

## Advances in culture priming research

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Andy Warhol, Rebel without a cause

# Major collaborators

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- Lee Ann Mallorie UIUC
- Michael W. Morris Columbia University
- Jie Sui Peking University, China
- Carlos Torelli UIUC
- Ying Zhu Peking University, China

# CNBC, Mumbai (India)



# Lay's Potato Chip (Peking Duck Flavor), China



# Coca-Cola, China



# KFC, Shanghai (China)





# Starbucks Coffee, Shanghai (China)



# Starbucks Coffee Moon Cake, Hong Kong (China)





# McDonald's, Singapore



Save more.

Claim: The virtues of life are used to illustrate these extra value meals at McDonald's.

(客) 麥當勞/\$4.50超值全餐 (McDonald's/\$4.50 Extra Value Meals) 
 (廣) 新加坡李奧貝納廣告公司 (Leo Burnett Advertising, Singapore) 
 (文) 陳耀福 (Norman Tan), 曹穎 (Mandy Siow) 
 (美) 陳耀福 (Norman Tan) 
 (製) Xavier Heng 
 (攝) Stock 
 (圖) Tan Chin-soon

# McDonald's, Beijing (China)

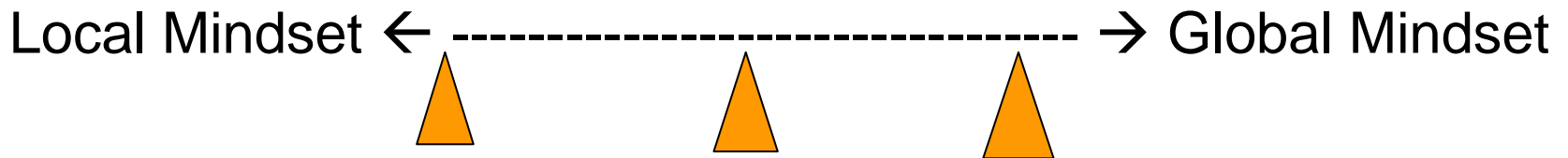


# Basic Question

- Globalization creates multicultural space in contemporary societies.
- Will globalization eventually make culture irrelevant?

# Why May Culture Disappear?

- Emergence of a global village – homogenization of cultural experiences
- Acculturation effects –



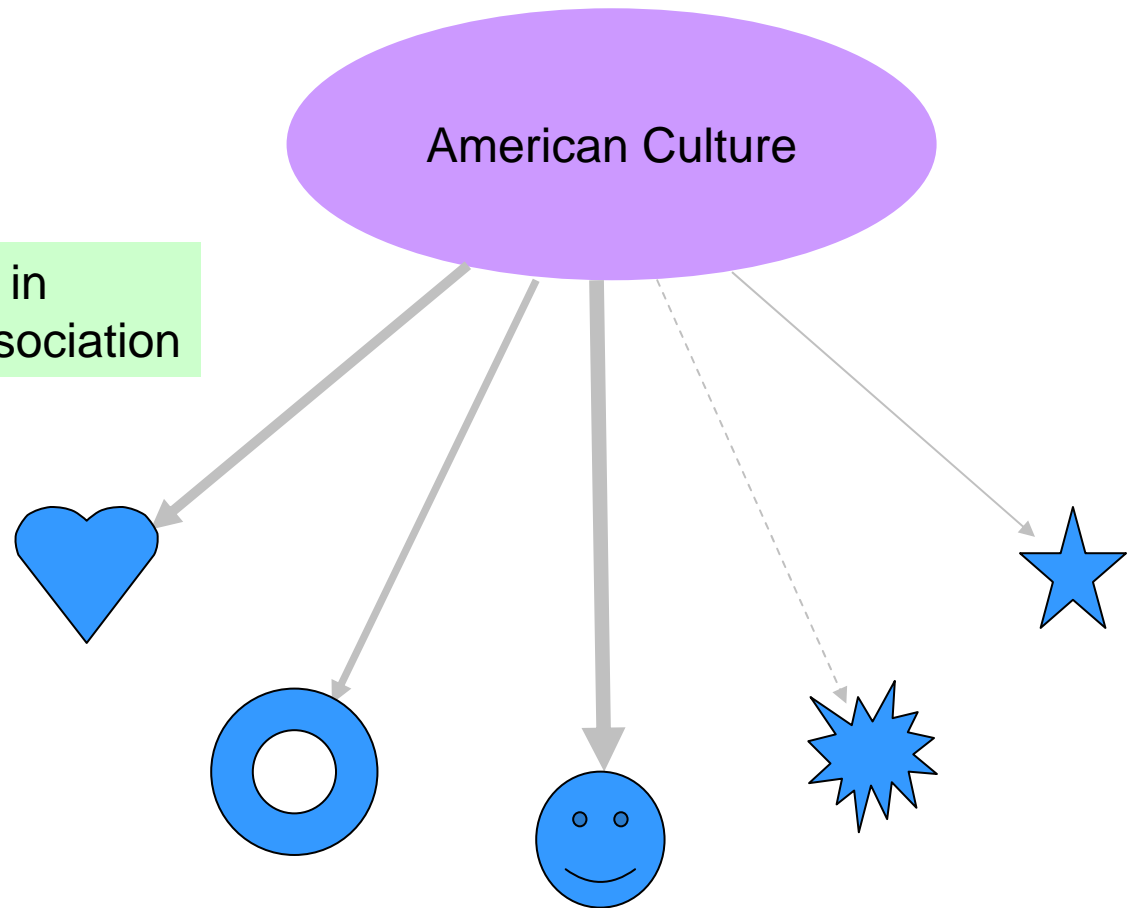
# How Do Local Cultures Survive Globalization? Psychological Perspective

- Co-presence of multiple cultural knowledge traditions in the same space makes culture a salient organizing construct for grasping experiences.
- Co-presence of multiple cultural knowledge traditions in the same space leads to development of multiple cultural frames, and the ability to shift cultural frames spontaneously in response to aspects of the situation.

# Mental representation of a culture

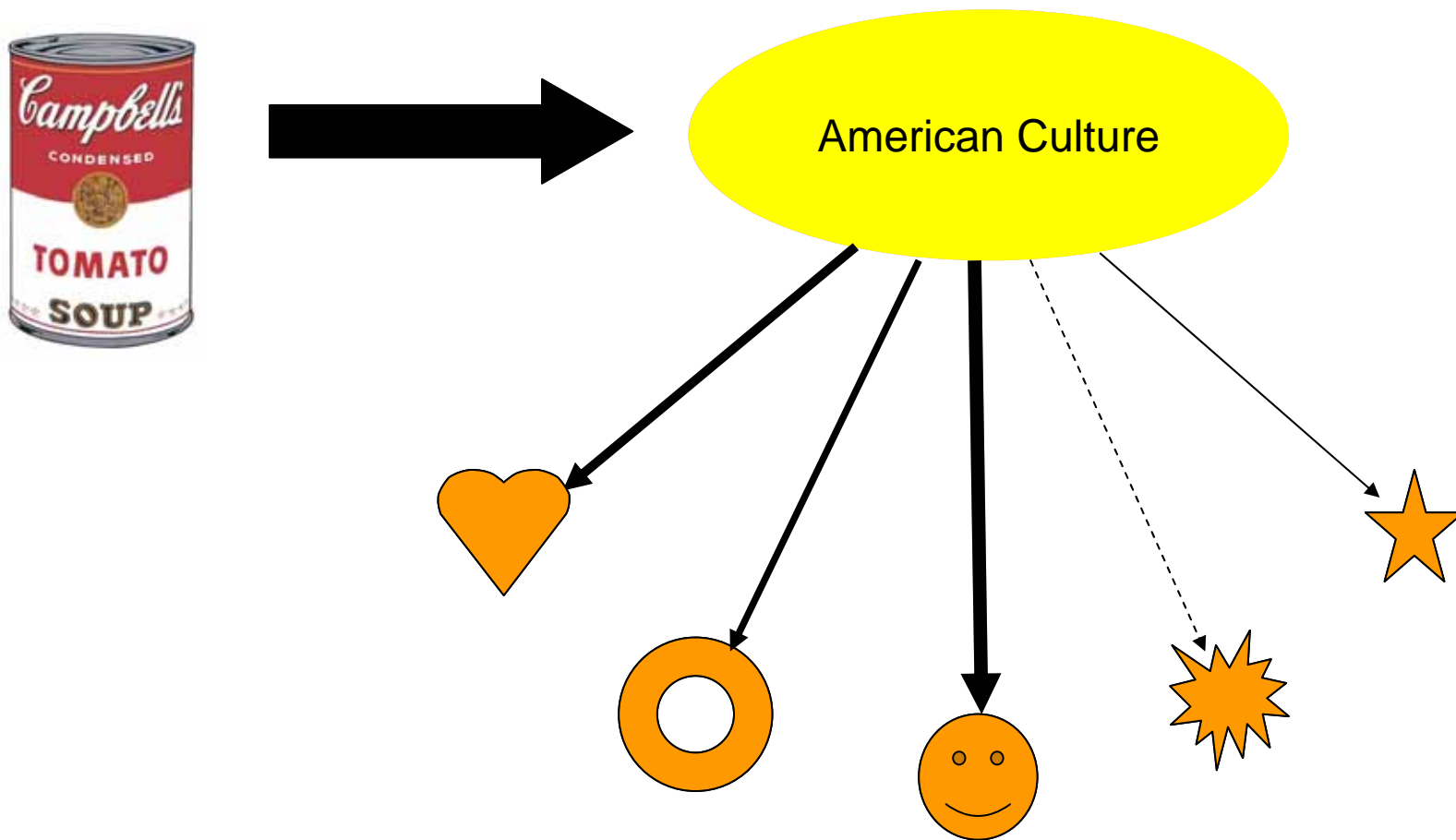
The links vary in strength of association

The central concept “American Culture” is linked to different knowledge items. An item could be a procedural knowledge, a declarative knowledge (a person-representation, event representation, or norm representation)

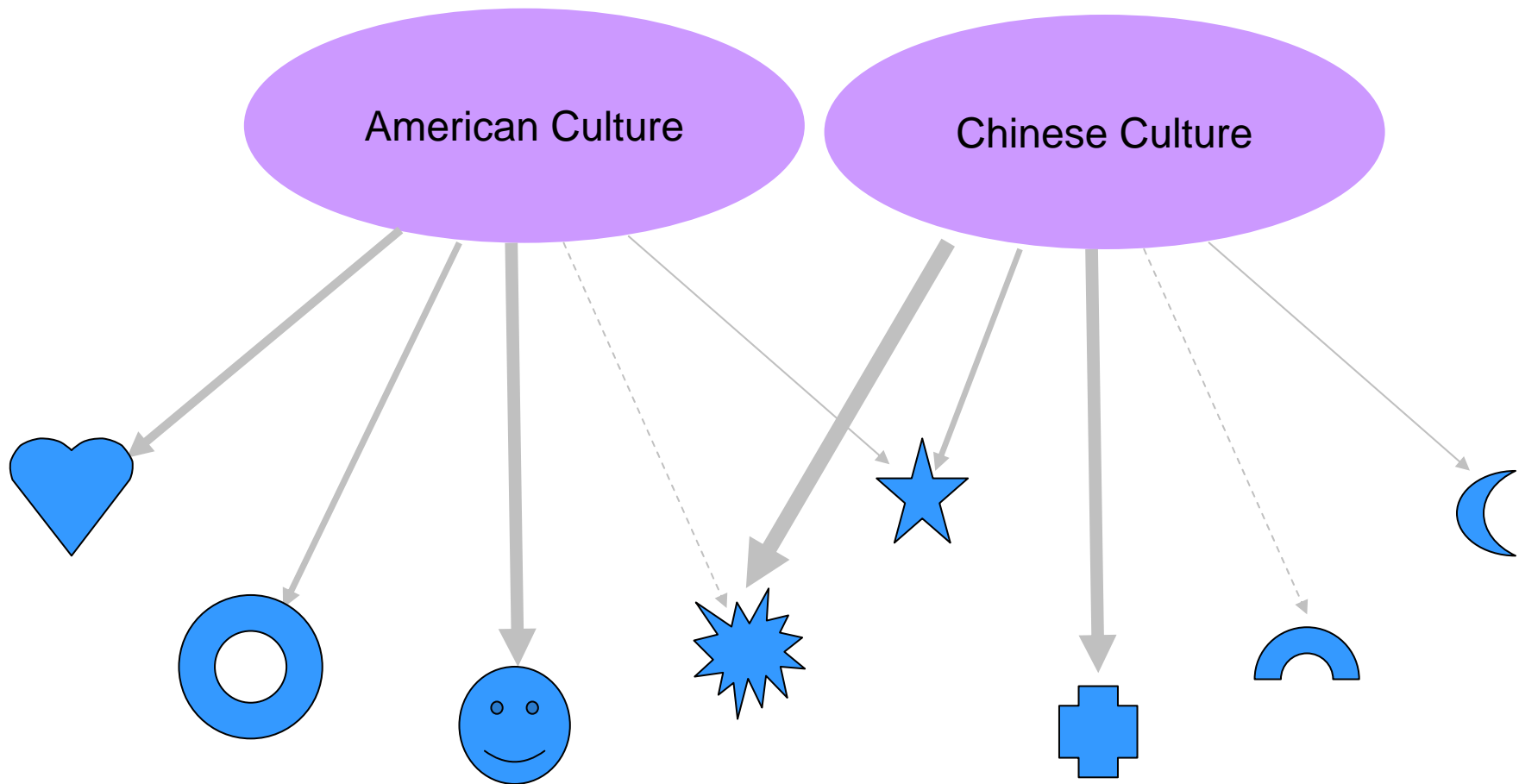


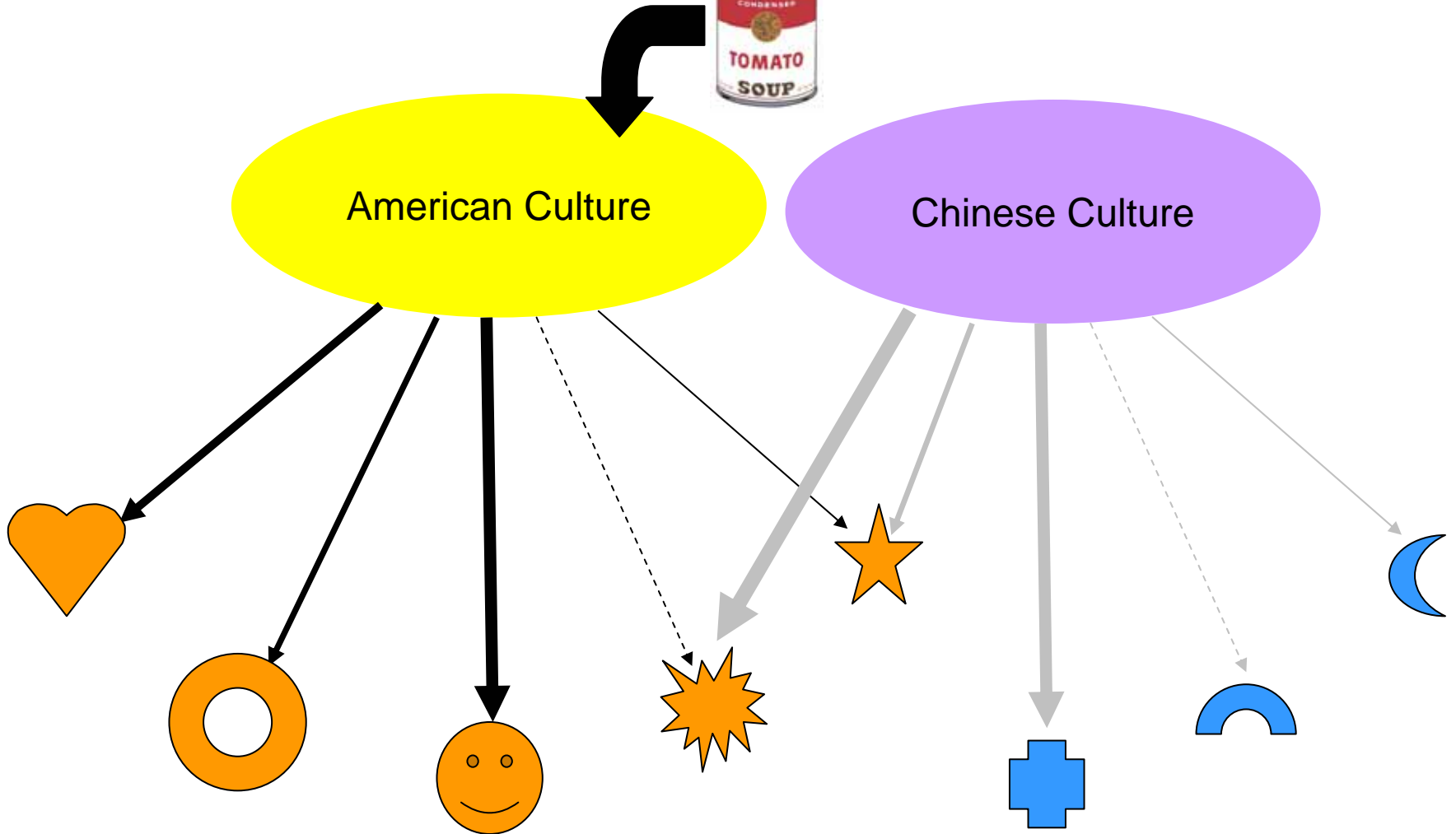


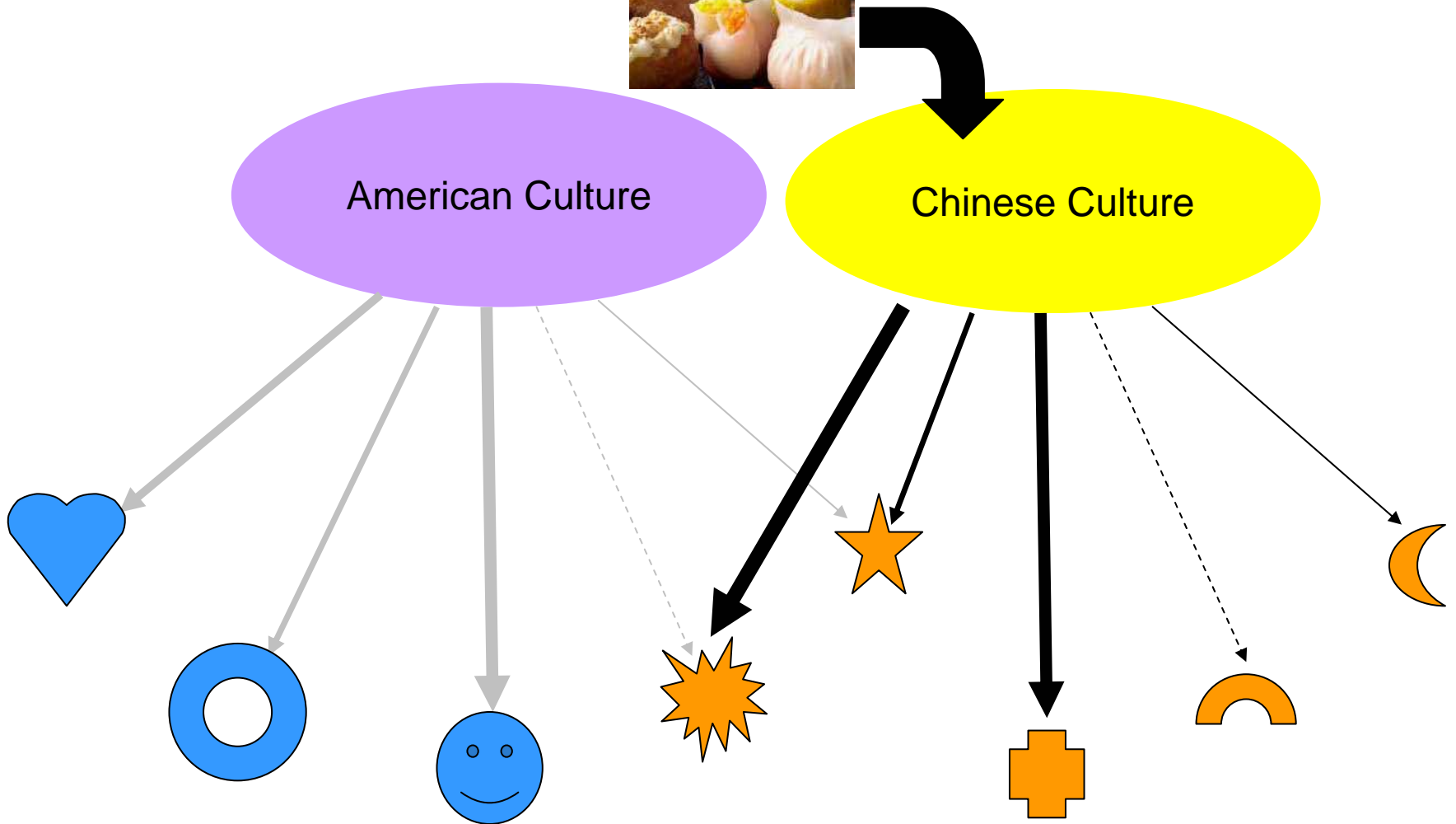
# Activation of a culture representation

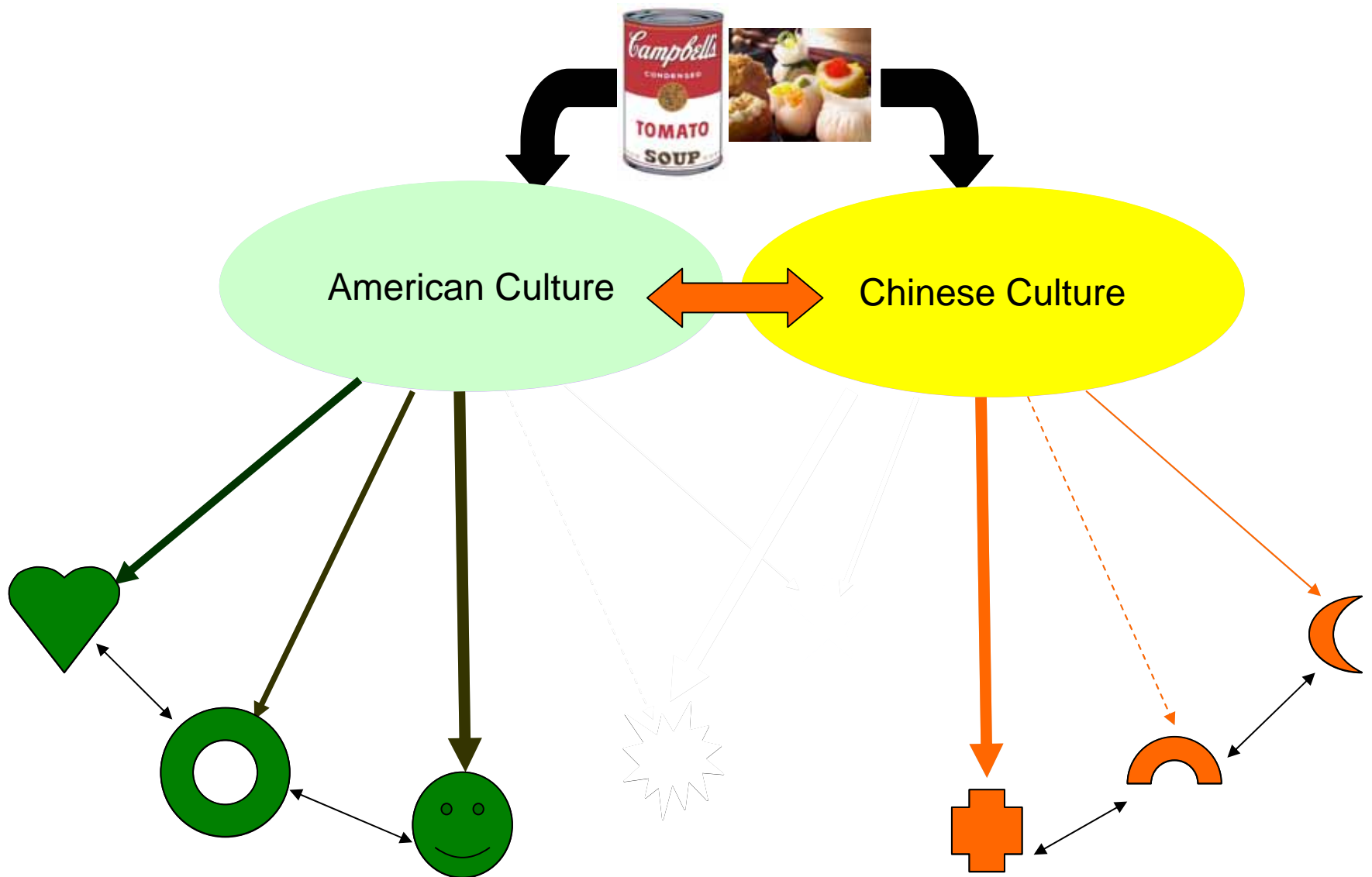


# Mental representation of two cultures





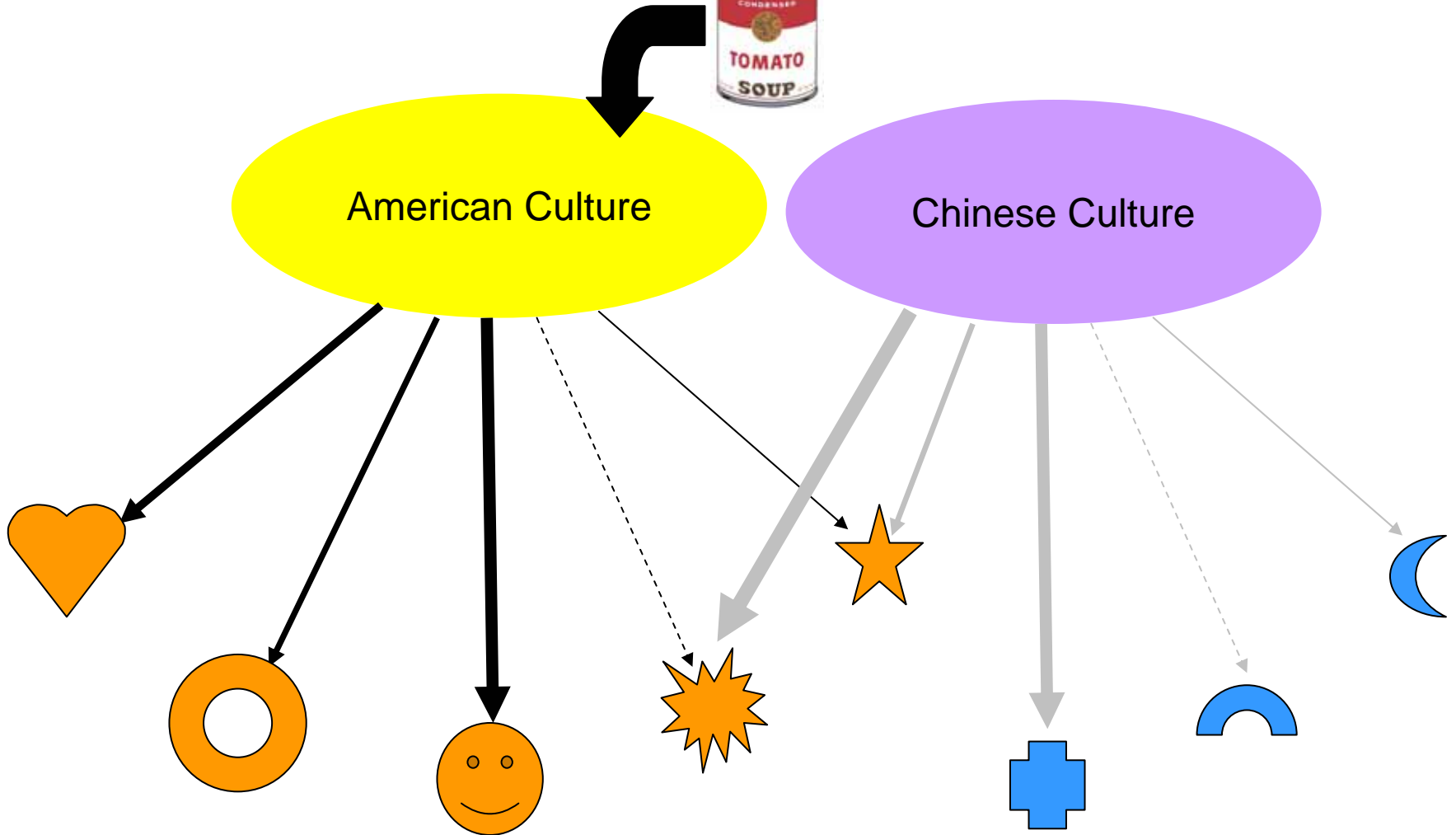


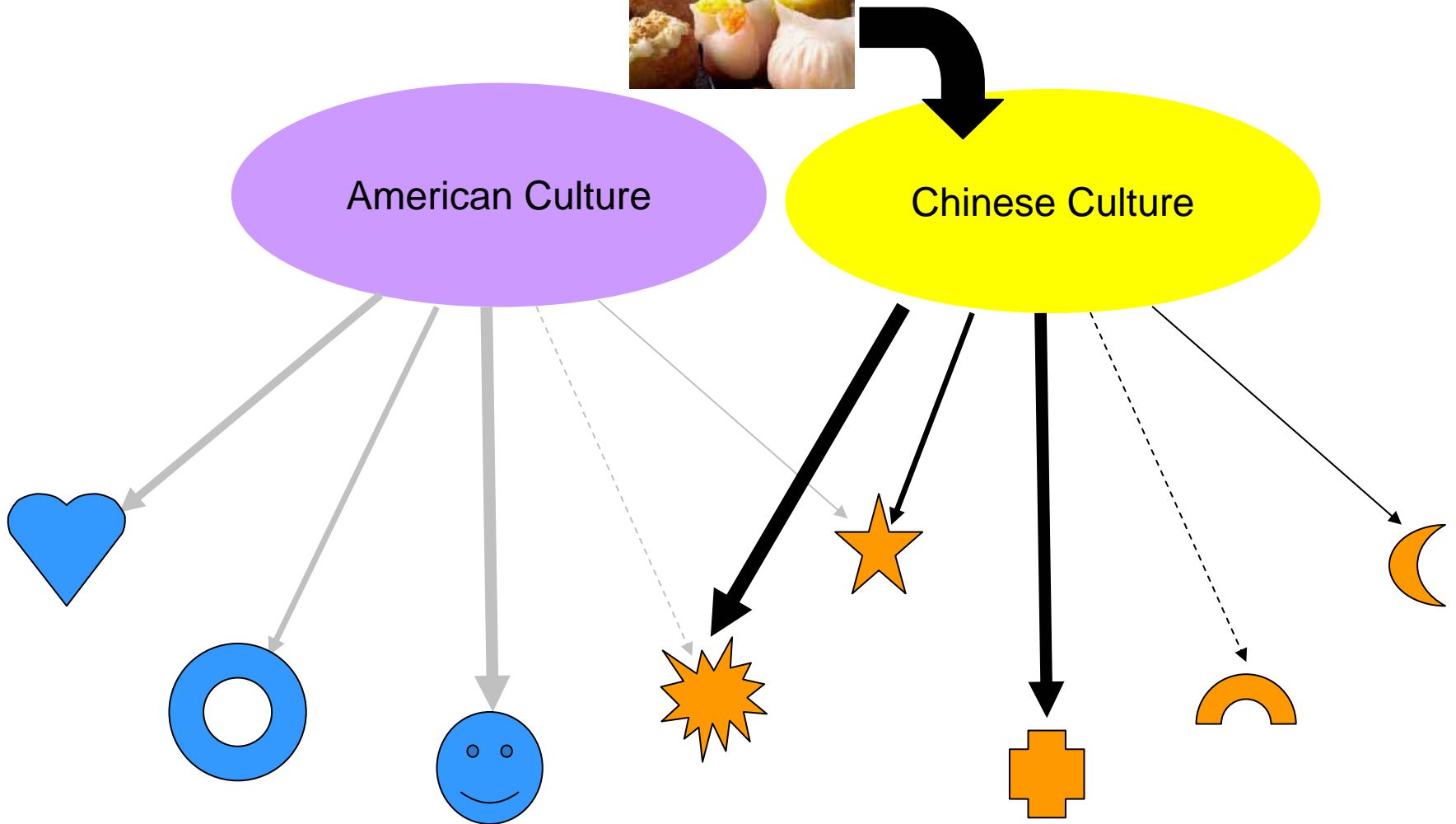


# Cultural Frame Switching

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# Self-Report

- “I think of myself not as a unified cultural being but as a communion of different cultural beings. Due to the fact that I have spent time in different cultural environments I have developed several cultural identities that diverge and converge according to the need of the moment” (p. 190).  
-- *Susanna Harrington, a multicultural informant of South American origin in Sparrow (2000)*

# Experiment 1

- Culture Priming and Attributions (Hong, Chiu, & Kung, 1997)

## Chinese Cultural Primes



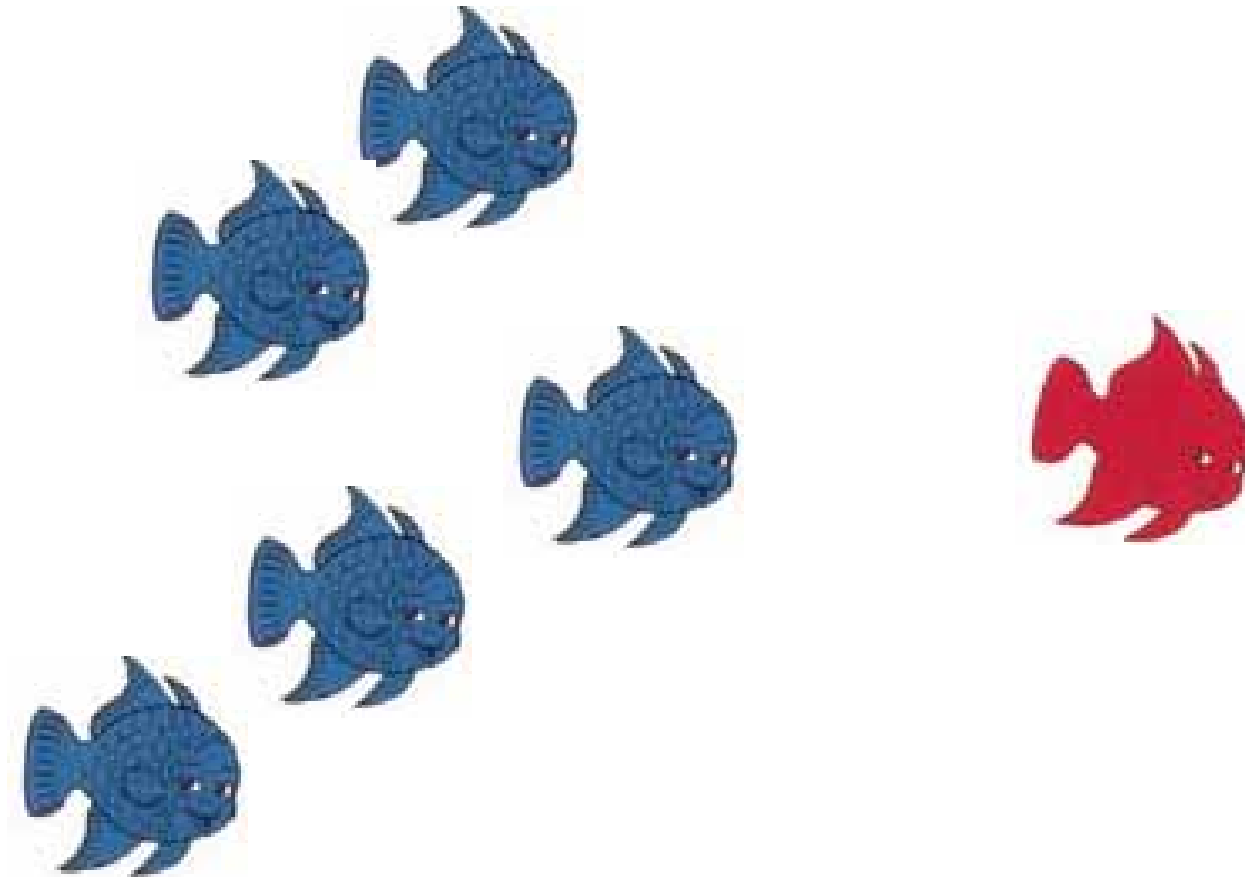
## Neutral Primes



## American Cultural Primes

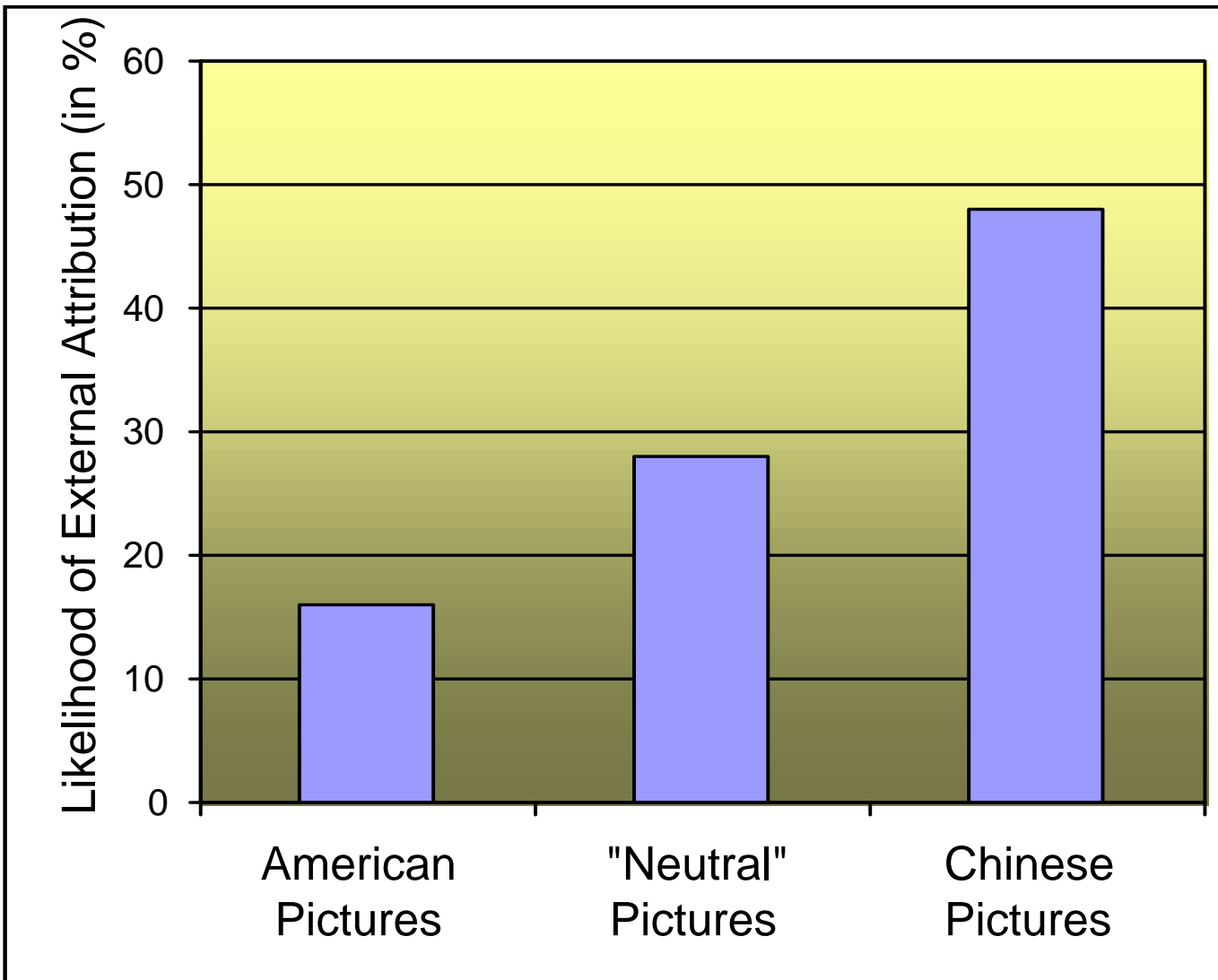


## Experiment 1



Why does the red fish swim ahead of other fish?

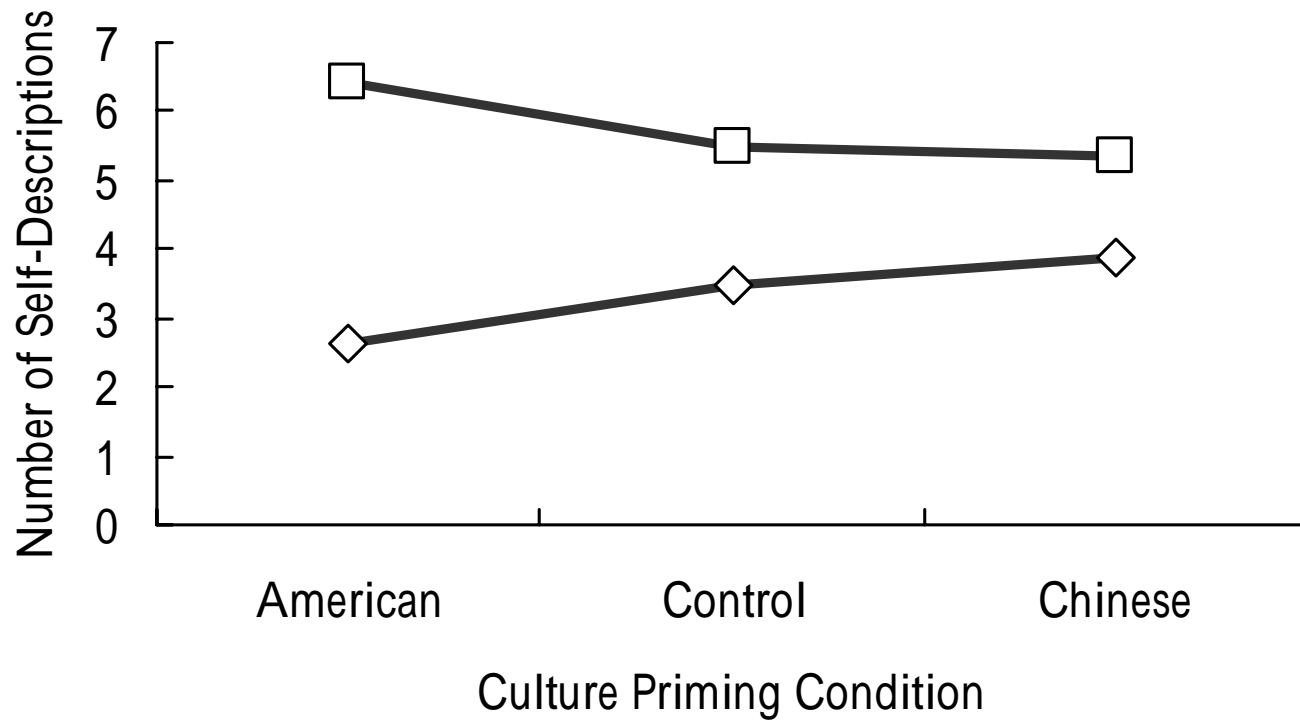
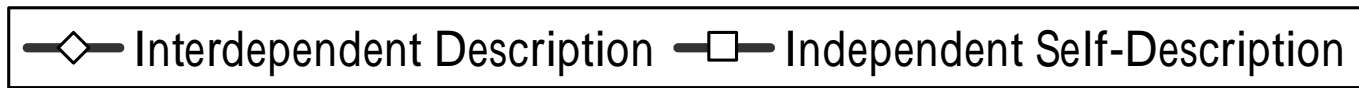




Source: Hong, Morris, Chiu & Benet-Martinez (2000), *American Psychologist*

# Experiment 2 (Sui, Zhu, & Chiu, under review)

- Fifty-four ethnic Chinese undergraduate students (20 men, 24 women; mean age = 22.63) from Peking University.
- Culture priming: Chinese, American, control
- DV: 10 self-descriptions
  - Independent self-descriptions,
  - Interdependent self-descriptions

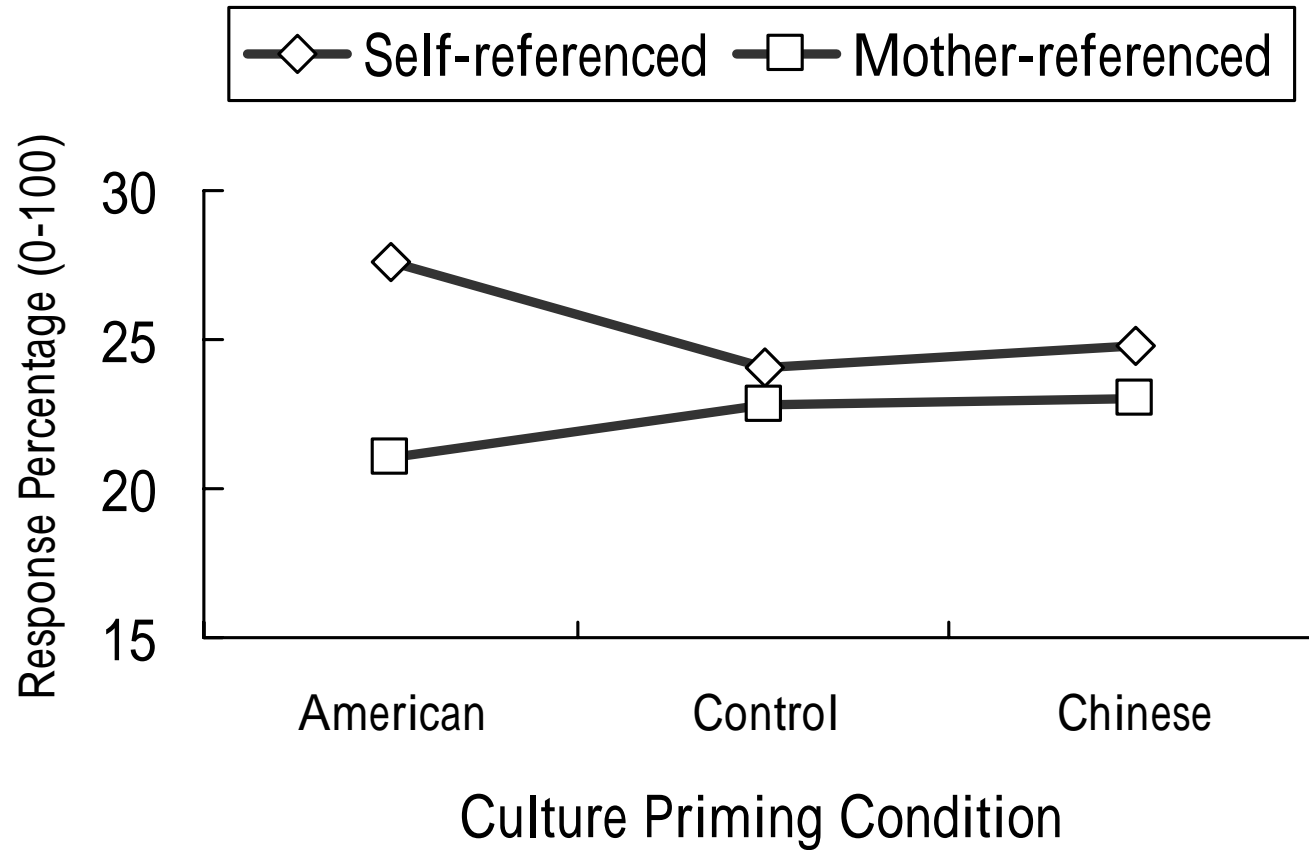


# Experiment 3: Background (Sui, Zhu, & Chiu, under review)

- Self-reference effect on recognition memory
  - Cheerful:
    - how true is this adjective of the self? (self-reference)
    - How true is this adjective of a public figure (e.g., Bill Clinton)? (other-reference)
  - Recognition memory was better in a delayed recognition test in the self-reference condition than in the other-reference condition.
  - Similar effects were obtained among Westerners and Easterners.
- Mother-reference effect
  - Cheerful:
    - How true is this adjective of the self?
    - How true is this adjective of your mother?
  - Recognition memory was better in a delayed recognition test in the self-reference condition than in the mother-reference condition only for Westerners.
  - Chinese participants recognition memory was the same in both conditions.

# Experiment 3

- Seventy-eight ethnic Chinese undergraduate students from Peking University (Mean age = 21.97, 27 men, 51 women)
- Culture priming (Chinese, American, control)
- Encode: 20 adjectives (10+, 10-)
  - Self-reference (how true the adjective is of the self)
  - Mother-reference (how true the adjective is of your mother)
- A surprise recognition task after an 1-hour delay





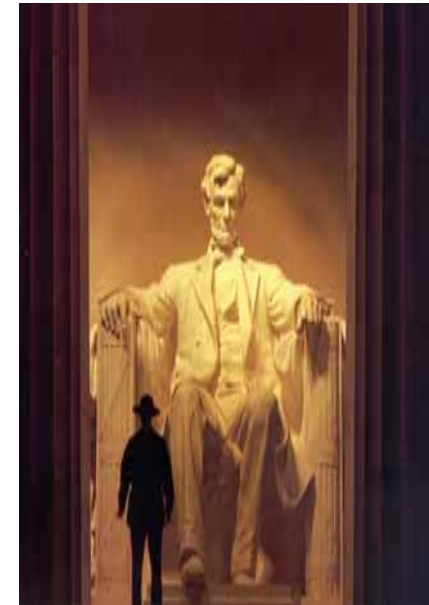
# Experiment 4: Spontaneous Cultural Frame Switching (Fu, Chiu, Morris, & Young, under revision)

Chiu, Dweck, Tong, & Fu (1997), *JPSP*; Hong, Ip, Chiu, & Menon (2000), *Social Cognition*



Chinese moral values:  
duty- & interpersonally-based

American moral values:  
rights- & individual-based

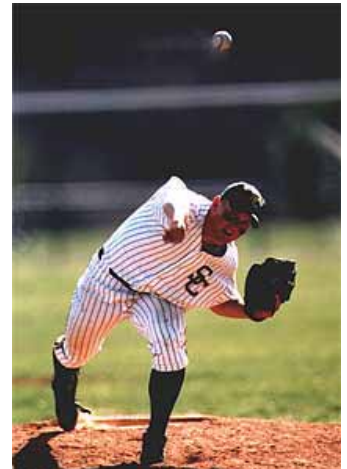


# Spontaneous Cultural Frame Switching: Research Question

## Experiment 4

Does 'tai-chi' make  
Chinese-American  
biculturals  
think of duty- and  
interpersonally-based moral  
values spontaneously?

Does baseball  
make them think of  
rights- &  
individual-based  
moral values  
spontaneously?



# Method

- Automatic Elaborative Inference Task

(McKoon & Ratcliff, 1986; Uleman, Hon, Roman, & Moskowitz, 1996)

- In the automatic elaborative inference task, the participant reads a sentence on a computer screen on each trial. After reading the sentence, the participant indicates whether it includes a probe.

■ Sentence 1: *He carried the heavy luggage for the old lady.*

■ *Probe: helpful*

■ Sentence 2: *He bought some green apples from the food market.*

■ *Probe: helpful*

The correct response to both Sentences 1 and 2 is “no.”

However, because *helpful* is a cognitively accessible inference after the participant has read Sentence 1, a competing “yes” response will interfere with the correct “no” response, and hence retard response time.

# Procedures

- 1) Participant read a sentence;
- 2) The sentence disappeared;
- 3) A 'Beep' after 250ms;
- 4) The probe appeared;
- 5) Participant judged whether the probe appeared in sentence

# Sentences

**American Culture Reference Sentences:** Turkey and cranberries are traditional food for a holiday in November.

**Chinese Culture Reference Sentences:** A great emperor once produced an underground army of clay warriors.

**Culture-Neutral Sentences:** People usually watch movies, read books and sleep on long airplane journeys.

## Probe words

Chinese-culture-related probe words: obedience, modesty, and conformity

American-culture-related probe words: freedom, diversity, and independent

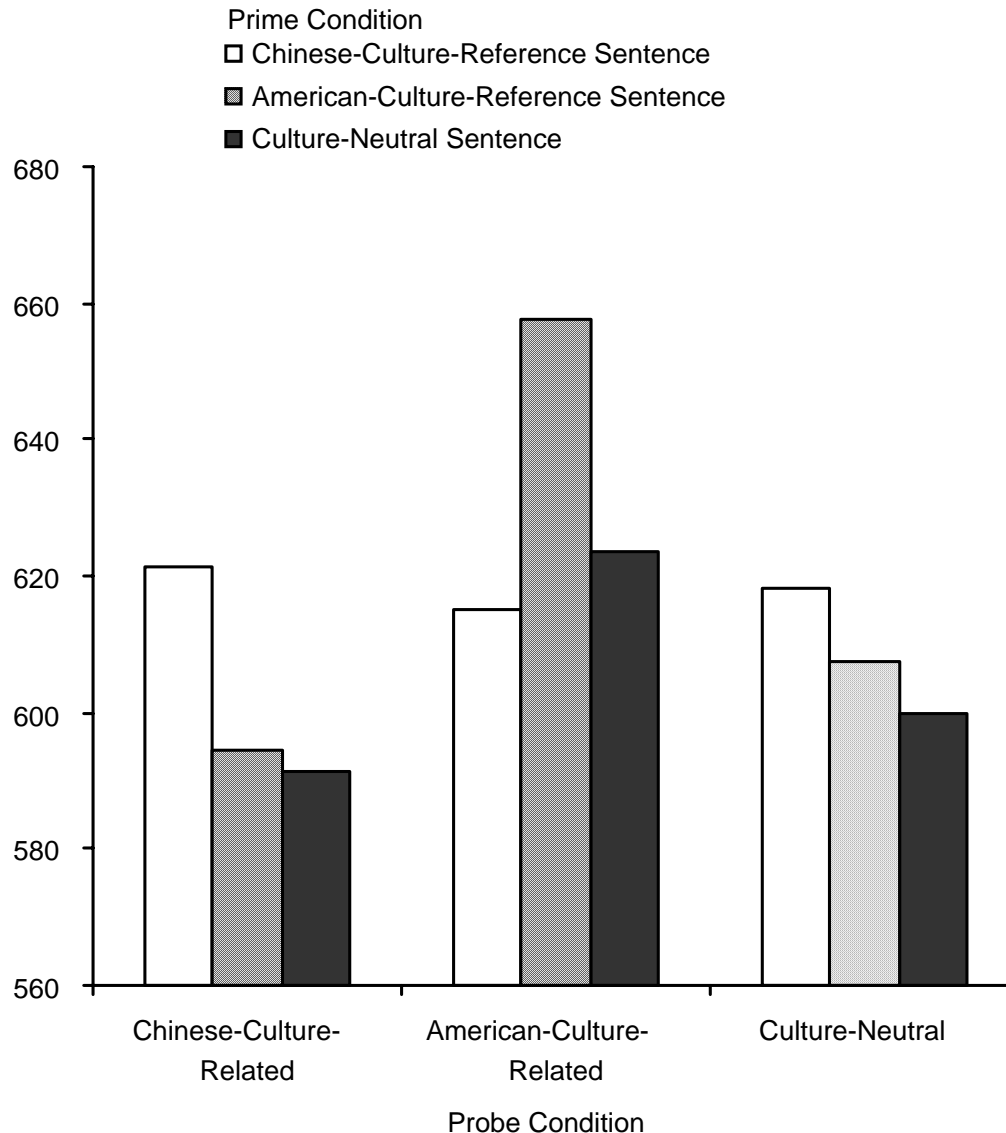
Culture-neutral probe words: exercise, prosperity, and elegant.



# Analysis

- Analyzed correct “No” responses
- When spontaneous inference occurs, reaction time (RT) will be slowed down.
- Long RT implies that spontaneous activation of the association between contents of the sentence and the moral value signified by the probe word.

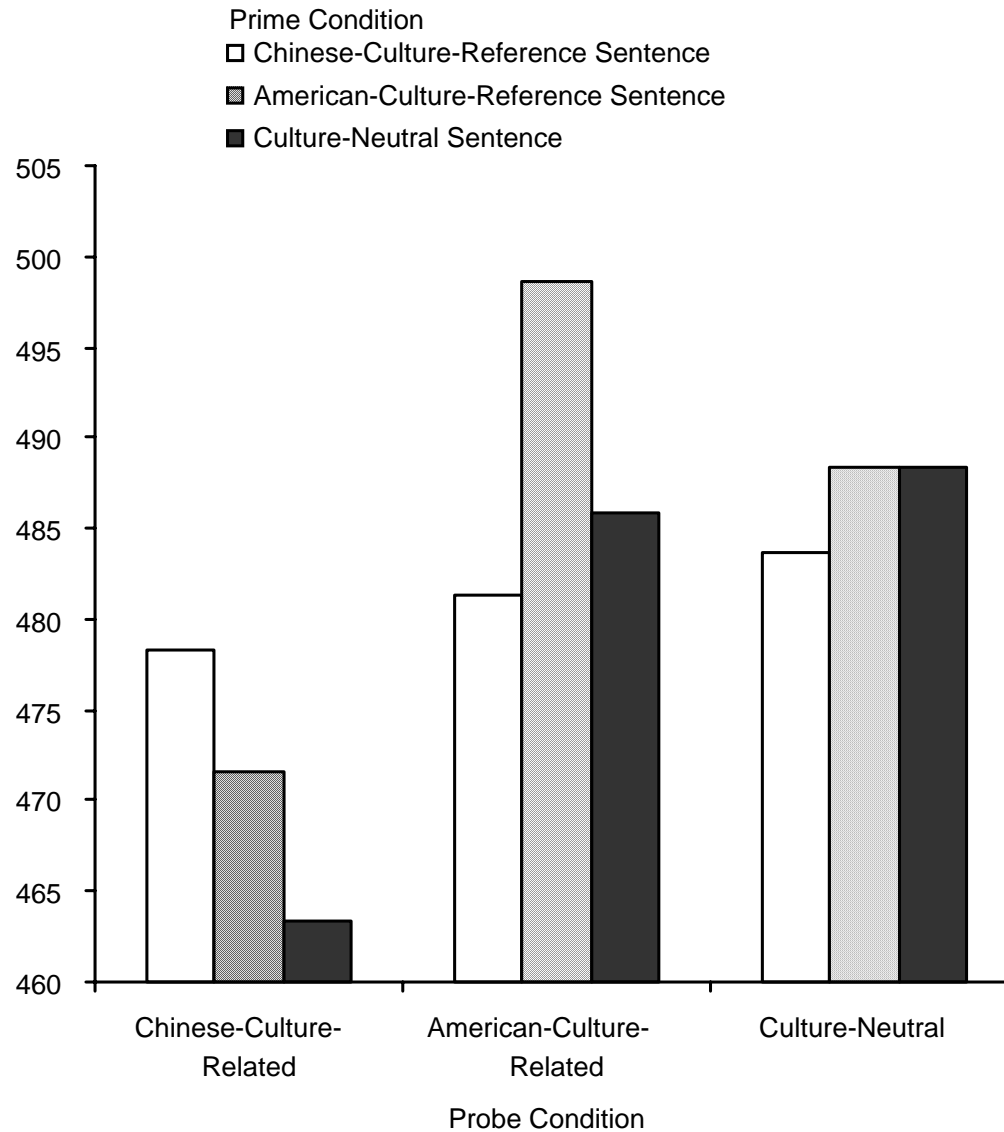
# Sample 1: Chinese Americans in California (Chinese Americans)

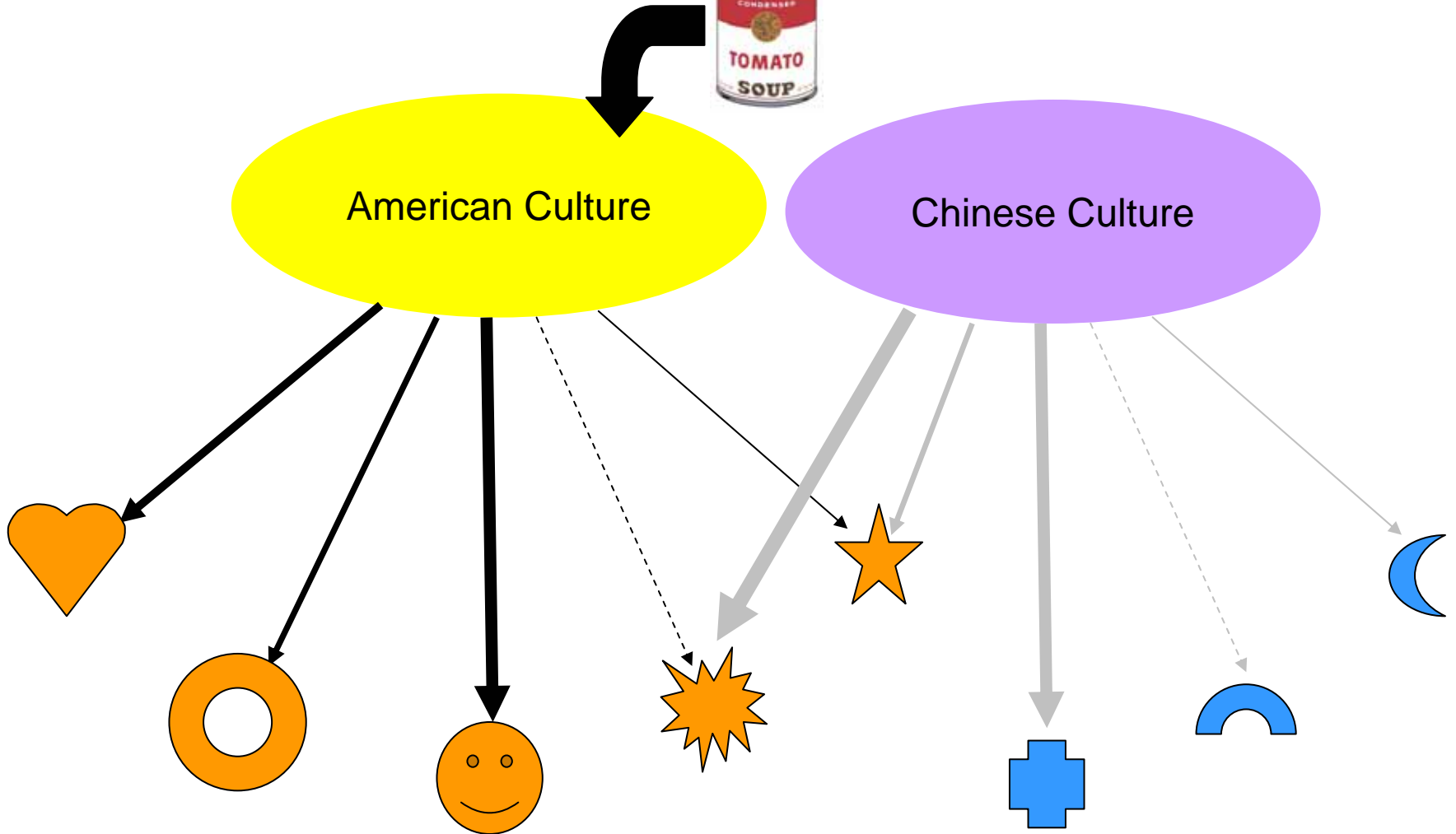


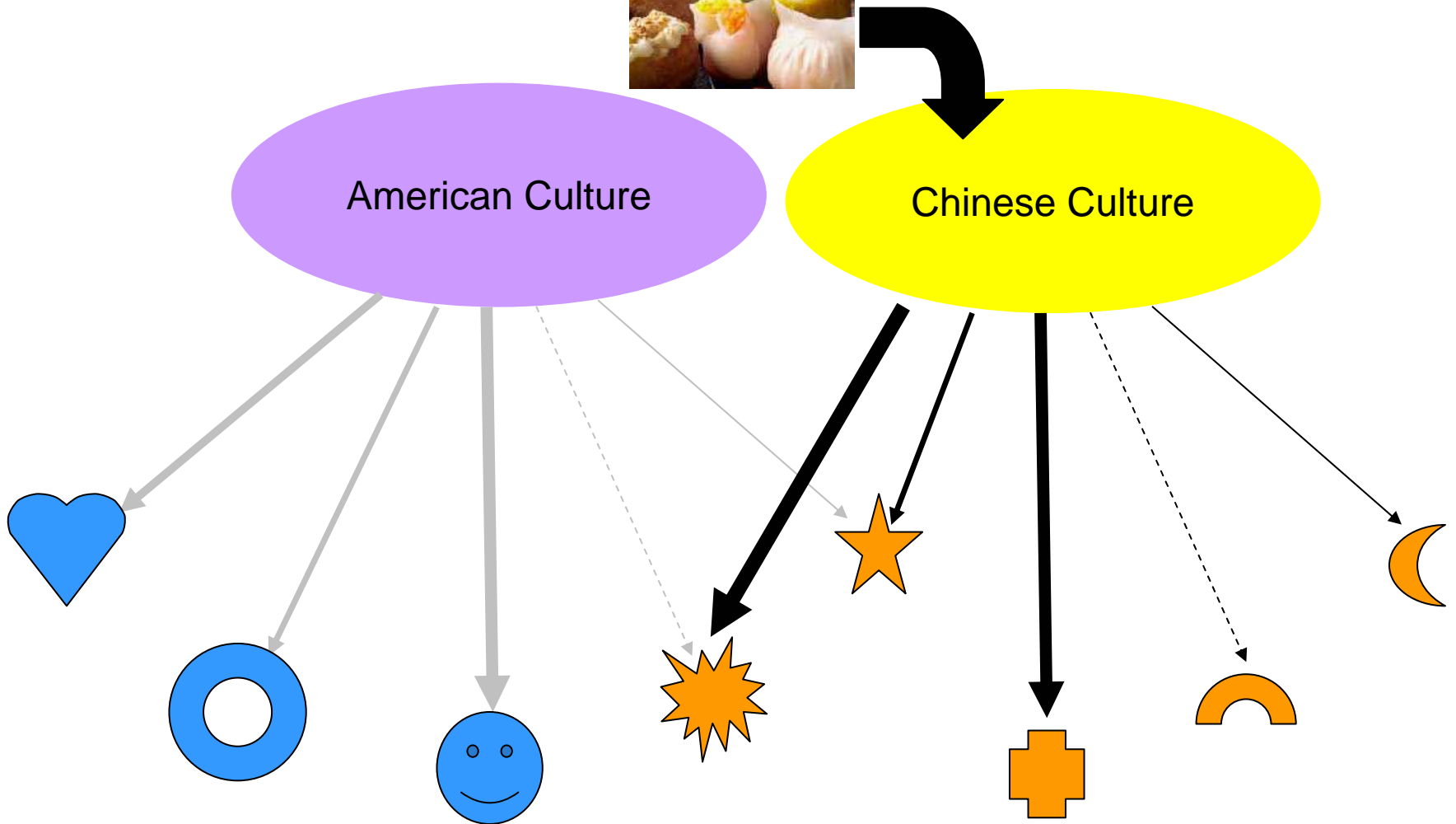
# Summary:

- **Chinese duty-based** moral values are more strongly activated by **Chinese** cultural materials than by American cultural materials.
- **American rights-based** moral values are more strongly activated by **American** cultural materials than by Chinese cultural materials.

# Sample 2: Hong Kong Chinese

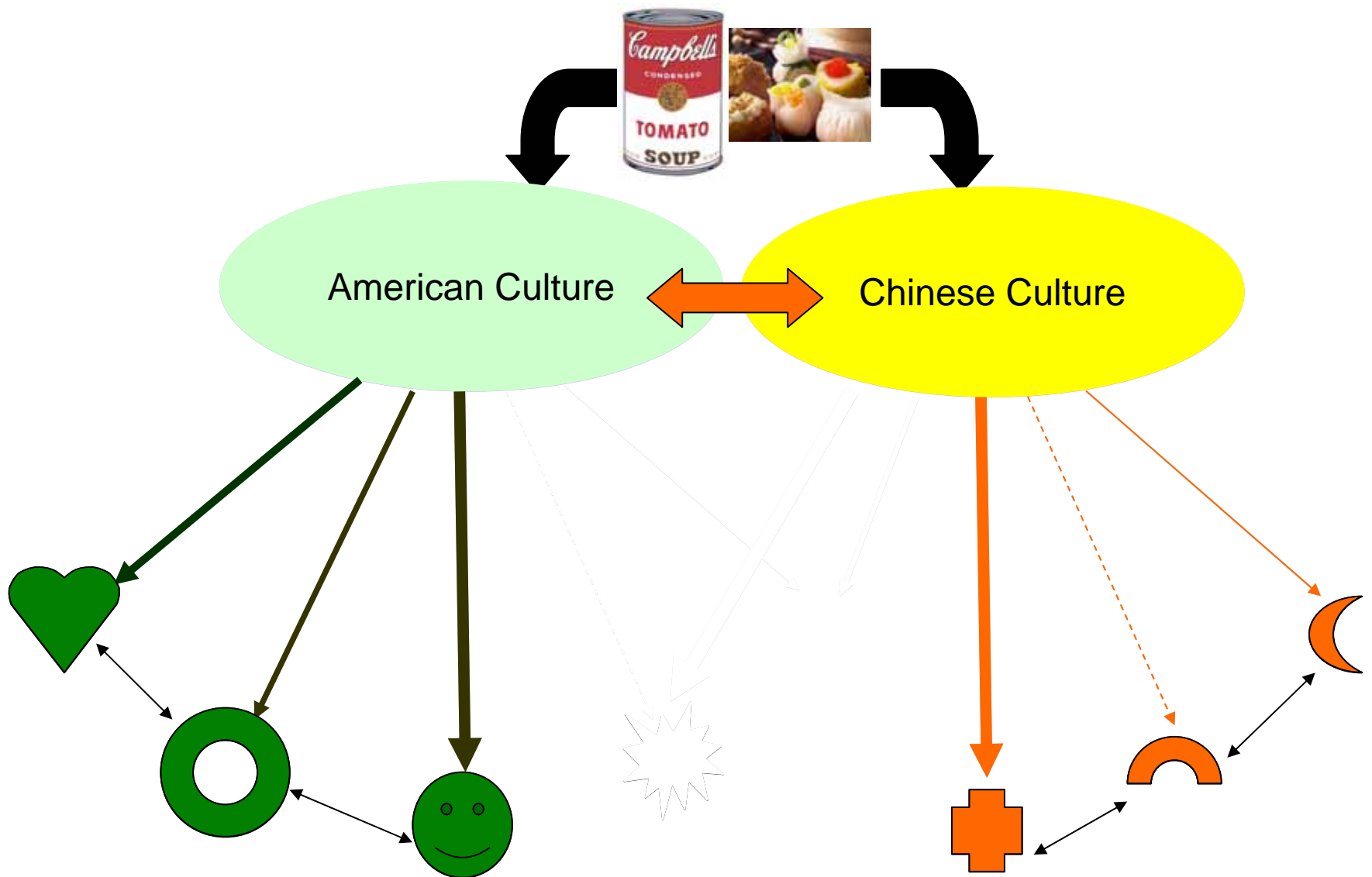






# Simultaneous Activation of two cultural representations

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# Experiment 5 (Mallorie, Keh, Chiu, & Law, in preparation)

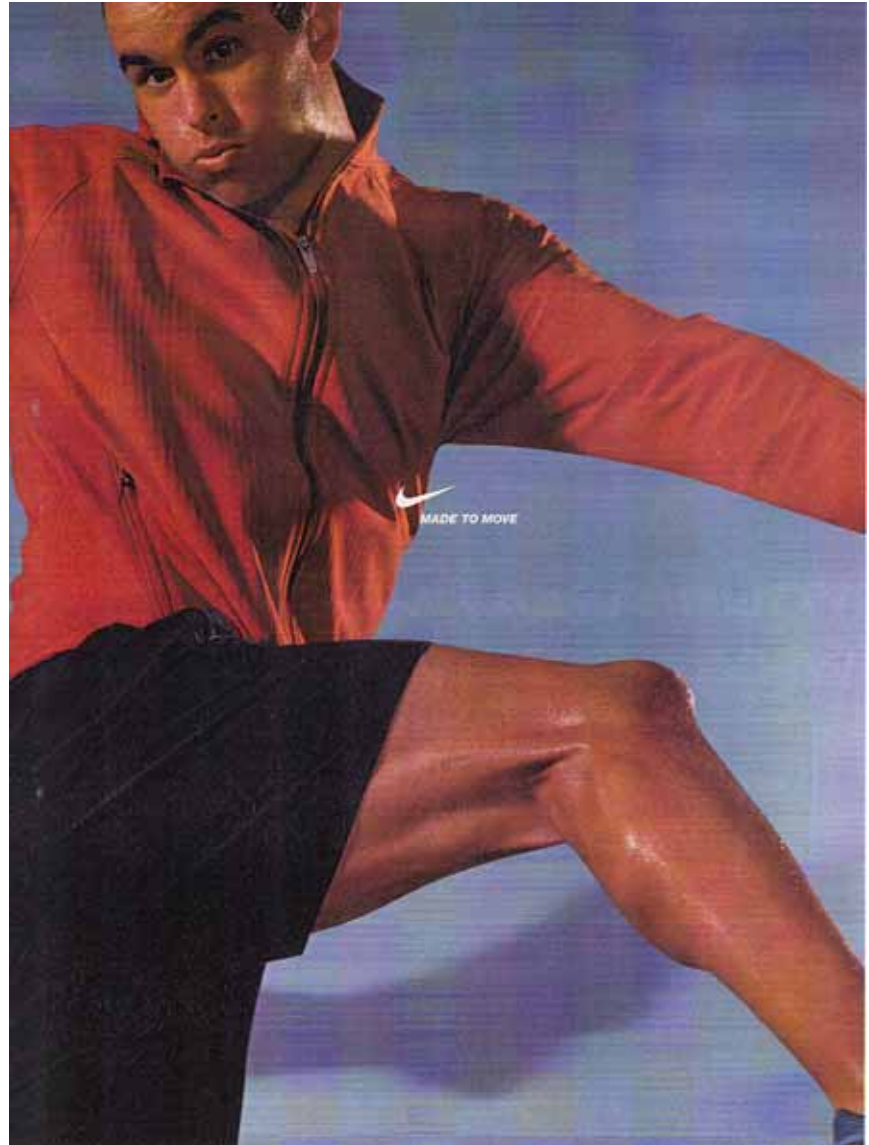
## Participants

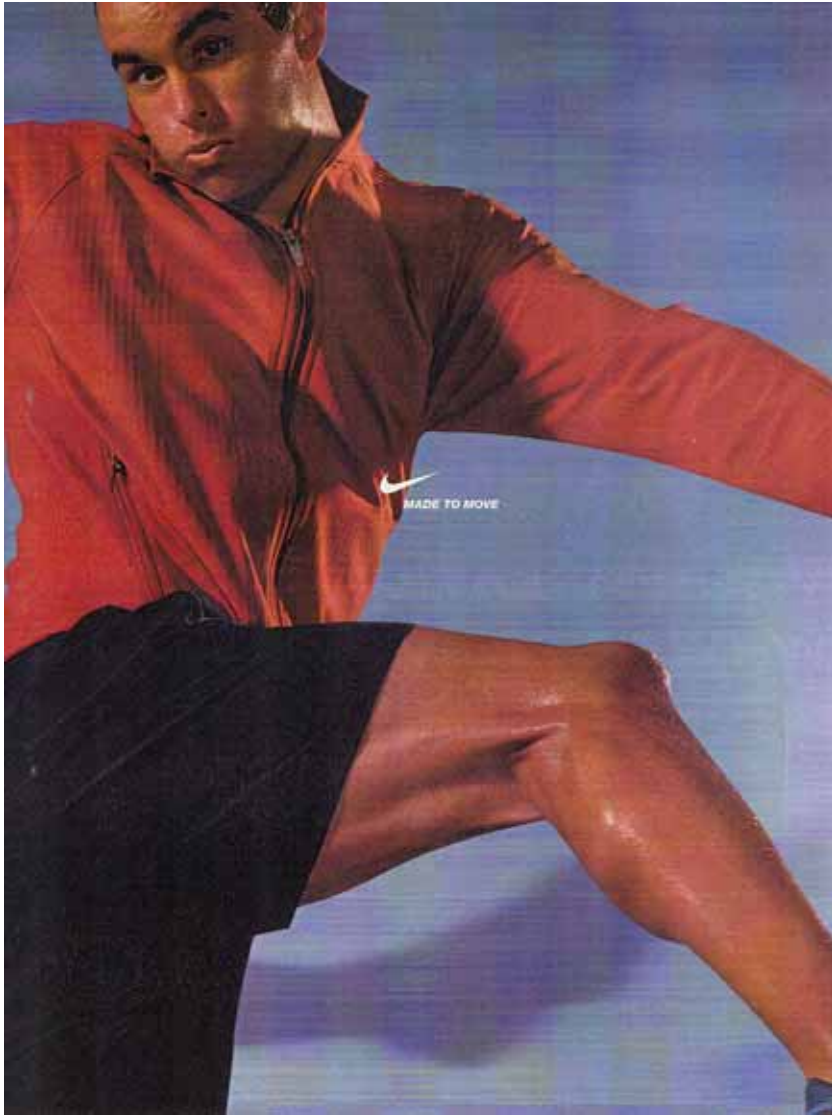
- 58 UIUC Caucasian students (30 men, 28 women)
- Average Age: 19.45 (SD = 2.39)

# Mere Minimal Bicultural Exposure

- **Single Presentation Condition:** An American ad was shown, and participants described how much they liked the product, the person in the ad, and judged how much the endorser image matched the product.
- **Joint Presentation Condition:** An American ad and a Chinese ad of the same product were shown, and participants responded to the American ad only.

# Single presentation

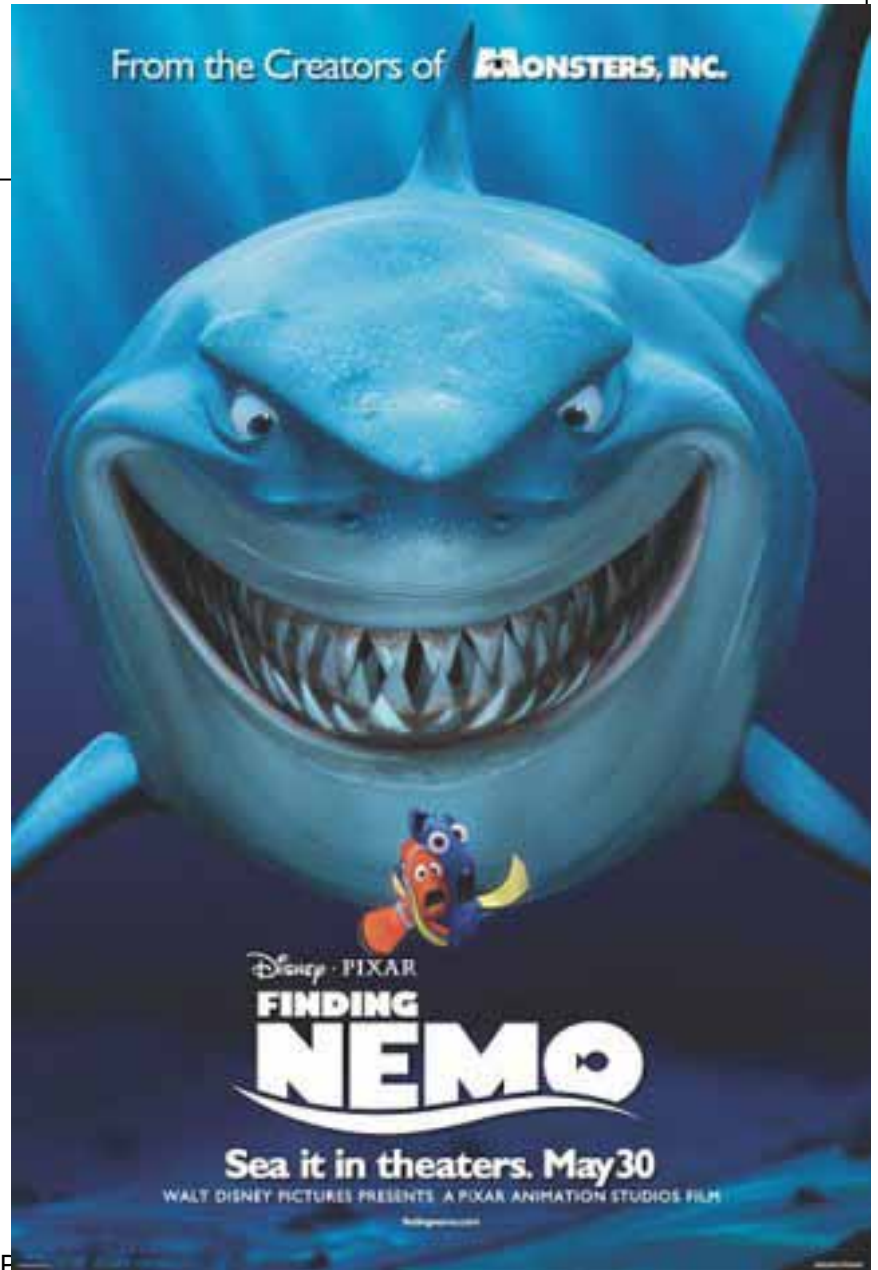




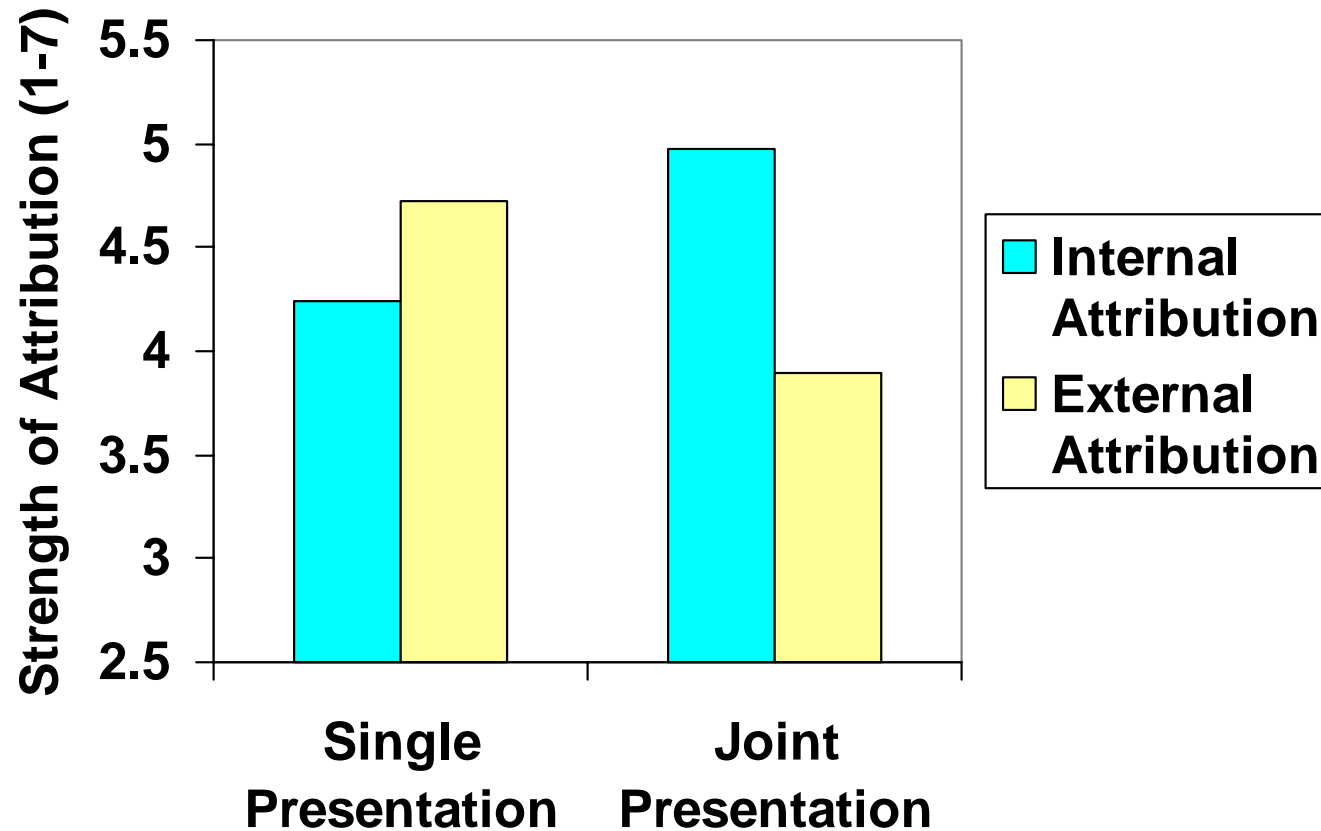
# Joint presentation



# Attribution



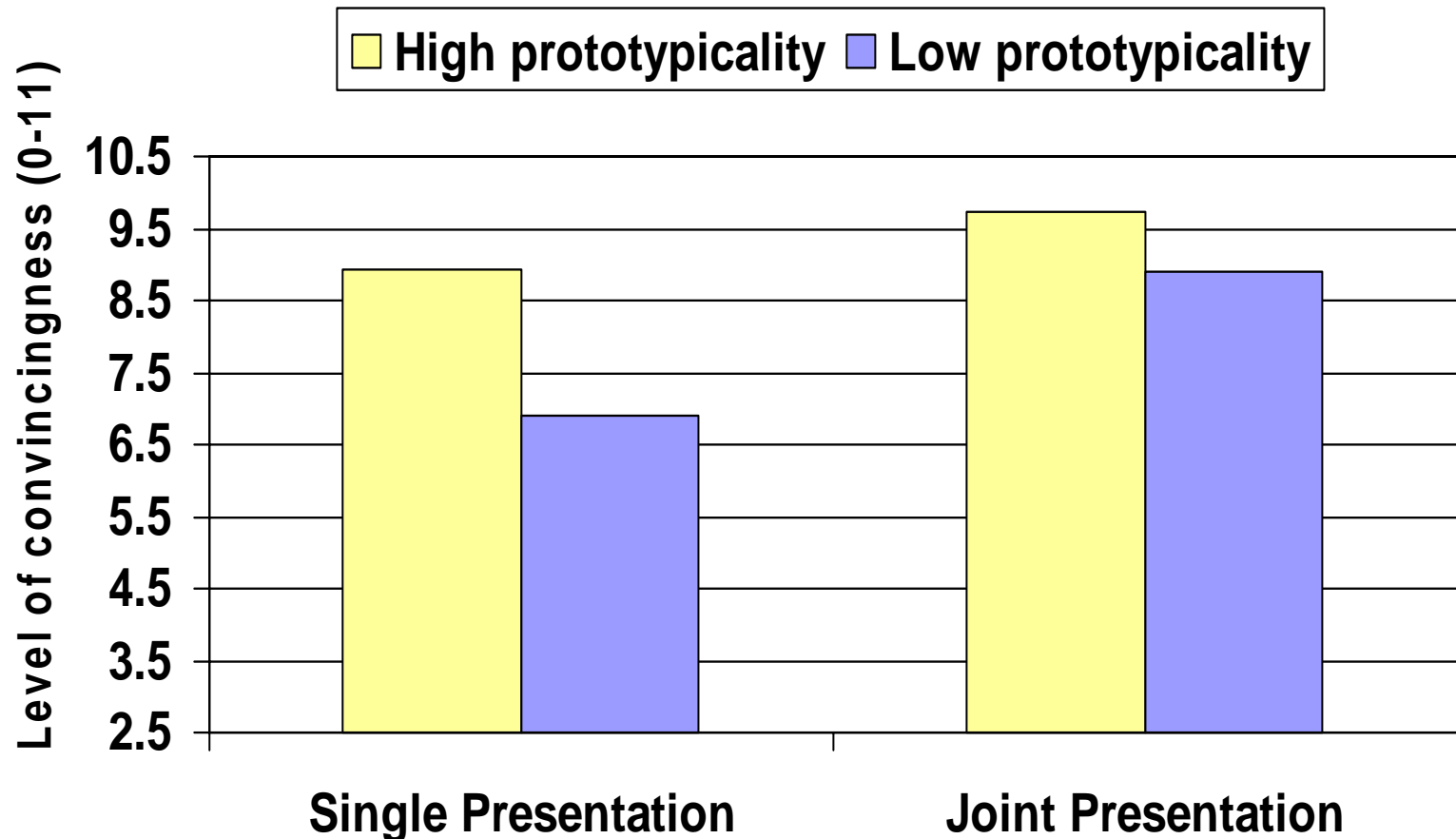
# Internal vs. External Attribution



$F(1,54) = 4.61, p < .05$

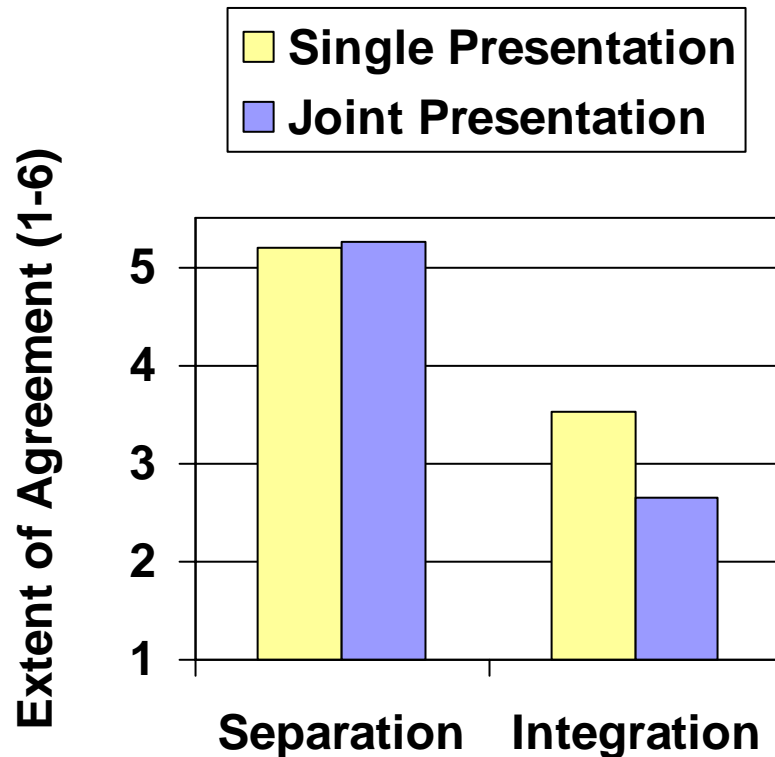


# Reasoning by Prototypicality



$F(1,55) = 4.50, p < .05$

# Measures of Culture Integratibility



$F(1,56) = 6.33, p < .05$

- You can learn new things from different cultures, and even after a long time, you can still separate unique cultural information and apply different knowledge in different cultural settings. (Separation)
- You can learn different things from different cultures, but after a while the information becomes integrated, and it is no longer possible to separate unique cultural information. (Integration)

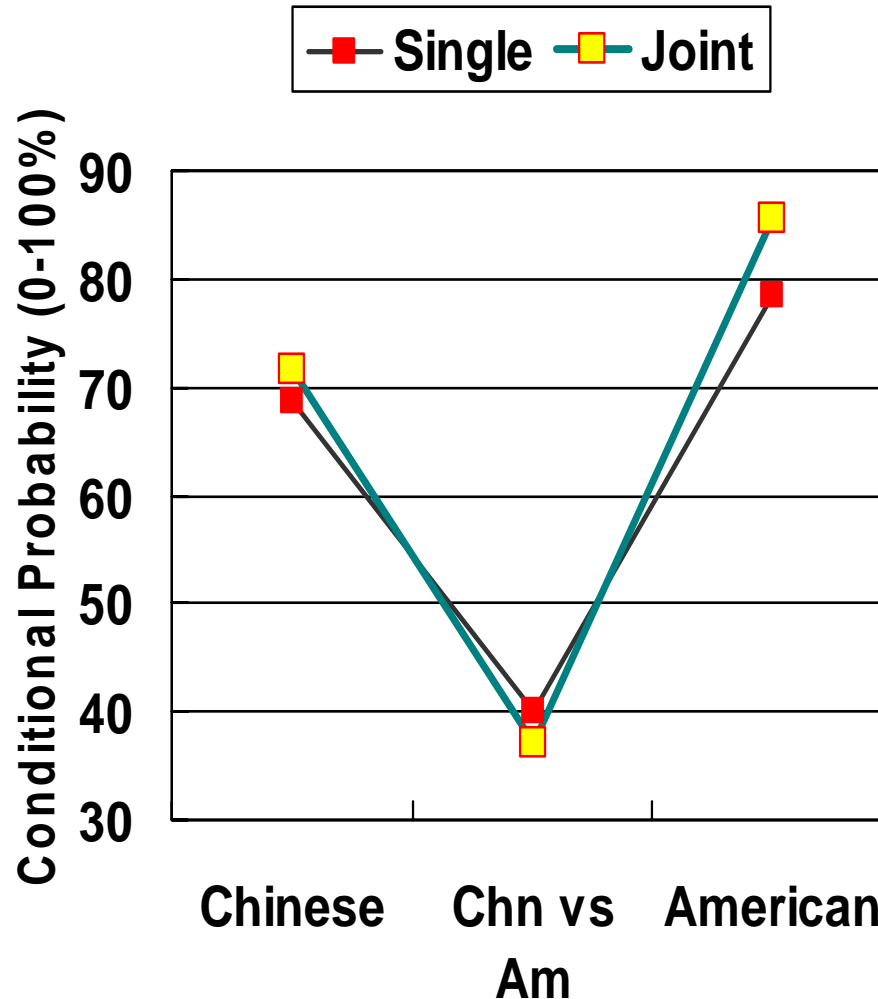


# Conditional Probability Ratings

How likely the person in the ad would be to agree to the following statement, assuming that she agreed strongly with another statement.

- Chinese culture – Internal Consistent (n = 6): *“To understand who I am you must see me with members of my group.”* versus *“It is not possible to understand the pieces without considering the whole picture.”*
- American culture – Internal Consistent (n = 9): *“I tend to do my own things, and others in my family do the same.”* versus *“In my society, individuals take control of the situation around them and exercise free will.”*
- Chinese culture vs. American culture (n = 17): *“Our world has its basic or ingrained dispositions, and you can’t really do much to change them.”* versus *“I feel that I have the right to refuse to help my relative.”*

# Results (Conditional Probability)



$F(2,110) = 3.5, p < .05$

# Summary and Discussion

- Mere exposure to two cultures increases the likelihood that *culture* will be used as a mental category to organize cultural knowledge. Such categorization strategy might promote the development of a *systemic* view of culture (the view that culture is a coherent system of meanings with some defining psychological essences).

# Replication in China (Mallorie et al., in preparation)

## Participants

- 121 undergraduates (86 men, 35 women) in a public university in Beijing, China.
- Their age ranged from 18 to 25 ( $M = 20.90$ ,  $SD = 1.40$ ).

# Experimental Conditions



Single Presentation



Joint Presentation – Side-by-side



Joint Presentation – Fusion

# Implications: Brand Management

- What's in a name?  
That which we call a  
rose by any other  
name would smell as  
sweet.

-- William Shakespeare,  
*Romeo & Juliet.*

Would it? Will a  
Chinese brand be  
perceived similarly in  
the US market if the  
brand name is  
translated differently?

# A thought experiment

- Dynasty red wine(皇朝干紅), a Chinese brand, is imported into France.
- The product category (red wine) would activate French culture.
- If the brand name is translated into **Dynastie** (a semantic translation), it may create a single presentation effect.
- If the brand name is translated into **Huangchao** (a phonetic translation), it may create a joint presentation effect.

- What if the product category is torchlight?



# Examples of iconic American product categories





# Experiment 6 (Torelli & Chiu, in preparation)

## ■ Participants:

- 38 US-born, non-Asian participants at UIUC
- Strong identification with American culture: ( $M = 7.45$ , on a 1 – 9 point scale)

## ■ Product categories:

- Iconic American products: jeans, cereals, sneakers
- Non-iconic American products: table lamps, umbrellas, toasters

## ■ Experimental conditions

- China-imported products with phonetic Chinese brand names (*Chenxiao*, *Qinjin*, *Xenshi*, *Zhongyan*, *Beihua*, *Wufeng*).
- China-imported products with “English” brand names (*Nine Zero*, *Uncle Bob*, *Aspire*, *Schonbek*, *Robin*, *Murray*).

## ■ Dependent measures:

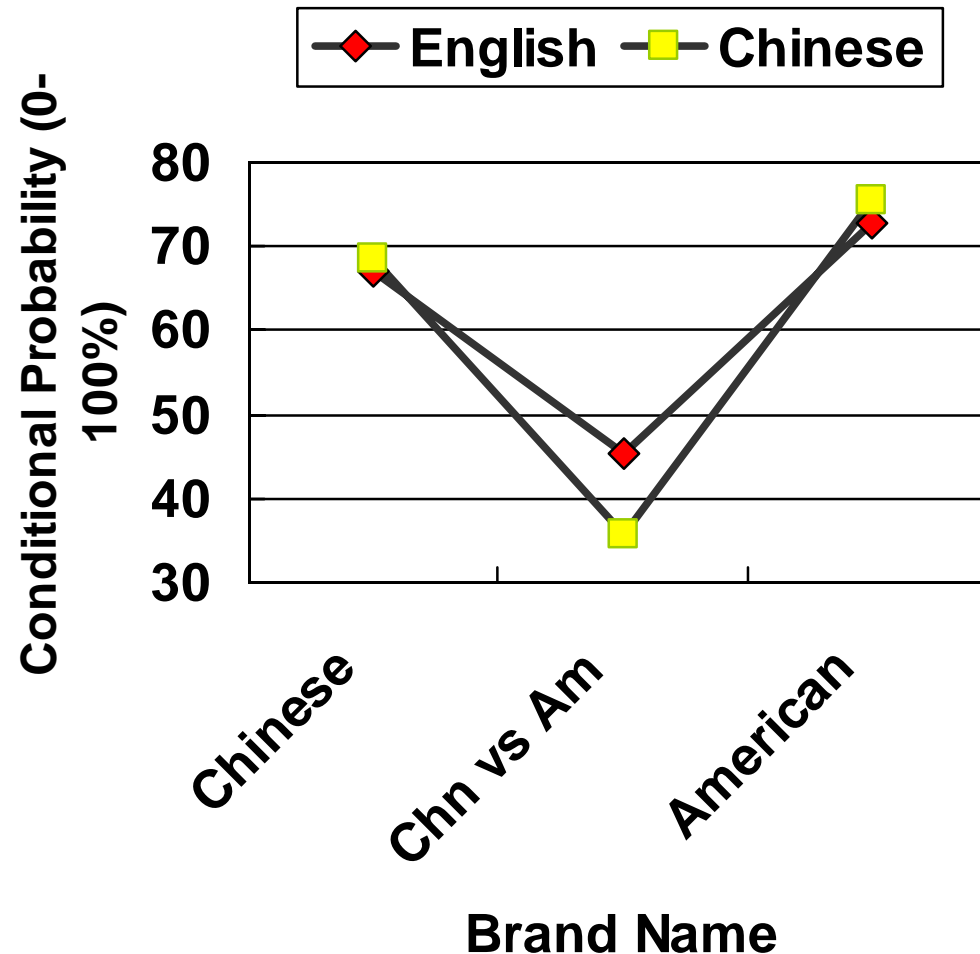
- Conditional probability measure of beliefs
- Individualist vs. collectivist message
- Product evaluation (bad-good, unappealing-appealing, unfavorable-favorable)

# Conditional Probability Ratings

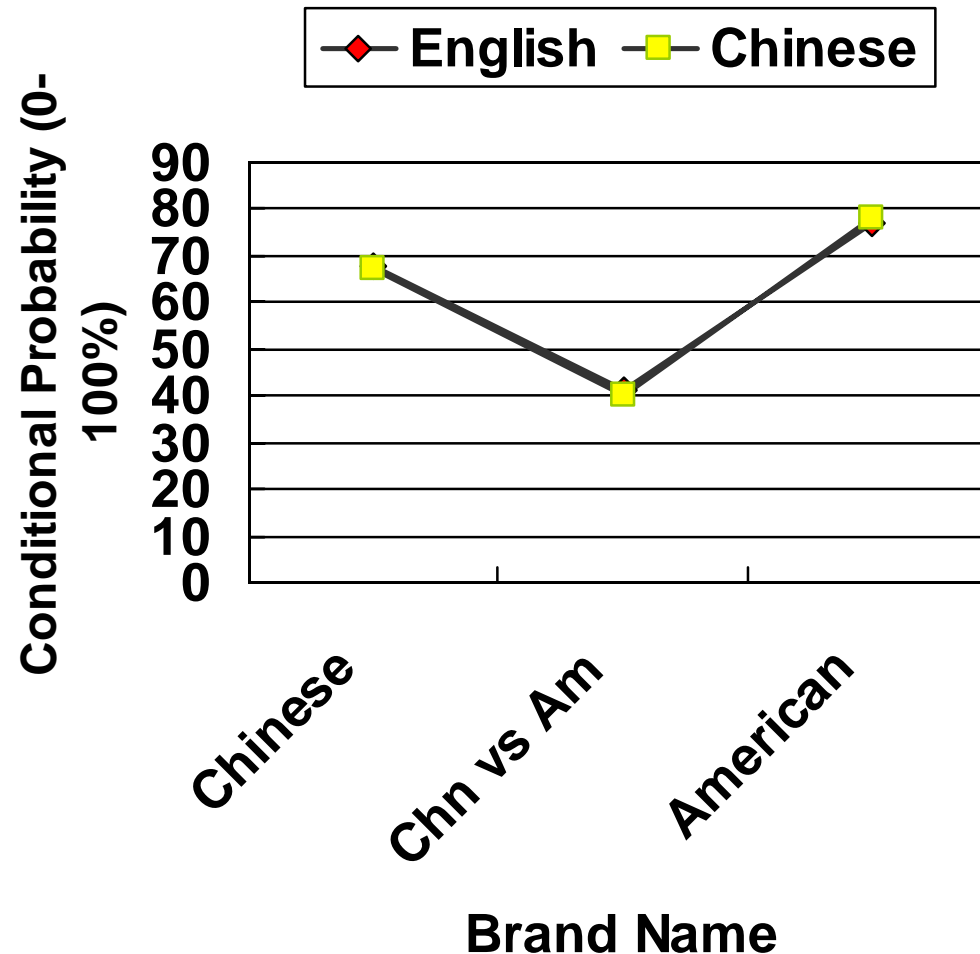
How likely the person in the ad would be to agree to the following statement, assuming that she agreed strongly with another statement.

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- Chinese culture vs. American culture (n = 17): *“Our world has its basic or ingrained dispositions, and you can’t really do much to change them.”* versus *“I feel that I have the right to refuse to help my relative.”*

# Conditional Probability Measure: Iconic American Products



# Conditional Probability Measure: Non-Iconic American Products



# Dependent Measures

- Persuasion measure
  - Participants learned that an American advertising student was designing a website for Timex.
  - They viewed two commercial messages for Timex, one appealing to individualist values, and one to collectivist values.
  - Participants estimated using an 11-point scale (from *very unlikely* to *very likely*) how likely the target would be to use each of the two messages.

Individualist  
Message



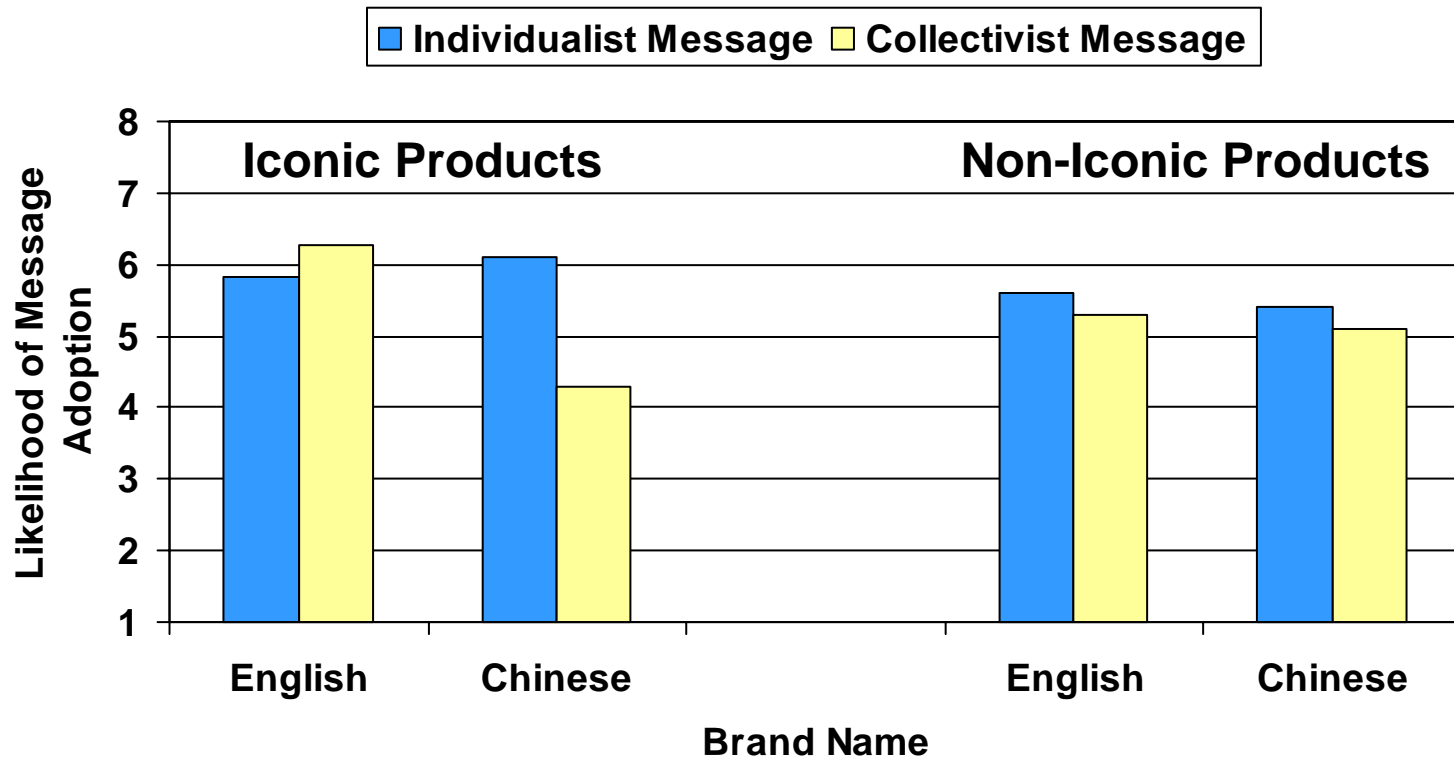
*The Timex watch. It embodies so much. It's like a person. It has an impressive personality, very individualistic, and with a strong focus and concern for oneself – in a positive way.*



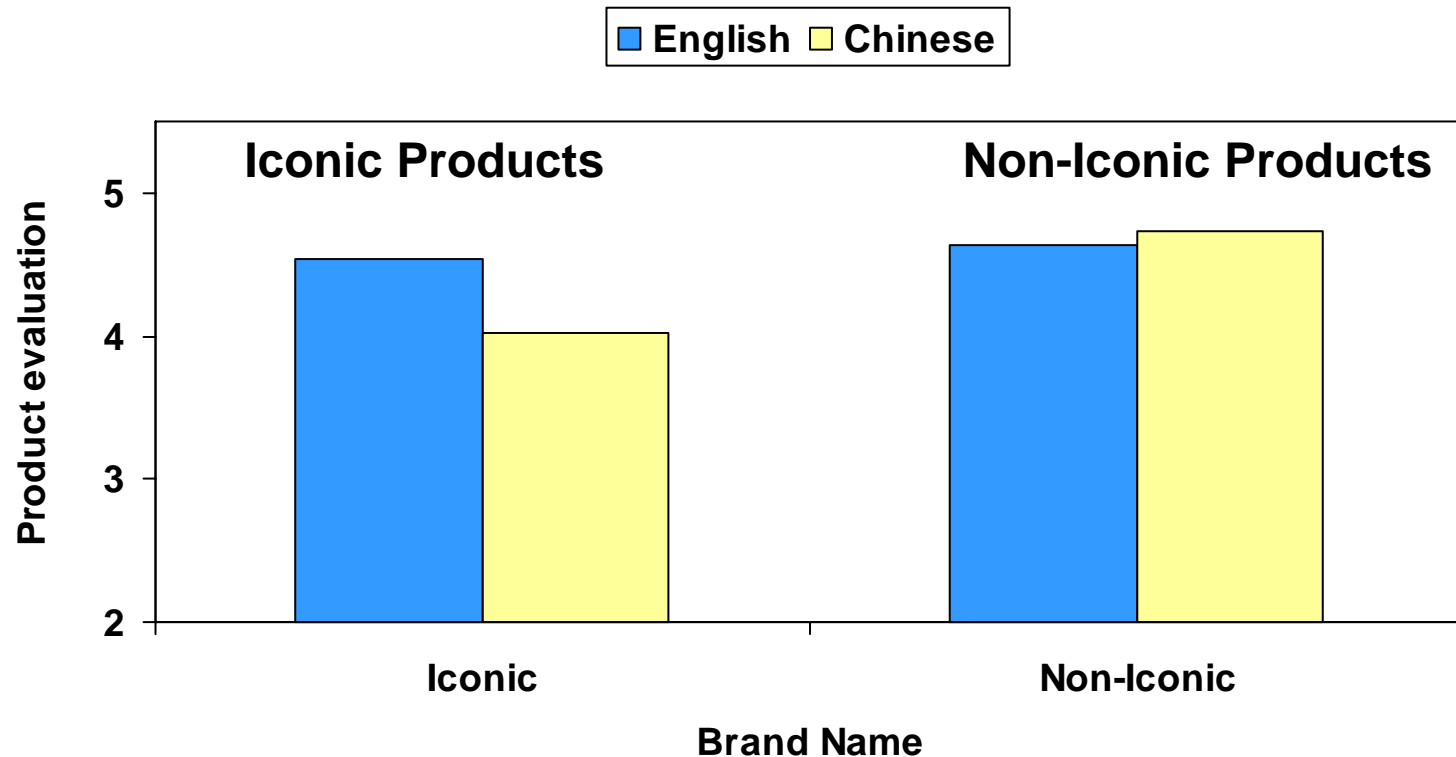
*The Timex watch. It embodies so much. It's like a person. It's an impressive social being, very concerned with others, and with a strong focus and concern for others – in a positive way.*

Collectivist  
Message

# Individualist vs. Collectivist Message



# Individualist vs. Collectivist Message



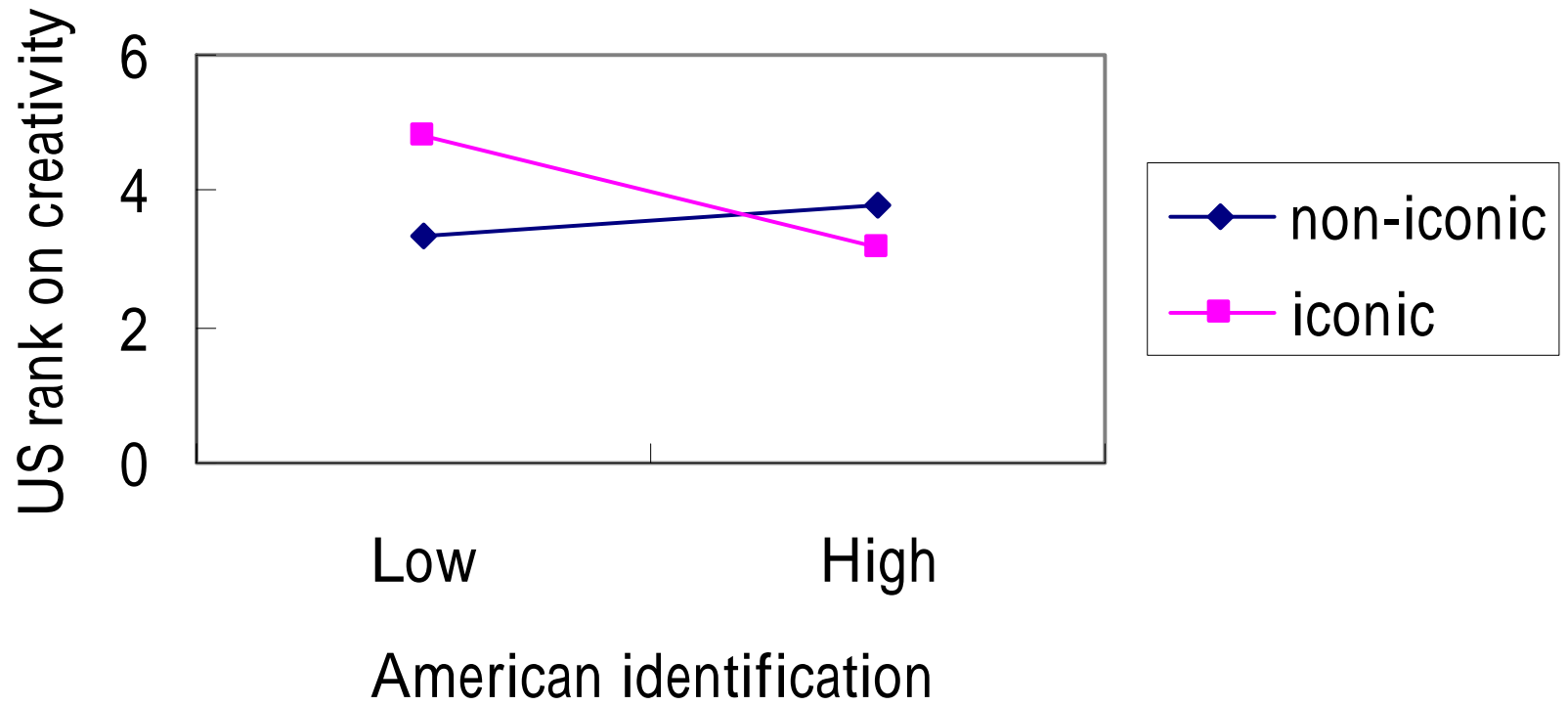


# Effects of Cultural Identification

- If priming two increases the salience of cultural coherence and cultural differences, effects of cultural identification on evaluation of one's culture should be more pronounced when two cultures (vs. a single culture) are primed.

# Experiment 7 (Torelli & Chiu, in preparation)

- 114 UIUC students
- Iconic American products
- Manipulation:
  - Chinese brand names vs. English brand names
- Measure: identification with the US
- Estimated international ranking of the US on creativity



# How Do Local Cultures Survive Globalization?

- Co-presence of multiple cultural knowledge traditions in the same space leads to development of multiple cultural frames, and the ability to shift cultural frames spontaneously in response to aspects of the situation.
- Co-presence of multiple cultural knowledge traditions in the same space makes culture a salient organizing construct for grasping experiences.

# What Next?

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# What to prime next?



Hiding Cultures in Multicultural Space: Glocalization vs. Standardization of Cultural Experiences

Most malls in the world are planned and built by no more than 10 transnational architectural firms.

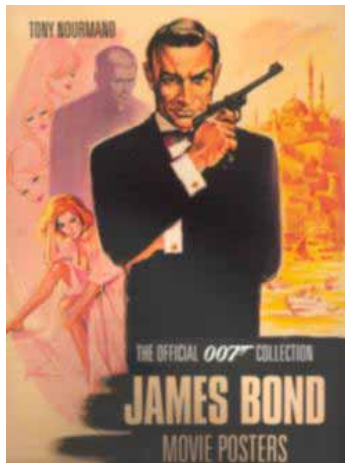
Malls throughout the world share common features of architecture and design.

A Shopping Mall in Downtown, Beijing (China)

# What to prime next?



- Would these images call out different mental representations inter-ethnic relations in the US?



- If so, how may the effects vary across ethnic groups?

# Current research on cultural processes


## ■ Culture and normative processes

- Intersubjective consensus effect (with Catherine Wan)
- Normative regulation of self-enhancement (with Young Kim)
- FAB: Culture and fate-agency beliefs in disaster management (with Evelyn Au)
- Socially desirable responding (with Sharon Shavitt & Ashok Lalwani)

## ■ Multicultural cognition

- Cross-border judgments (with Melody Chao)
- Multicultural experiences and creativity (with Angela Leung)
- Social change and judgments (with Julie Chen)
- Activation of cultural representations (this presentation)





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