# Culture and Systems of Thought: Holistic vs. Analytic Cognition Nisbett, Peng, Choi, and Norenzayan, 2001

- I. Assumption of universality of cognitive processes strengthened in the  $20^{th}$  century with the analogy to computer
  - A. Authors propose that since inferential rules and cognitive processes vary within culture, it would make sense that they would vary across cultures based on social differences across cultures
  - B. Proposal: Social differences affect beliefs about specific aspects of the world AND
    - i. Naïve metaphysical systems (theories about the nature of the world)
    - ii. Tacit epistemologies (theory of knowledge)
    - iii. Nature of cognitive processes
- II. Ancient Greek and Chinese Societies
  - A. Greek civilization → European and American civilization (West)
    - i. Emphasis on power of the individual
    - ii. Value placed on logic and power of debate
    - iii. Created causal models of the world, presumed it could be explained by a set of rules
  - B. Chinese civilization  $\rightarrow$  civilizations of East Asia (East)
    - i. Emphasis on collective agency
    - ii. In-group harmony paramount, debate discouraged
    - iii. Technologically superior to Greeks due to their "genius of practicality"
  - C. Social-psychological aspects of life correspond to two types of thought: Greek = analytic, Chinese = holistic
  - D. Observed historical differences in thought hold true today: Continuity vs. discreteness, field vs. object, relationships and similarities vs. categories and rules, Dialectic vs. foundational principles and logic, experienced based knowledge vs. abstract analysis (preceding: East vs. West)

## III. Sociocognitive Systems

- A. Social organization affects cognitive processes *indirectly* by directing attention and focuse to different parts of the world and *directly* by social acceptance of certain forms of communication
- B. Collective social organization leads one to attend to the field and explain events by observing the relation between objects and events
- C. Individualist social organization leads one to attend primarily to the object and it's properties explain events based on categories and rules of the object's properties
- D. Beliefs about the world influence beliefs about how to get knowledge (tacit epistemologies)
- E. Perceptual and cognitive habits develop based on the importance of type of knowledge, these habits become automatic and outside of our awareness
- F. Social organization can directly influence cognitive processes: dialectics and logic are tools developed to deal with social interactions
- IV. Contemporary Evidence for Cognitive Differences
  - A. Attention and Control

- i. East = wholes, West= parts (holistic vs. analytic Rorschach responses)
- ii. East= easily see relationships among object and field, West= easily differentiate object and field (East: "binding" between object and field, East= more accurate and confident detection of covariation among elements in the environment)
- iii. East= perception of control has less influence over behavior, West= perception of control has more influence over behavior (West= performance improved based on perceived control, no difference in performance for East)

# B. Explanation and Prediction

- i. East= attribute causality to context and situations, West= attribute causality to properties of individual or object
- ii. West= more prone to Fundamental Attribution Error (Even when put in particular contexts, the West still attributes beliefs or actions to the agent rather than the context)
- iii. East= more prone to hindsight bias (East less surprised than West at unexpected outcomes)
- C. Relationships and Similarities vs. Rules and Categories
  - i. East= relational-contextual groupings of objects, West= rule-based categorical groupings of object
  - ii. East= categorize easier based on family resemblance than rule based strategies
  - iii. East capable of using categories for inference but only if category made salient
  - iv. East had a harder time learning categories

### D. Formal Logic vs. Experiential Knowledge

- i. West more willing to set aside experiential knowledge in favor of logic than East
- ii. West follow and prefer laws of non-contradiction and East searches for the dialectic or "middle way", even when arriving at the same conclusion their explanations reflected this difference in cognitive processing
- iii. West can be persuaded to endorse an argument more when presented with a weak argument in contrast (non-contradiction), and East can be persuaded to endorse an argument less when presented with a weak argument in contrast (dialectic)

#### V. Origins of Sociocognitive Thought

- A. Agrarian cultures required more collectivism, hunter/gatherer and trade cultures required allowed for more individualism
  - This is held up for subcultures in industrialized society that value a more collectivist mindset, and also for studies in which an individualist is temporarily benefited by adopting a more collectivist attitude
- B. Relations between social and cultural practices in homeostasis with cognitive processes have been propagating this difference in cognition

- i. E.g. practice of feng shui, training of employees (view of whole company or view of one part), debate promoted vs. avoidance of debate, contracts binding vs. fluid contracts, language that emphasizes parts of the language rather than a contextual influence
- VI. There is evidence for fixedness of cognitive content; so either stance in itself might be wrong
- VII. Difficult to separate process from content
  - A. These authors endorse the idea of "situated cognition" and that cognition is not so fixed as was once supposed