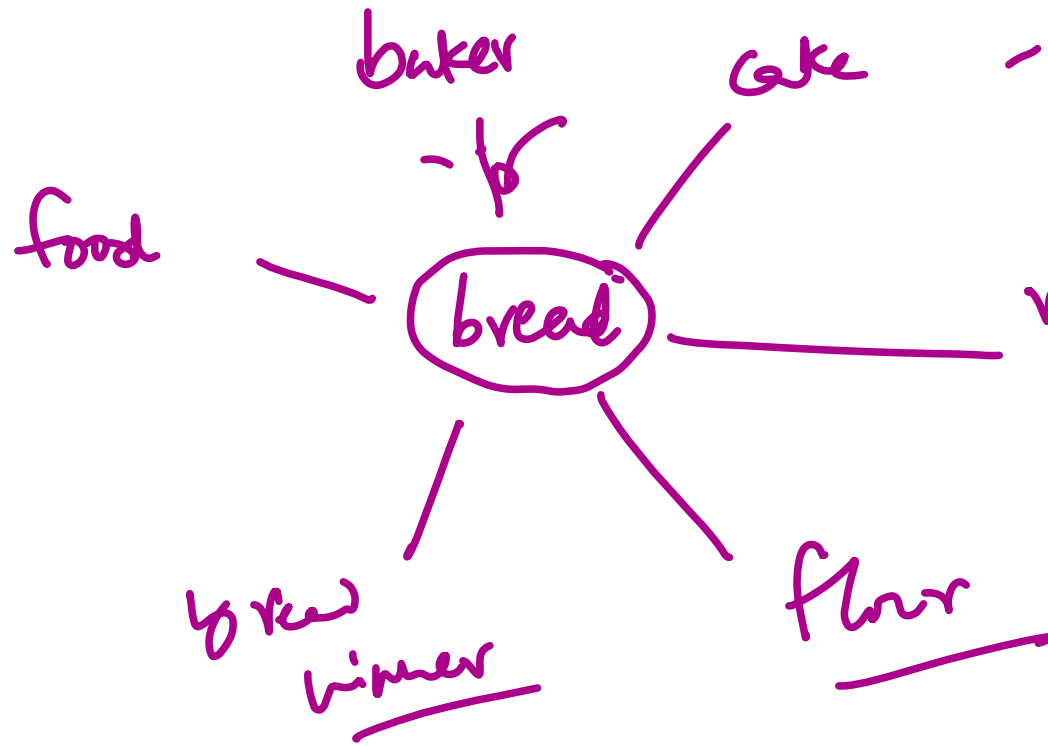


Structural

Augustine.



words help to  
Concept



"identity is not defined  
by its intrinsic properties but  
rather by the bigger structure of  
which it is a part"

