Learning Outcome:
Discuss how social or cultural factors affect one cognitive process.

Bartlett et al. (1932)

Key Terms:
Serial reproduction: The transmission of a story, piece of knowledge, etc., by being passed on repeatedly from one person to another, especially with reference to the alterations made to the original message during such transmission
Cognitive Schema: Mental view or expectations you have on certain subjects due to past experiences
Cognitive Distortion: Exaggerated or irrational thought patterns that are believed to perpetuate the effects of psychopathological states

Aim: To investigate if memory is reconstructive and if schemas influence recall

Procedure
- Participants were asked to read “The War of the Ghosts” - Native American legend
  - Participants were of English background
    - Unknown concepts and names reflecting other conventions and beliefs
- Tested their memory of the story using serial reproduction and repeated reproduction
  - Serial reproduction
    - First participant recalls original story and second participant has to reproduce the first
  - Repeated reproduction
    - Asked to recall it six or seven times over various retention intervals

Findings:
- Memory is always subject to reconstruction based on pre-existing schemas (not a passive but rather an active process)
- Participants relied on schematic knowledge, acquired within their culture to understand and later recall a story from a different culture
- Both results led to similar results
  - The subjects were all prone to similar errors in their recall abilities
- Memory is a social phenomenon that cannot be studied as a “pure” process as it is an imaginative reconstruction of experience
  - Interpretation plays a rather unrecognized role in memory by reconstructing the past by deduction that can be altered by existing schemas

Three patterns of distortion

Assimilation
- Recalled stories were distorted and altered in various ways making it more conventional and acceptable to their own cultural perspective (rationalization)
  - More understandable according to the participants’ experiences and cultural schemas

Levelling
- Subjects unconsciously discarded information from the legend that did not fit their cultural schemata or standards
  - Becomes more conventional
- As the number of reproductions increased, the story recalled became shorter and there were more changes to the story
  - ‘hunting seals’ changed into ‘fishing’
  - ‘canoes’ became ‘boats’
  - Despite becoming shorter and details being omitted, the story becomes more coherent because the participants are interpreting the story as a whole

Sharpening
- Subjects tended to change the order of the story in order to make it more coherent to themselves
- Added emotions and extra information that was not in the original story in order to fit their own cultural frameworks
Strengths:
- Supports schema theory
- Cause and effect relationship established
- Supports Bartlett’s theory of reconstructive memory
- Easily replicated

Limitations:
- Little controlled variables
- Disregard for environmental setting
  - No standardized instructions
    - Demand characteristics
    - Some participants were asked to recall the story a few minutes later, some hours later, some days later
      - Time may have been a key factor
- Low cross cultural validity and generalization
- British male participants only
- Low ecological validity
- Laboratory experiment

Application:
- Schema theory
  - Applied in classroom
    - Foreign language learning
  - Explains the understanding of schemas when people remember stories, they typically omit details, and introduce rationalisations and distortions
    - Reconstruct the story to make more sense in terms of their knowledge, the culture in which they were brought up in and experiences in the form of schemas
  - Pointed towards the possibility of studying cognitive processes like memory scientifically

Significance to Learning Outcome:
- Supports schema theory
- Remembering is integrally related to the social and cultural contexts in which it is practised. When members of Western and non-Western cultures are compared on tasks devised in psychology laboratories, such as free recall of lists of unrelated words, the people from Western cultures do better, but this is probably due to the meaninglessness of such tasks for non-Western people
- Relates to effect of culture on memory
  - How schemas originating in one particular culture can affect how literature from another culture is recalled
  - Participants relied on schematic knowledge, acquired within their culture to understand and later recall a story from a different culture