Linguists say:

Morphemes are the smallest meaningful units of language

Language =

Memorized stuff + Computations for creating bigger expressions from the memorized stuff

Language =

Memorized stuff + **Computations for creating expressions from memorized stuff**

- Phonemes of your language

- rains cats and dogs

Language =

Memorized stuff + *Computations for creating bigger expressions from the memorized stuff*

- Phonemes of your language

  What are the smallest bits that we can input into the combinatory rules that create complex meanings?

- rains cats and dogs

Language =

Memorized stuff **+** Computations for creating bigger expressions from the memorized stuff

- Phonemes of your language

- cat

  Meaningful units that you cannot decompose any further = morphemes

- -s

- rains cats and dogs

- cat

- -s

Meaningful units that you cannot decompose any further = morphemes

WHY CARE??

A system that computes with morphemes looks very different from a system that computes with words

A system that computes with morphemes looks very different from a system that computes with words

Decomposition theory
"morpheme theory"

Storage theory
"word theory"

magnet

ism

ic

ize

A system that computes with morphemes looks very different from a system that computes with words

Decomposition theory
"morpheme theory"

Storage theory
"word theory"

magnet

ism

ic

ize

magnetize   *magnolia*

magnetic

magnet

magnetism

magnificent

Etc…

A system that computes with morphemes looks very different from a system that computes with words

Decomposition theory   **Storage theory**

magnet

magnet ism   magnetize   magnolia

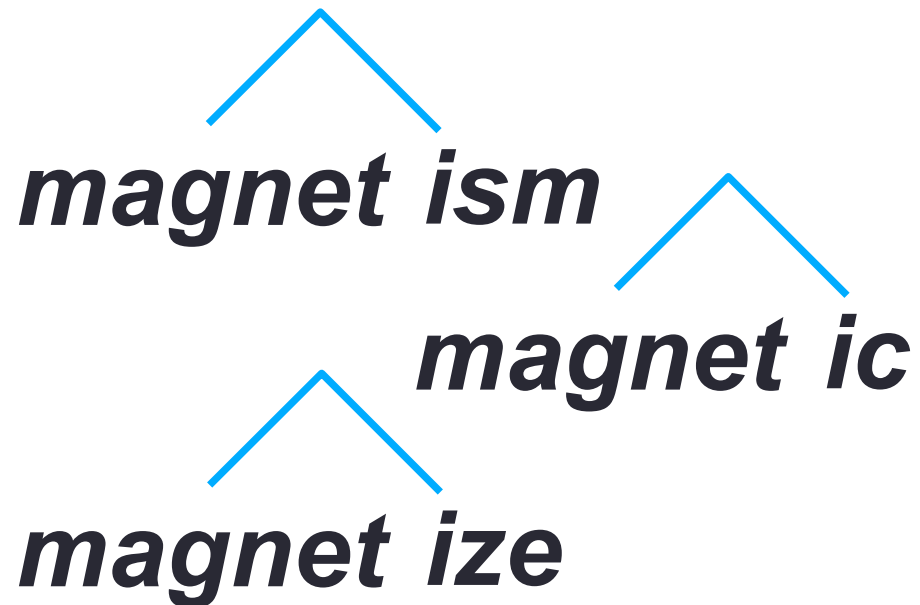magnet ic   magnetic

magnet ize   magnet

magnetism

magnificent

Etc…

Decomposition theory

magnet

magnet ism

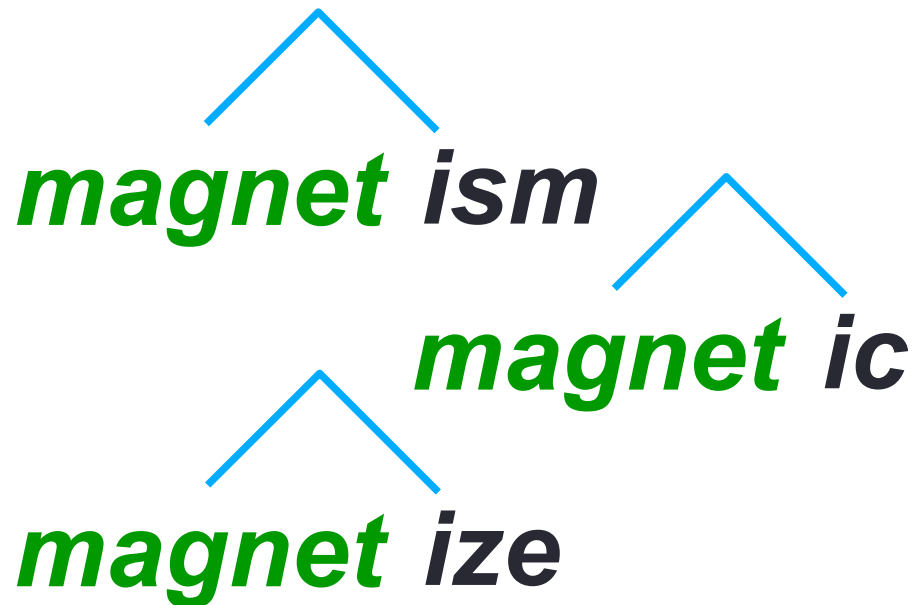*magnet ic*

magnet ize

Decomposition theory

magnet

magnet ism

magnet ic

magnet ize

All of these words contain the same morpheme *magnet*.

→ All of these words relate to each other via identity.

→ Any prime-target combination of these words should elicit repetition priming.

Predictions

All of these words are similar in sound.

→ They should compete with each other in recognition.
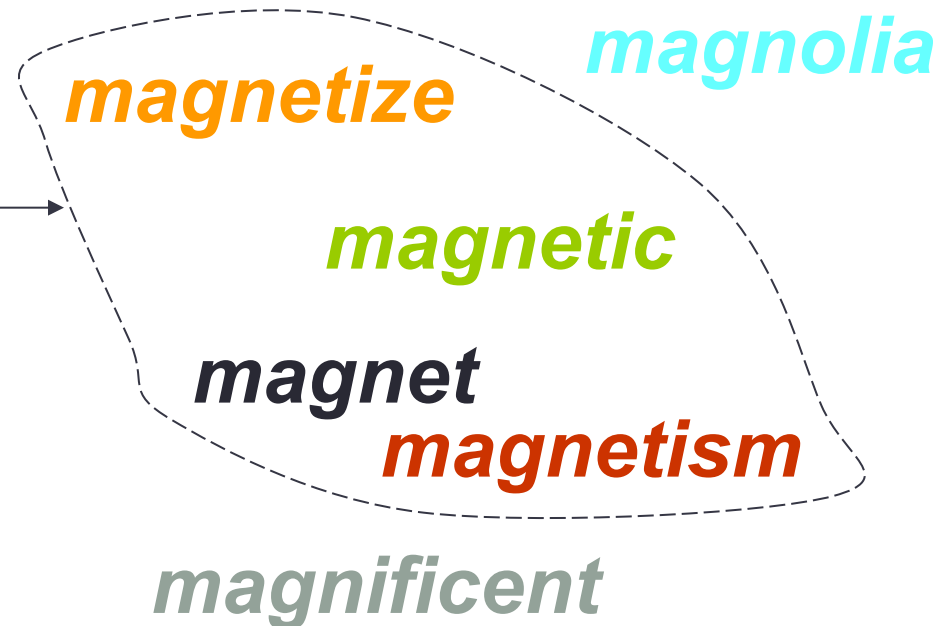
Some of these words are also similar in meaning.

→ They should semantically prime each other.

None of these words relate to each other via identity.

→ Any priming effect between *magnet* and *magnetism*, for example, should be explainable in terms of sound and meaning similarity alone.

Storage theory

magnolia

magnetize

magnetic

magnet

magnetism

magnificent

Etc…

Upshot

➢A "morpheme lexicon" and a "word lexicon" contain different similarity relations.

➢Therefore, they make different predictions about priming.