Religion: An Evolutionary Perspective

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Fossil records of graves/burying the dead are the earliest signs of religious belief in hominids. These sites were discovered in Qafzeh, Israel, and date back $\sim 100,000$ years.

Religious Behaviour Involves Mental Modules

Mental modules are said to accidentally give rise to religious concepts. The term for this is: "mental module misapplication."

- Agent detection

 this module is adaptive because it prevents predation.

 This module gives rise to religious behaviour by assigning the cause of ambiguous occurrences to supernatural entities.
- Theory of mind → this module is adaptive because it allows us to empathize with others and predict their behaviour.
 - This module gives rise to religious behaviour by being mis-applied to non-conscious agents, as well as by continuing to run when observing a dead body.
 - The test usually used to assess whether someone has properly developed this module is called The "Sally-Anne test" / "False-belief test".
- Ritual

 the example given in class of a ritual performed by the Turkana people of Kenya is called ariwo.
 - Increasing cohesion through practice \longrightarrow practicing highly scripted, complex actions as a group tends to increase the group's efficacy at future similar tasks.
 - Costly signaling theory → costly rituals act as reliable displays of commitment to the group, and non-participation exposes free-riders.
 - The prisoner's dilemma is a commonly cited example of how cheating operates in the group context (free-loading).

Why are religious beliefs so successful and widespread?

• Minimally counter-intuitive concepts (MCICs) \longrightarrow ideas that violate normal ontological categories are memorized for much longer than normal, intuitive ideas. An example of a MCIC would be: a thinking tree/a talking orange.

Adaptive Benefits of Religious Behaviour

- Inter-group competition → religion encourages prosocial behaviour, this is called "fictive kinship."
 - Groups that are better able to cooperate displace others through warfare and reproductive differentials.
- Free-rider problem → omnipresent deities discourage free-loading through punishments (also costly signaling hypothesis!).

 \bullet Terror management \longrightarrow consciousness allows us to think about death in the abstract sense, which gives us "death anxiety."

Religion reduces unnecessary anxiety by promising symbolic immortality via an afterlife.

• Health benefits:

Religious individuals
experience lower rates of:

experience better:

- 1. Coronary Heart Disease
- 2. Hypertension
- 3. Dementia
- 4. Cancer
- 5. General Mortality

1. Physical Functioning

- 2. Immunity
- 3. Endocrine Function
- 4. Perceived Health

Space for other notes and answering the discussion questions: