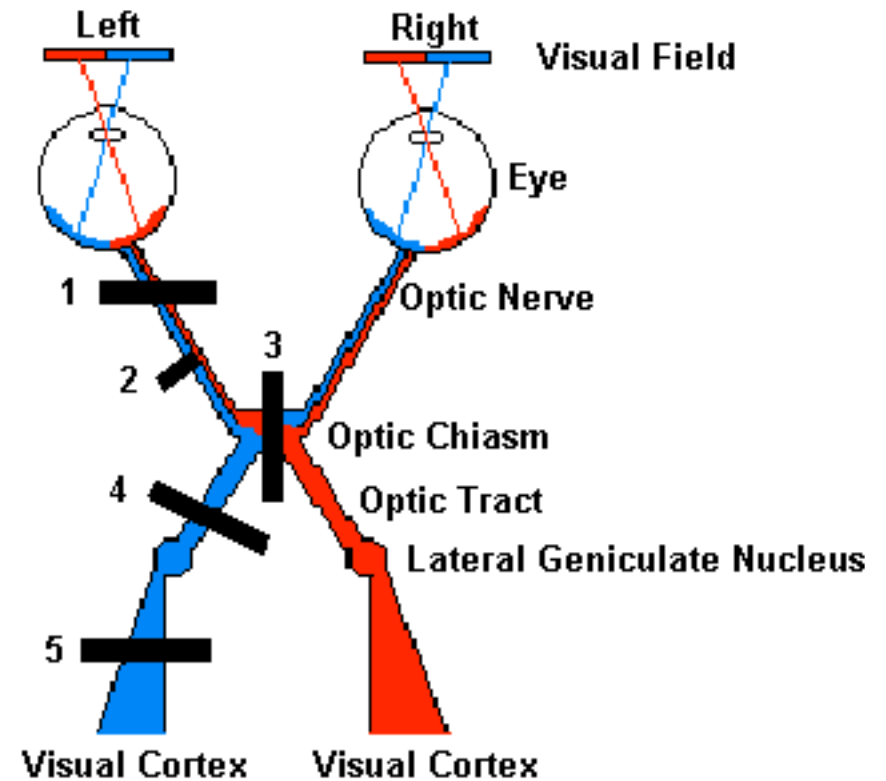


# Divided visual field technique

- One of the hemispheres is given “priority” in processing by presenting the stimulus in the left of right hemifield for .



# Burgess & Simpson 1988

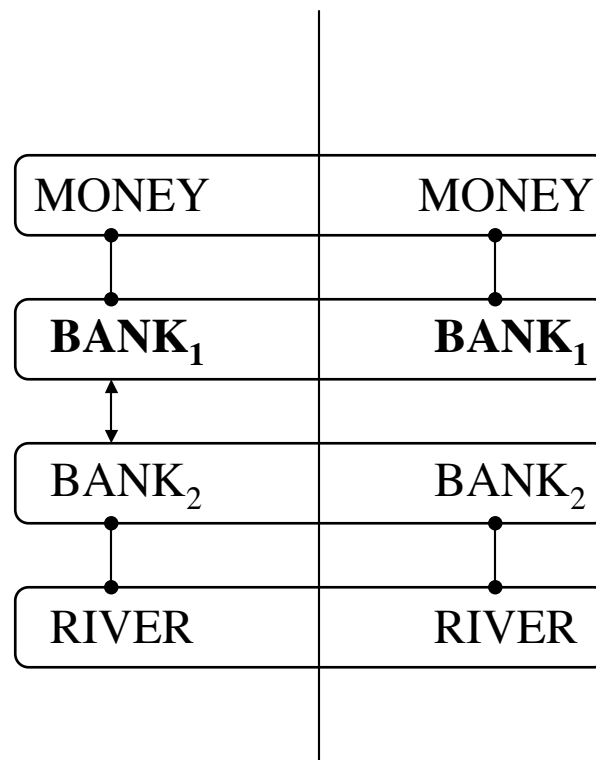
- Visual-visual semantic priming with homograph primes. Combined hemifield & SOA manipulation.

TABLE I  
EXAMPLES OF STIMULUS ITEMS

Target condition	Relatedness	Prime	Target
Subordinate	Unrelated	Riddle	River
	Neutral	—	River
	Related	Bank	River
Dominant	Unrelated	Riddle	Money
	Neutral	—	Money
	Related	Bank	Money
Nonword	Word	Bear	Glorb
	Neutral	—	Glorb

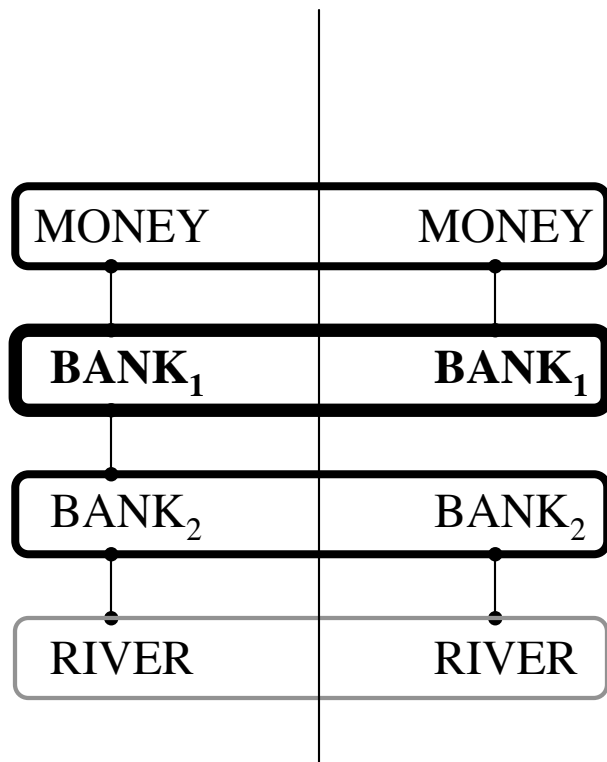
# What's the state of the mental lexicon after the presentation of an ambiguous prime?

- Based on our previous results assume this resting state:

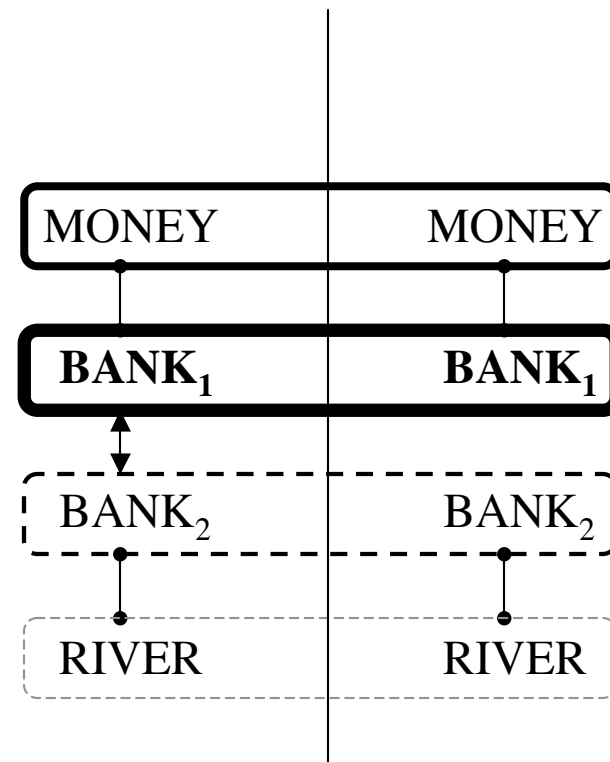


# What's the state of the mental lexicon after the presentation of an ambiguous prime?

35 ms after onset of *bank*

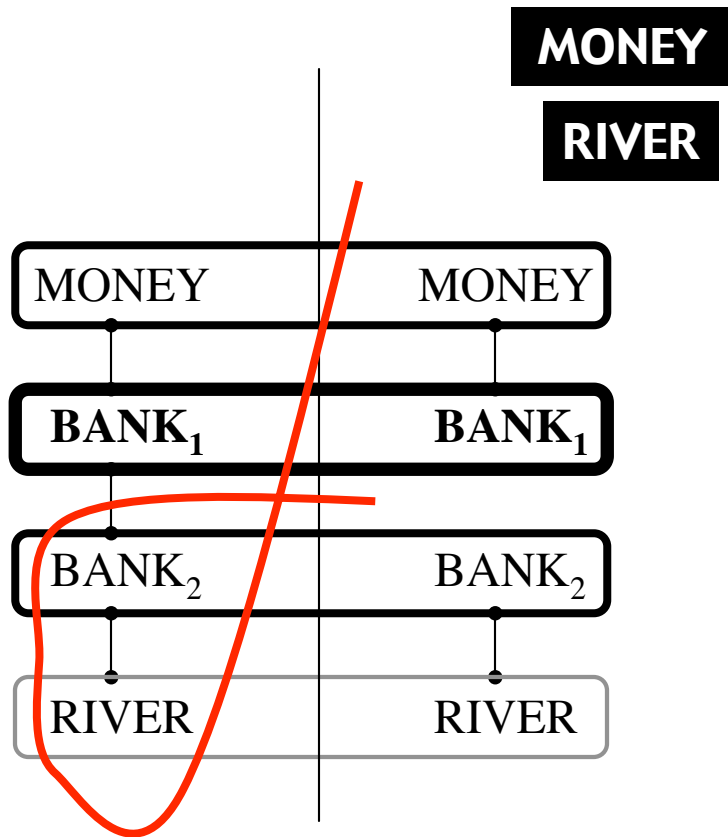


750 ms after onset of *bank*

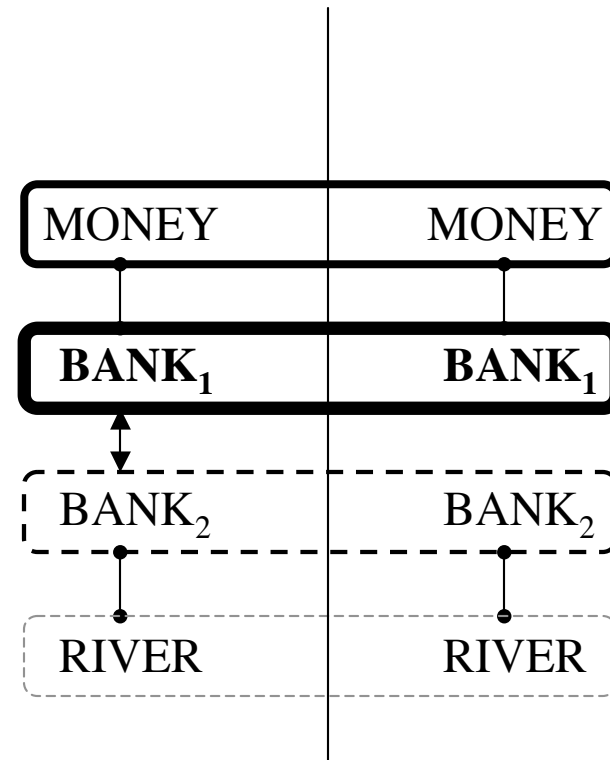




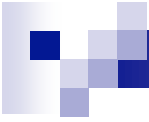
**35 ms after onset of *bank***



**750 ms after onset of *bank***



- Priming both for MONEY and RIVER.

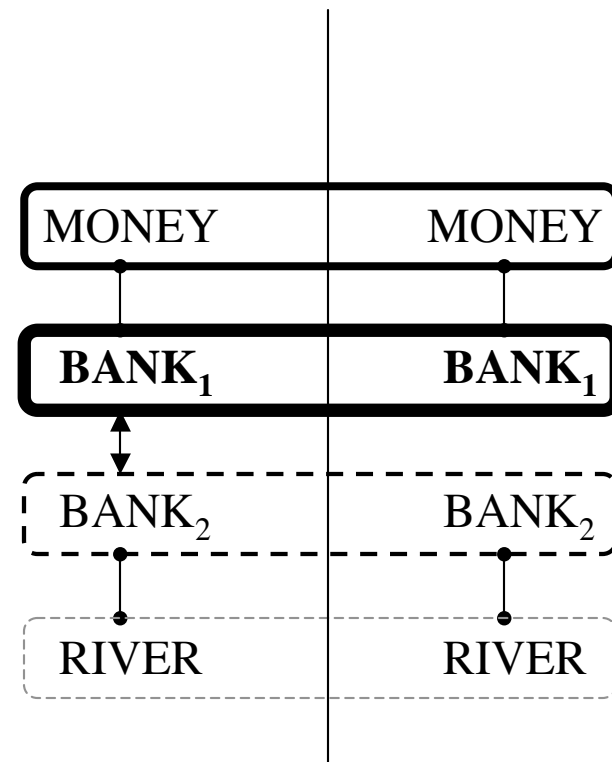
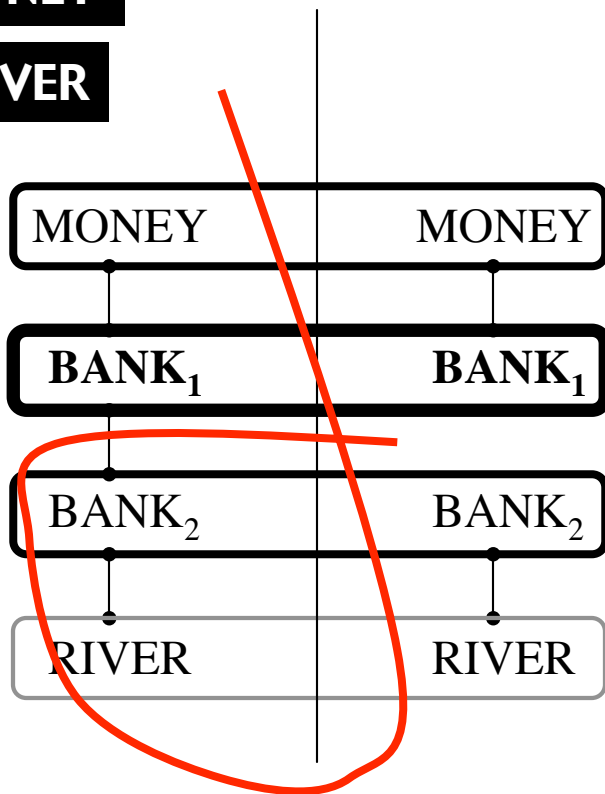


**35 ms after onset of *bank***

**750 ms after onset of *bank***

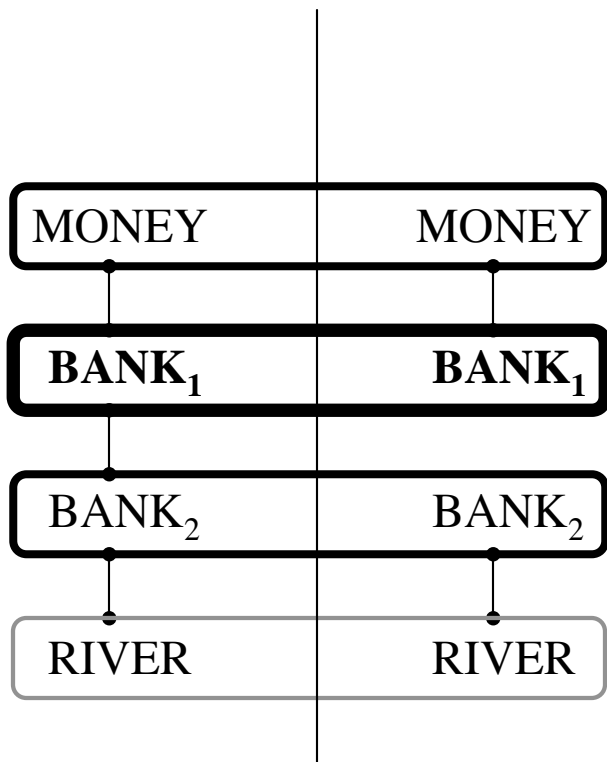
**MONEY**

**RIVER**

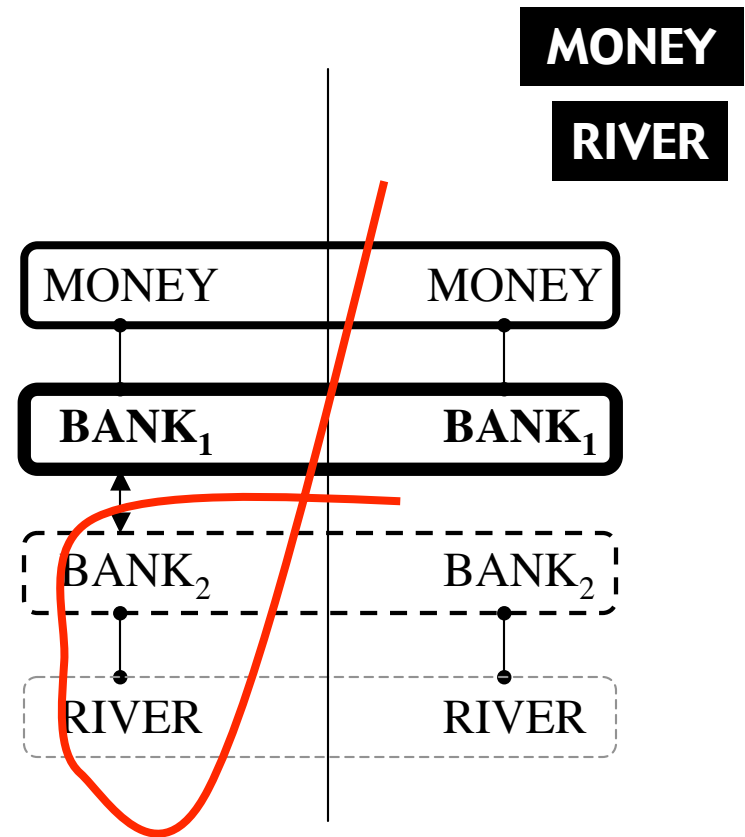


- Priming for MONEY. No priming for RIVER.
- Why? LP: Because the LH doesn't get direct visual input, this is in fact a longer "SOA" condition and the suppression of BANK<sub>2</sub> has already started.

35 ms after onset of *bank*



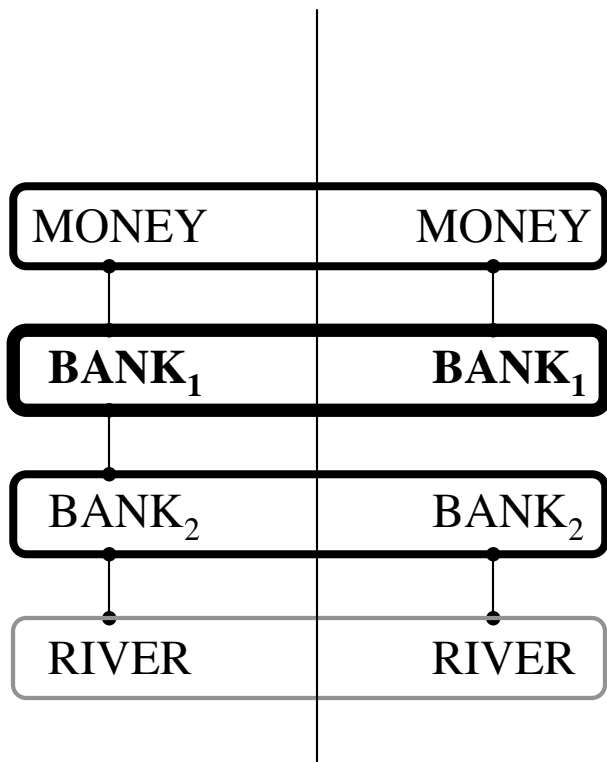
750 ms after onset of *bank*



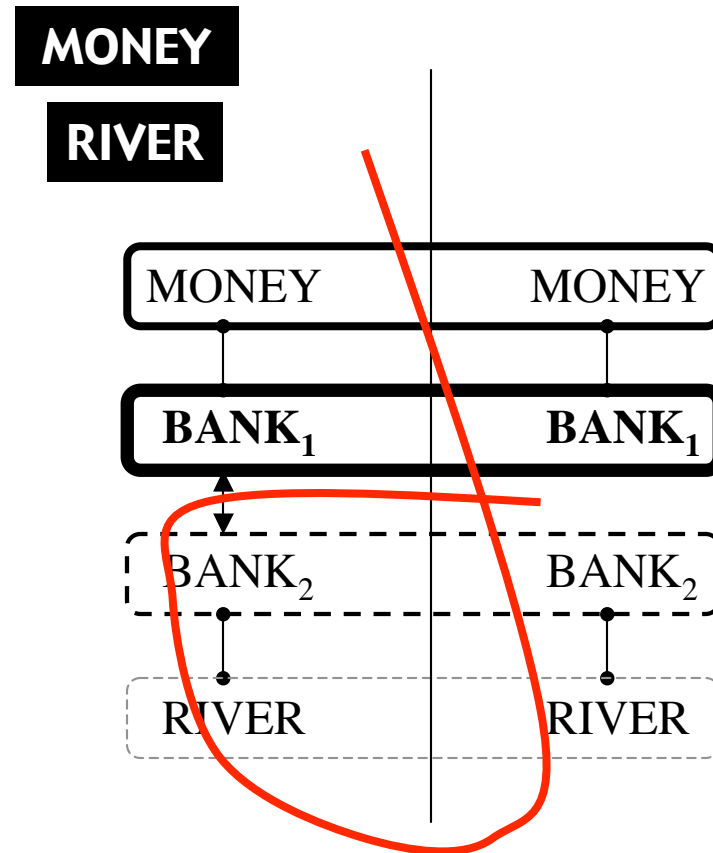
- Priming for MONEY. No priming for RIVER.
- Makes sense, river-related meaning of BANK has already been suppressed.



**35 ms after onset of *bank***

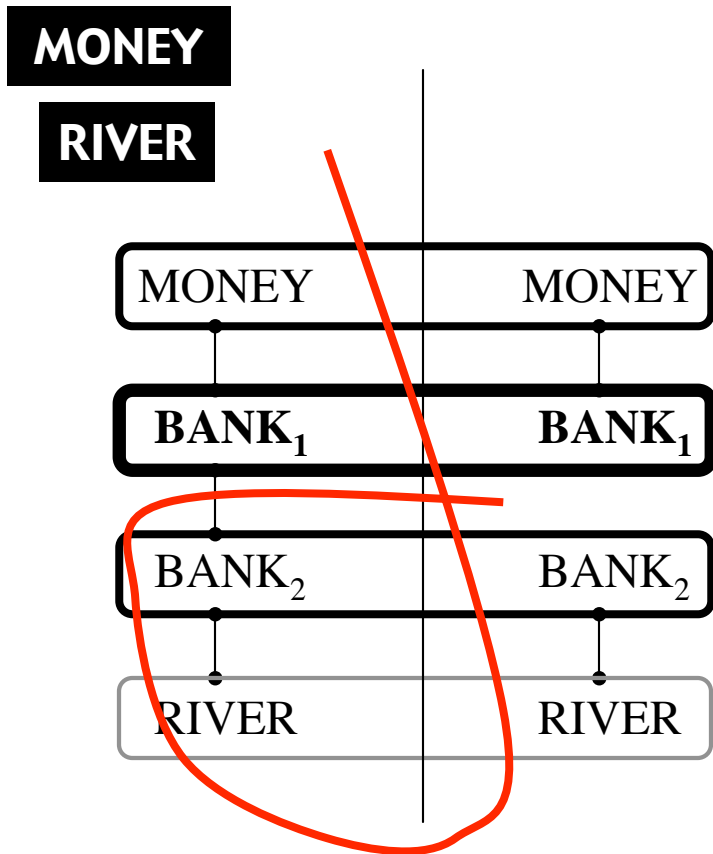


**750 ms after onset of *bank***

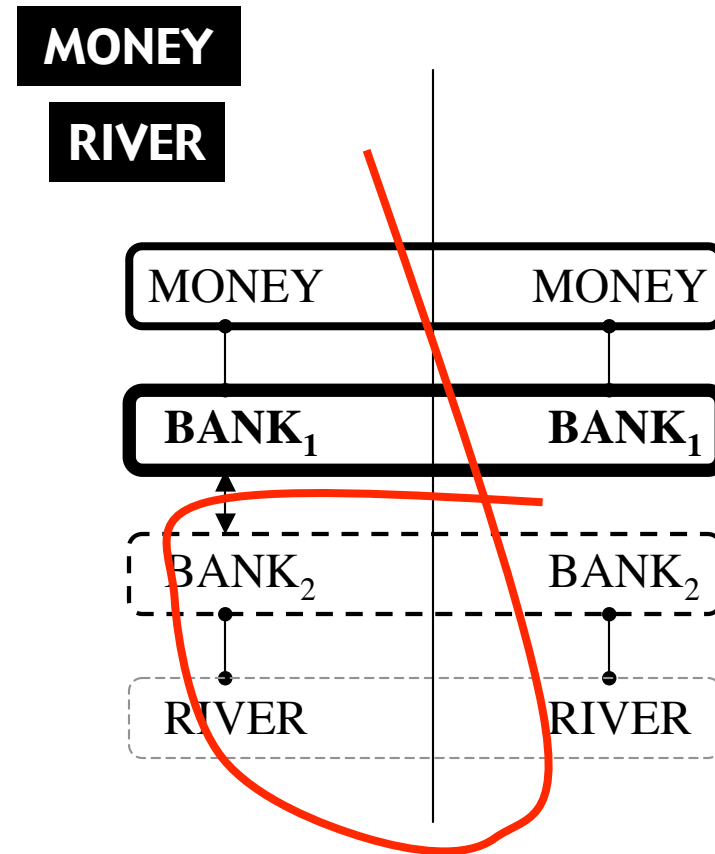


- Priming for MONEY. But also priming for RIVER.
- Doesn't follow from our picture.

### 35 ms after onset of *bank*



### 750 ms after onset of *bank*



- Priming for MONEY only.
- Priming for MONEY. Priming for RIVER.
- RH representations stay active even when representations in the LH are suppressed.
- Cf. our homonym and polysemy results.



## **Coarse coding hypothesis (Beeman 1998)**

- Semantic processing in the RH is more coarse than in the LH.
  - **More meaning active. More distant meanings. Supports comprehension of figurative language.**
- In some ways, our polysemy results suggest the opposite...