Universidad Veracruzana

Seminario de semántica

Doctorado en estudios del lenguaje y lingüística aplicada

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Usando WordNet (1)

Para esta sesión, vamos a hacer una tarea sencilla para entender mejor cómo funcionan las **relaciones léxicas** que se dan entre **lexemas** (o **palabras**). Usaremos entonces **WordNet**, un **lexicón electrónico** del que ya hemos visto algunas cosas.
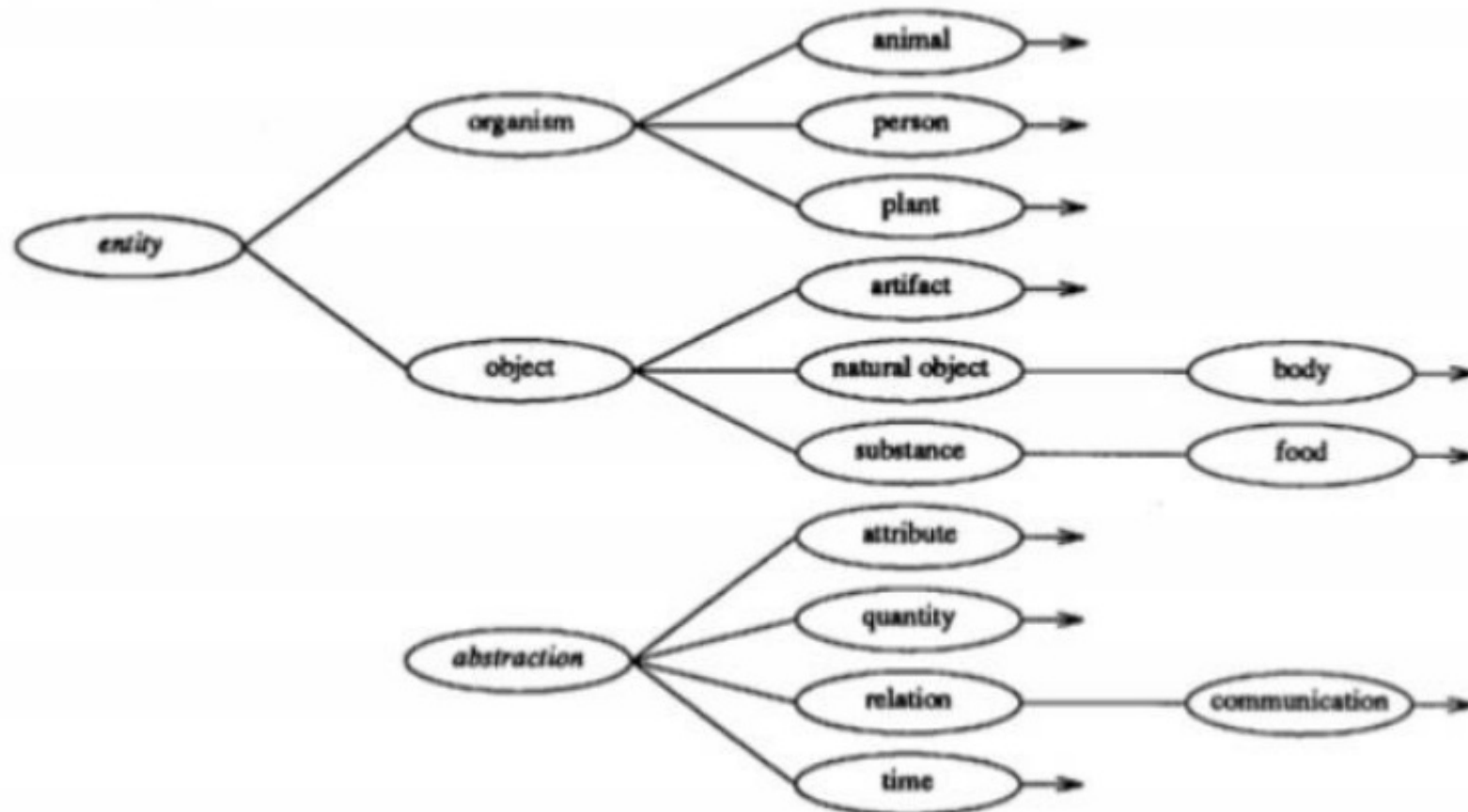
WordNet Research
@ PRINCETON

George A. Miller
(1920-2012)

Año de inicio: 1985
Proyecto en activo

Usando WordNet (2)

Como saben, **WorNet** ofrece una taxonomía de conceptos generales. La estructuración de ésta se sustenta en una jerarquía léxica como la siguiente:

Usando WordNet (3)

¿Cómo podemos establecer cuáles son los rasgos que caracterizan a un conjunto? Básicamente, tenemos 3 relaciones para esto:

Relation	Definition	Example
Hypernym	From concepts to superordinates	*breakfast → meal*
Hyponym	From concepts to subtypes	*meal → lunch*
Has-Member	From groups to their members	*faculty → professor*
Member-Of	From members to their groups	*copilot → crew*
Has-Part	From wholes to parts	*table → leg*
Part-Of	From parts to wholes	*course → meal*
Antonym	Opposites	*leader → follower*

Noun relations in WordNet

Tarea (1)

Vamos a crear una mini-red de palabras, tanto en inglés como en epañol, utilizando la información de la versión de **WordNet** en línea.

Para esto, primero vayamos al sitio WEB:

https://wordnet.princeton.edu/

Una vez situados en la página WEB, den un click a la opción en línea.

Tarea (2)

Usaremos 6 palabras en inglés, y cada una de ustedes selecciona una. Las palabras son:

1) Car

2) Cat

3) Dog

4) Chair

5) Book

6) Brother

Para esta sesión, emplearé esta última a manera de ejemplo.

Tarea (3)

WordNet Search - 3.1
- WordNet home page - Glossary - Help

Word to search for: Brother | Search WordNet

Display Options: (Select option to change) ▼ | Change

Key: "S:" = Show Synset (semantic) relations, "W:" = Show Word (lexical) relations
Display options for sense: (gloss) "an example sentence"

Noun

- S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
- S: (n) **brother** (a male person who is a fellow member (of a fraternity or religion or other group)) *"none of his brothers would betray him"*
- S: (n) buddy, **brother**, chum, crony, pal, sidekick (a close friend who accompanies his buddies in their activities)
- S: (n) **brother**, comrade (used as a term of address for those male persons engaged in the same movement) *"Greetings, comrade!"*
- S: (n) **Brother** ((Roman Catholic Church) a title given to a monk and used as form of address) *"a Benedictine Brother"*

Tarea (4)

Pregunta: ¿cuántas entradas léxicas tengo asociadas al lexema **Brother**?

Respuesta: 5 entradas asociadas a la categoría **Nombre** o **Sustantivo** (*Noun*).

Pregunta: ¿cuántas reconocen en el lexema que seleccionaron?

Tarea (5)

Veamos el primer **Synset** asociado a **Brother**:

WordNet Search - 3.1
- WordNet home page - Glossary - Help

Word to search for: Brother   Search WordNet

Display Options: (Select option to change) ▾ Change
Key: "S:" = Show Synset (semantic) relations, "W:" = Show Word (lexical) relations
Display options for sense: (gloss) "an example sentence"

Noun

- S: (n) brother, blood brother (a male with the same parents as someone else) "my brother still lives with our parents"
  - direct hyponym / full hyponym
  - direct hypernym / inherited hypernym / sister term
  - antonym
  - derivationally related form
- S: (n) brother (a male person who is a fellow member (of a fraternity or religion or other group)) "none of his brothers would betray him"
- S: (n) buddy, brother, chum, crony, pal, sidekick (a close friend who accompanies his buddies in their activities)
- S: (n) brother, comrade (used as a term of address for those male persons engaged in the same movement) "Greetings, comrade!"
- S: (n) Brother ((Roman Catholic Church) a title given to a monk and used as form of address) "a Benedictine Brother"

Tarea (6)

¿Cuál es el hipónimo asociado a **Brother**? Veamos los que son directos:

Noun

- S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
  - *direct hyponym* / *full hyponym*
    - S: (n) big brother (an older brother)
    - S: (n) little brother (a younger brother) *"my little brother just had his 50th birthday"*
    - S: (n) stepbrother, half-brother, half brother (a brother who has only one parent in common with you)
  - *direct hypernym* / *inherited hypernym* / *sister term*
  - *antonym*
  - *derivationally related form*
- S: (n) **brother** (a male person who is a fellow member (of a fraternity or religion or other group)) *"none of his brothers would betray him"*
- S: (n) buddy, **brother**, chum, crony, pal, sidekick (a close friend who accompanies his buddies in their activities)
- S: (n) **brother**, comrade (used as a term of address for those male persons engaged in the same movement) *"Greetings, comrade!"*
- S: (n) **Brother** ((Roman Catholic Church) a title given to a monk and used as form of address) *"a Benedictine Brother"*

Tarea (7)

Noun

- S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
  - *direct hyponym* / *full hyponym*
    - S: (n) big brother (an older brother)
      - *direct hypernym* / *inherited hypernym* / *sister term*
        - S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
    - S: (n) little brother (a younger brother) *"my little brother just had his 50th birthday"*
      - *direct hypernym* / *inherited hypernym* / *sister term*
        - S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
    - S: (n) stepbrother, half-brother, half brother (a brother who has only one parent in common with you)
      - ***direct hypernym*** / *inherited hypernym* / *sister term*
        - S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
  - *direct hypernym* / *inherited hypernym* / *sister term*
  - *antonym*
  - *derivationally related form*

Tarea (8)

Ahora, ¿cuál es el hiperónimo asociado a **Brother**?

Noun

- S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
    - *direct hyponym* / *full hyponym*
    - *direct hypernym* / *inherited hypernym* / *sister term*
        - S: (n) male sibling (a sibling who is male)
    - *antonym*
    - *derivationally related form*
- S: (n) **brother** (a male person who is a fellow member (of a fraternity or religion or other group)) *"none of his brothers would betray him"*
- S: (n) buddy, **brother**, chum, crony, pal, sidekick (a close friend who accompanies his buddies in their activities)
- S: (n) **brother**, comrade (used as a term of address for those male persons engaged in the same movement) *"Greetings, comrade!"*
- S: (n) **Brother** ((Roman Catholic Church) a title given to a monk and used as form of address) *"a Benedictine Brother"*

Tarea (9)

Noun

- S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
    - *direct hyponym* / *full hyponym*
    - *direct hypernym* / *inherited hypernym* / *sister term*
        - S: (n) male sibling (a sibling who is male)
            - ***direct hyponym*** / *full hyponym*
                - S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
            - *direct hypernym* / *inherited hypernym* / *sister term*
            - *antonym*
    - *antonym*
    - *derivationally related form*
- S: (n) **brother** (a male person who is a fellow member (of a fraternity or religion or other group)) *"none of his brothers would betray him"*
- S: (n) buddy, **brother**, chum, crony, pal, sidekick (a close friend who accompanies his buddies in their activities)
- S: (n) **brother**, comrade (used as a term of address for those male persons engaged in the same movement) *"Greetings, comrade!"*
- S: (n) **Brother** ((Roman Catholic Church) a title given to a monk and used as form of address) *"a Benedictine Brother"*
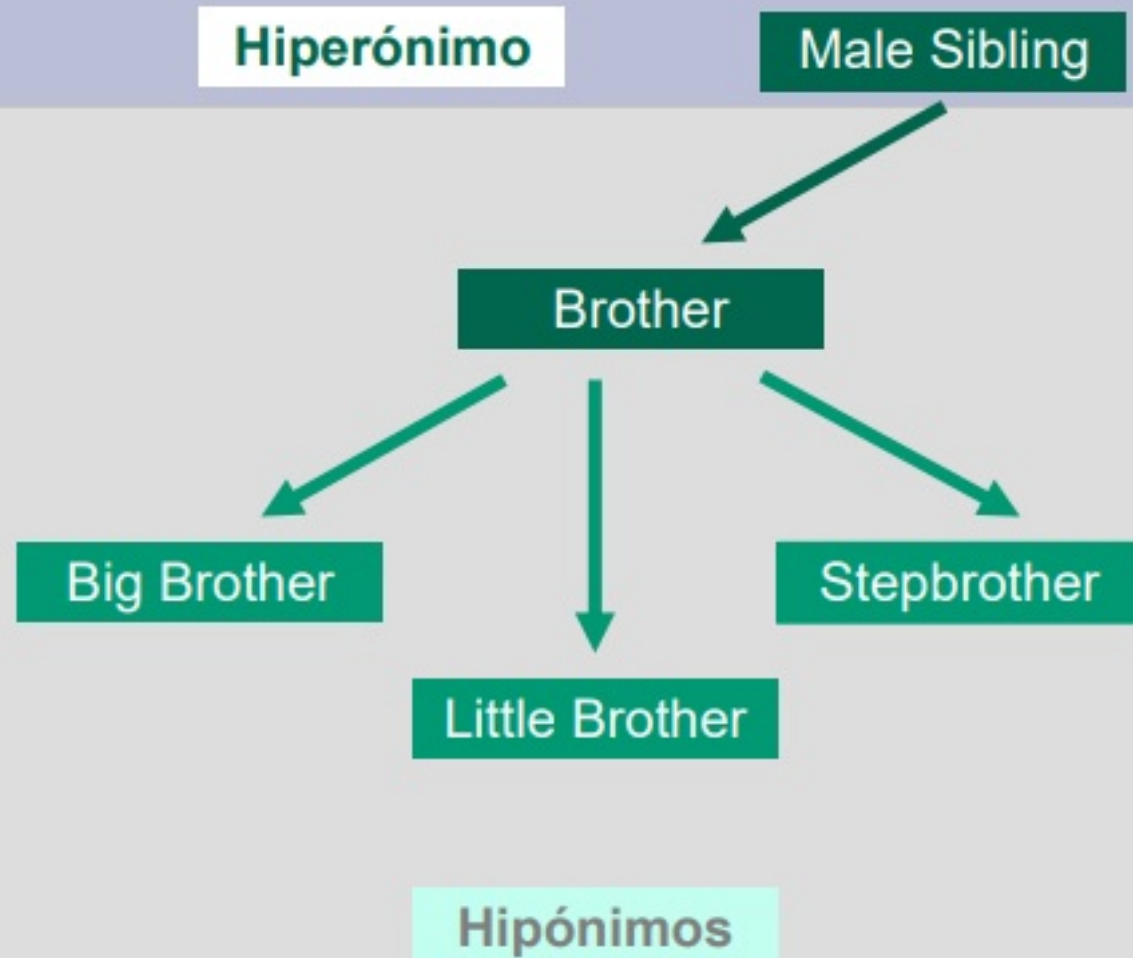
Tarea (10)

Noun

- S: (n) **brother**, blood brother (a male with the same parents as someone else) *"my brother still lives with our parents"*
    - *direct hyponym* / *full hyponym*
    - *direct hypernym* / *inherited hypernym* / *sister term*
        - S: (n) male sibling (a sibling who is male)
            - *direct hyponym* / *full hyponym*
            - ***direct hypernym*** / *inherited hypernym* / *sister term*
                - S: (n) kinsman (a male relative)
            - *antonym*
    - *antonym*
    - *derivationally related form*
- S: (n) **brother** (a male person who is a fellow member (of a fraternity or religion or other group)) *"none of his brothers would betray him"*
- S: (n) buddy, **brother**, chum, crony, pal, sidekick (a close friend who accompanies his buddies in their activities)
- S: (n) **brother**, comrade (used as a term of address for those male persons engaged in the same movement) *"Greetings, comrade!"*
- S: (n) **Brother** ((Roman Catholic Church) a title given to a monk and used as form of address) *"a Benedictine Brother"*

14

Tarea (11)

Como se podrán imaginar, la mejor manera de ver estos resultados es dibujando una **red léxica** que represente todas las relaciones que ustedes han localizado con sus consultas.

La parte final de la tarea consiste en diseñar dicha red, p. e.:

Hiperónimo

Male Sibling

Brother

Big Brother

Little Brother

Stepbrother

Hipónimos

Tarea (12)

Finalmente, lo que se va a entregar como resultado de esta tarea es;

1. Un reporte en donde describan la tarea que hicieron, y las relaciones léxicas que les mostró WordNet.

2. El dibujo de una red léxica con todos los lexemas que aparezcan relacionados a la palabra que hayan analizado.

Finalmente, redacten un reporte con los resultados de las búsquedas que hicieron, así como los dibujos de sus redes léxicas.

Muchas gracias