## How we think about depression: Metaphors matter

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## Linguistic framing, emotions and social matters.

- The metaphors we use to describe emotions influence the way we reason about them (Lakoff & Johnson, 1980).
- Recent empirical work shows that subtle instantiations of metaphorical framings influence how we conceptualize social matters.
  - (e.g.) Metaphors shape political attitudes (Landau, Sullivan & Greenberg, 2010)
  - (e.g.) Metaphors used to describe *crime* affect how people form opinions about it (Thibodeau & Boroditsky, 2011).



## Linguistic framing and mental illness

- Descriptions of emotional disorders vary according to culture and historical context (Watters, 2010).
- Medicalization of psychological disorders (Pilecki, Clegg, McKay; 2011):
  - Framing mental illness as *brain disease* as opposed to a reaction to or consequence of psychosocial factors has been proposed as a strategy to fight stigma in recent years.
  - However, this framing may also cause undesired attributions to patients (see Corrigan & Watson, 2004, for a review).



#### Outline

#### Case study: Depression

- Corpus analysis to investigate how we talk about depression in Latino American countries.
- Experiment designed to test whether the way we frame depression influences the way we conceptualize the course of the symptoms.



## Corpus analysis

CREA corpus of written Spanish (Banco de datos CREA online, 2012 – Corpus de referencia del español actual. http://www.rae.es):

We used texts from Mexico, Argentina, Chile and Colombia, covering a wide range of topics and authors, running from 1974 to 2004.



## Corpus analysis

- ▶ Method (Stefanowitsch & Gries, 2006):
  - We extracted all sentences where the target domain lexical item depresión (depression) appeared.
  - Each sentence was then analyzed to determine whether the target word was embedded in a framing of interest.



#### Results

The total number of hits for the word *depresión* was 967 (distributed over four countries, and 307 different documents by different authors).

- ▶ 166 patterns of interest were identified:
  - ▶ 71 expressions were tagged as spatial/down metaphors (42%),
  - ▶ 29 expressions were tagged opponent metaphors (17%),
  - ▶ 62 expressions were tagged as disease framings (37%).
  - ▶ 4 expressions (2%) were identified as other metaphorical patterns.

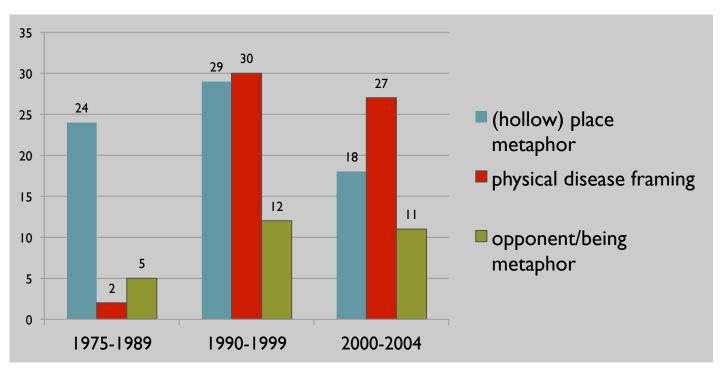


#### Examples

- ▶ DEPRESSION is [an] OPPONENT (17%):
  - ... me agarró una depresión (depression got a hold of me);
  - ... combatir la depresión (to fight depression)
  - ... en garras de la depresión (under the paws of depression)
- DEPRESSION is [a] (Hollow) PLACE (42, 3%);
  - ...cayó en una profunda depresión (He fell into a deep depression)
  - ...salir de la depresión (get out of depression)
  - ... desbarrancarse en la depresión (fall over the cliff of depression)
- ▶ DEPRESSION framed as a PHYSICAL DISEASE (37,8%).
  - ... la depresión es una enfermedad (depression is a disease)
  - ... curarse de la depresión (to cure from depression)
  - ... la depresión de Javier se me empezó a contagiar (Javier's depression became contagious)



#### Corpus data



Pearson's chi-squared test (3X3 contingency table)  $X^2 = 19.9$ ; df= 4; p < 0.001\*\*.

## Experimental questions

- When depression is framed as a brain disease, people make attributions about the *onset* of the disorder (biology) (Corrigan & Watson, 2004)
  - ▶ Do people make attributions also about its offset (Corrigan & Watson, 2004) Will the patient get better to live a normal life?
  - Does linguistic framing influence the way we conceive the course of depression?



## Experiment 1

- Task: Participants read a description of a fake case of depression and answered Likert-type questions (1-7 scale).
  - Three conditions:
    - I) Depression framed a physical disease.
    - ▶ 2) "Depression is an opponent" metaphorical framing.
    - ▶ 3) "Depression is hollow place" metaphorical framing.
- Participants: Sixty students from Universidad de Andes (Bogotá, Colombia)



## Materials (translated to English)

Juana is a 20-year-old girl. Five weeks ago she {contracted/was attacked by/fell into} a {serious/fierce/deep} depression. As a result of such a {disease/attack/fall} Juana presented the following signs over the last five weeks:

- Continuous crying over four or more hours a day.
- Loss of weight without entering a special diet.
- Insomnia five out of seven days.
- Loss of interest in almost all activities and people almost every day.



## Example questions

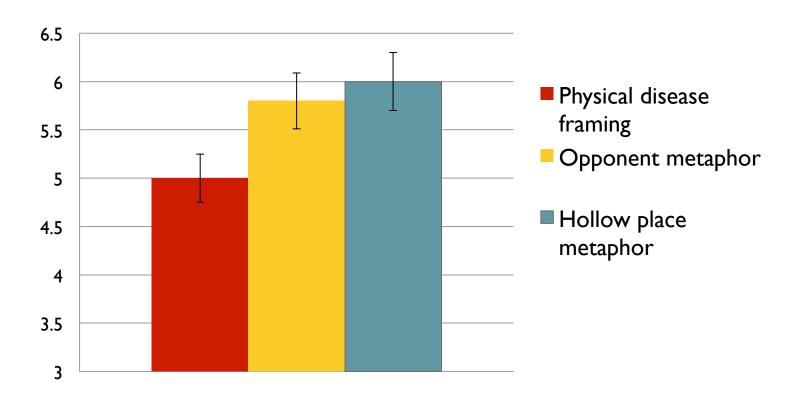
In a scale from I to 7, where I = "not likely at all" and 7 = "very likely",

How likely do you think it is that Juana will recover to live a normal life?

How likely do you think it is that Juana will improve her situation within the next three weeks?



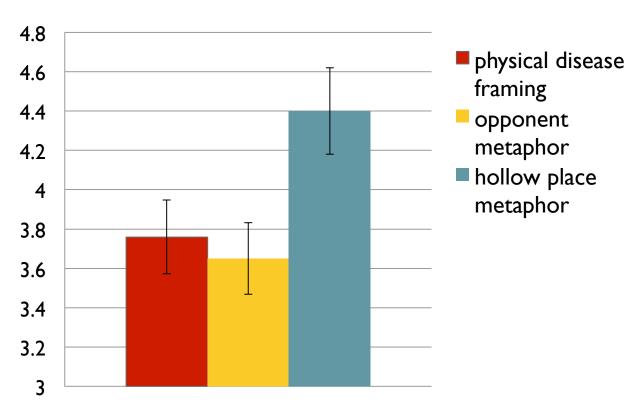
## Likelihood of recovery ratings 1= "not likely at all"; 7="very likely"



F(2,57)=4.75; p=.012.



# Likelihood of short-term recovery ratings.1= "not likely at all"; 7="very likely"



Hollow-place vs. opponent/physical disease t(58) = 2.25; p = .028



#### Conclusions

- The results suggest that linguistic framing influences the way we conceptualize the course of depression.
  - This is consistent with previous literature suggesting that framing mental illness as a brain disease might cause undesired attributions to the nature of the condition. (Corrigan & Watson, 2004).



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