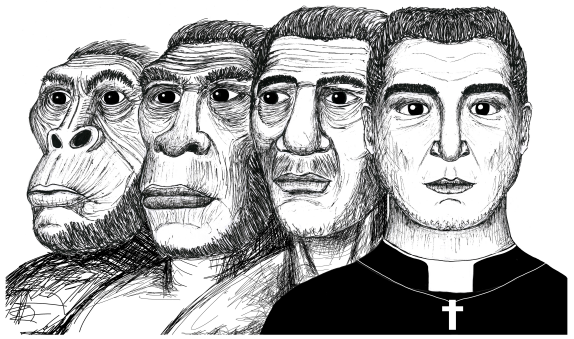
Lecture 2. Why do people believe in human-like gods?



Lecture 2. Why do people believe in human-like gods?

Part 1 Cognitive Science: what is it, and why does it matter to the study of religion?

Part 2. Cognitive Science meets evolution: theory that beliefs in human-like gods are by-products of how our minds work.

First…

Three key terms

Three Key Terms

- **Operationalisation** of "religion." In this course we stipulate a meaning for "religion" as beliefs and practices regarding the (supernaturally) sacred.
- **Methodological Naturalism**: We will not assume the existence of any supernatural being (e.g. Zeus) when explaining beliefs and practices regarding supernatural beings (e.g. Greek religion).
    - Methodological naturalism is a useful assumption: it has led to scientific progress.
    - Methodological naturalism does not imply atheism (It is an *assumption*, not a result).
    - Science is limited. We have no reason to think we'll explain much about reality: progress does not imply completeness.
- **The principle of consistency**: we can be held accountable to our beliefs

PoC: Beliefs have implications for other beliefs

1. You believe that Abel Tasman is south of Wellington
2. You believe that maps can be trusted.
3. You look up Abel Tasman at 40.9347° S
4. You look up Wellington at 41.2865° S
5. Your beliefs are inconsistent

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Part 1 Cognitive Science: what is it, and why does it matter to the study of religion?

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Cognitive Science

Key idea: thinking is a kind of "information processing."

1. Cognitive scientists claim that both the brain and computers need to be approached abstractly and from a non-materialist point of view.
2. Thinking (and computers) involves transforming information through symbolic representation according to rules
3. I**mplication: to understand thinking requires understanding rules (not neurons or any other material "stuff")**

Tracking color is much harder than tracking light frequencies

Example: language

John saw Mary with Alice.

John saw Mary and Alice.

With whom did John see Mary?

And whom did John see Mary?

Travelling sales executive problem illustrates “Combinatorial Explosion”

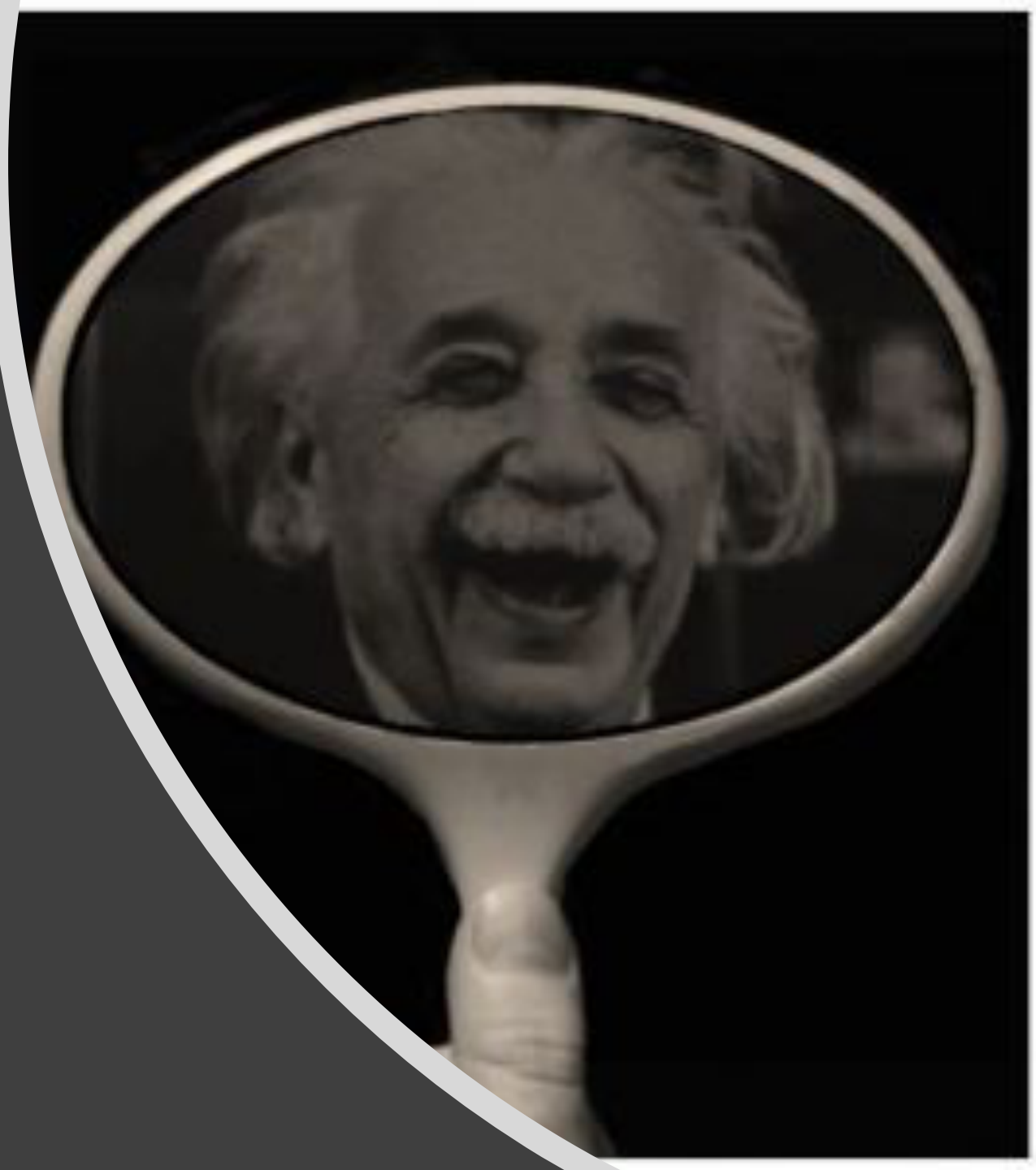
- What is the shortest distance between 10 cities?
- (n-1)!/2 =
- 181,440 permutations.
- What if we had 11 cities?
- 1,814,400
- 12?
- 19,958,400

Genius in the mirror

* Figuring out what is in the work yields a complexity of thought that grows very quickly.

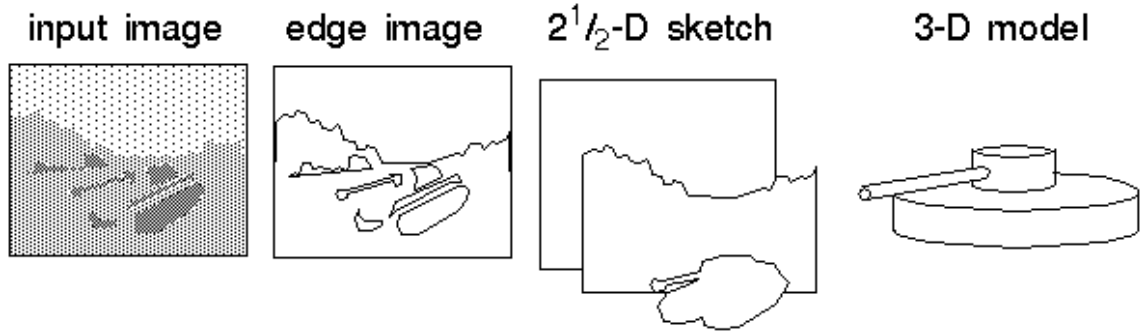
- The brain could not think through the universe of possibilities before addressing even even the most rudimentary problems of thought.

- Hence, each one of us faces a genius in the mirror: we regularly solve incalculably hard problems



What are the implications of combinatorial explosion for psychology?

(Principle of consistency)



Modularity of the mind: thought works like an **assembly line.**

SUMMARY PART 1.

Information processing approach: how does the brain transform information to enable thinking?

Combinatorial explosion: the mind cannot review a universe of possibilities each time it solves a problem

Modularity of mind: thinking requires an assembly line approach: breaking down the problems in to smaller parts.

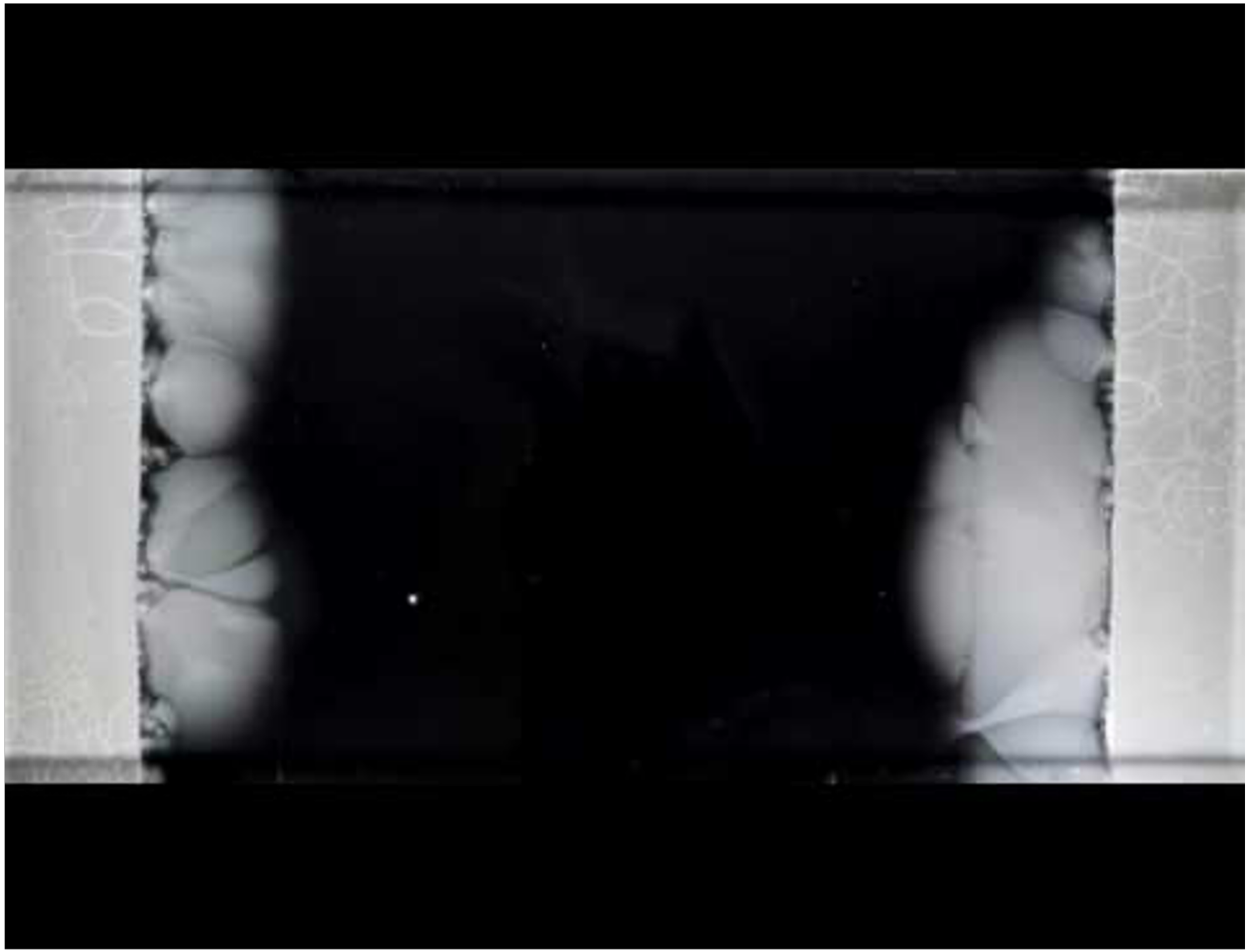
Lecture 2. Why do people believe in human-like gods?

~~Part 1. Cognitive Science: what is it, and why does it matter to the study of religion?~~

Part 2. Cognitive Science meets evolution: theory that beliefs in human-like gods are by-products of how our minds work.

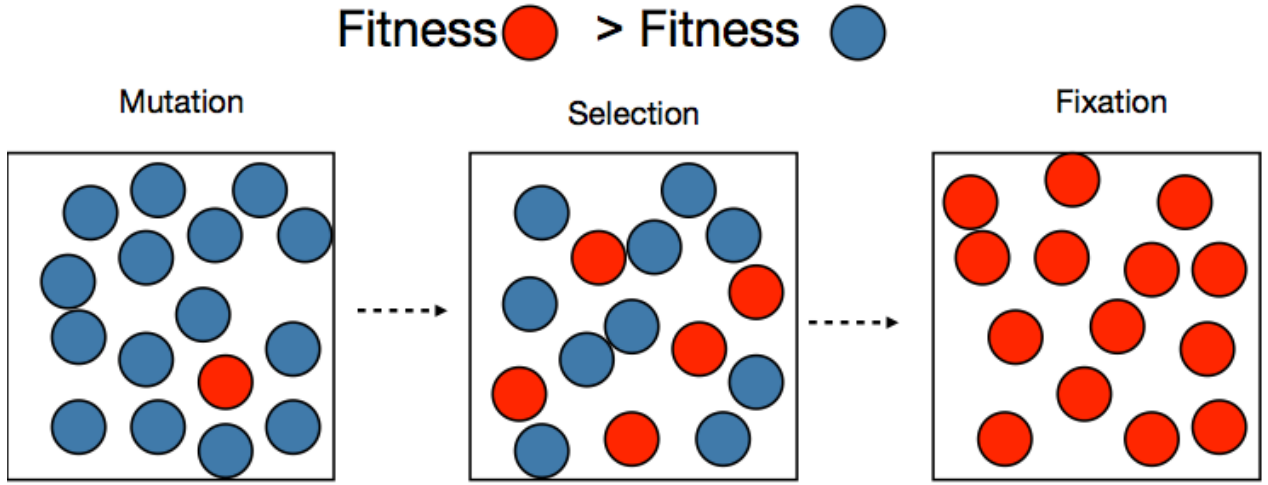
Refresher Evolution by Natural Selection

https://www.youtube.com/watch?v=plVk4NVIUh8



Evolutionary Theory

1. Variation
2. Selection
3. Inheritance

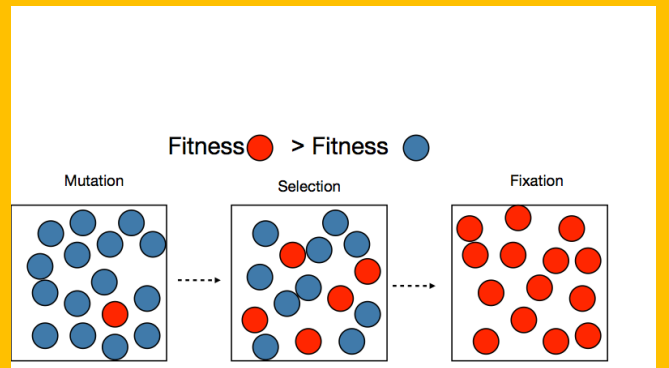


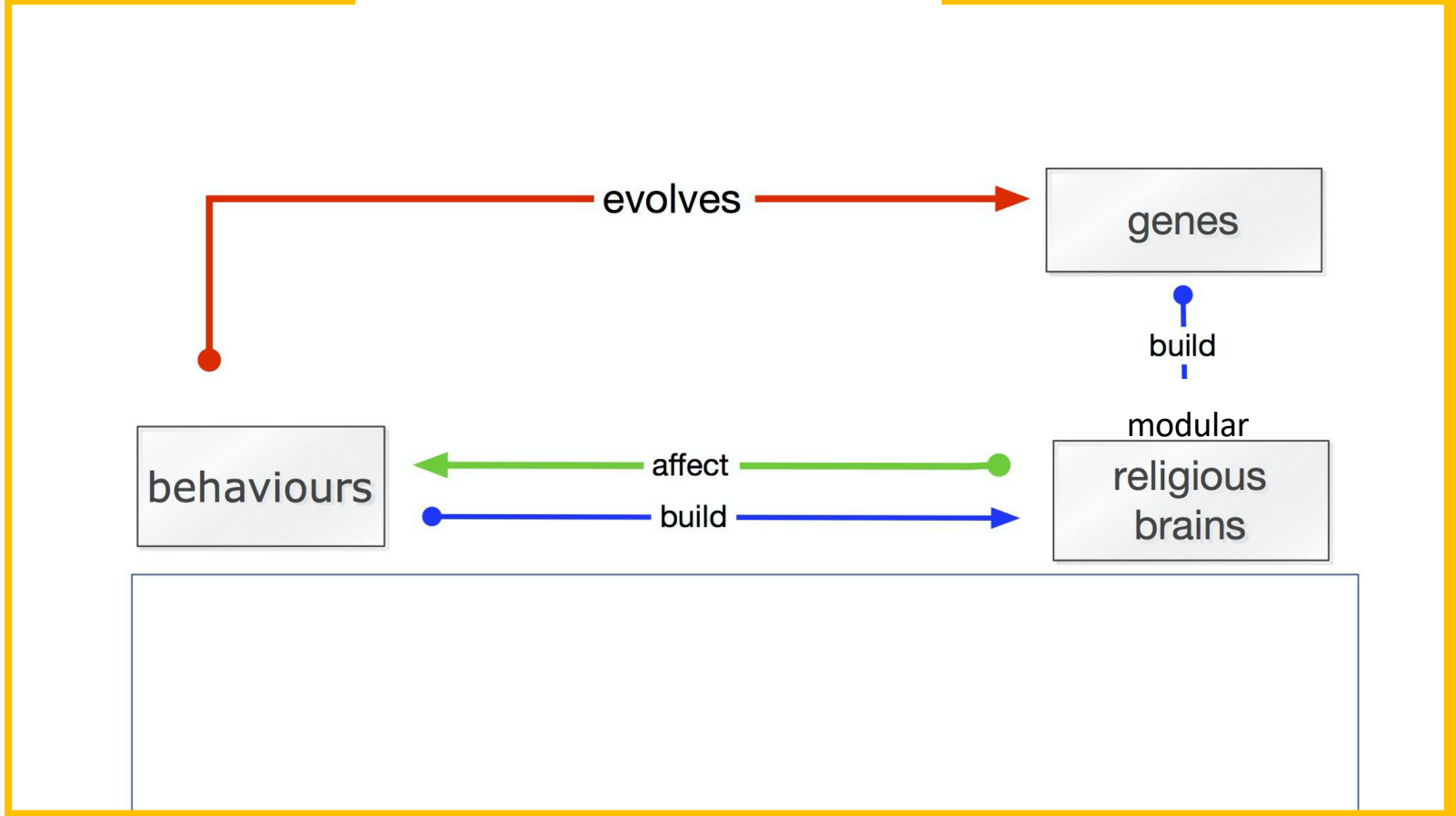
Premises of Evolutionary Psychology

The brain is an information processing organ.

The brain's modules are the product of natural selection.

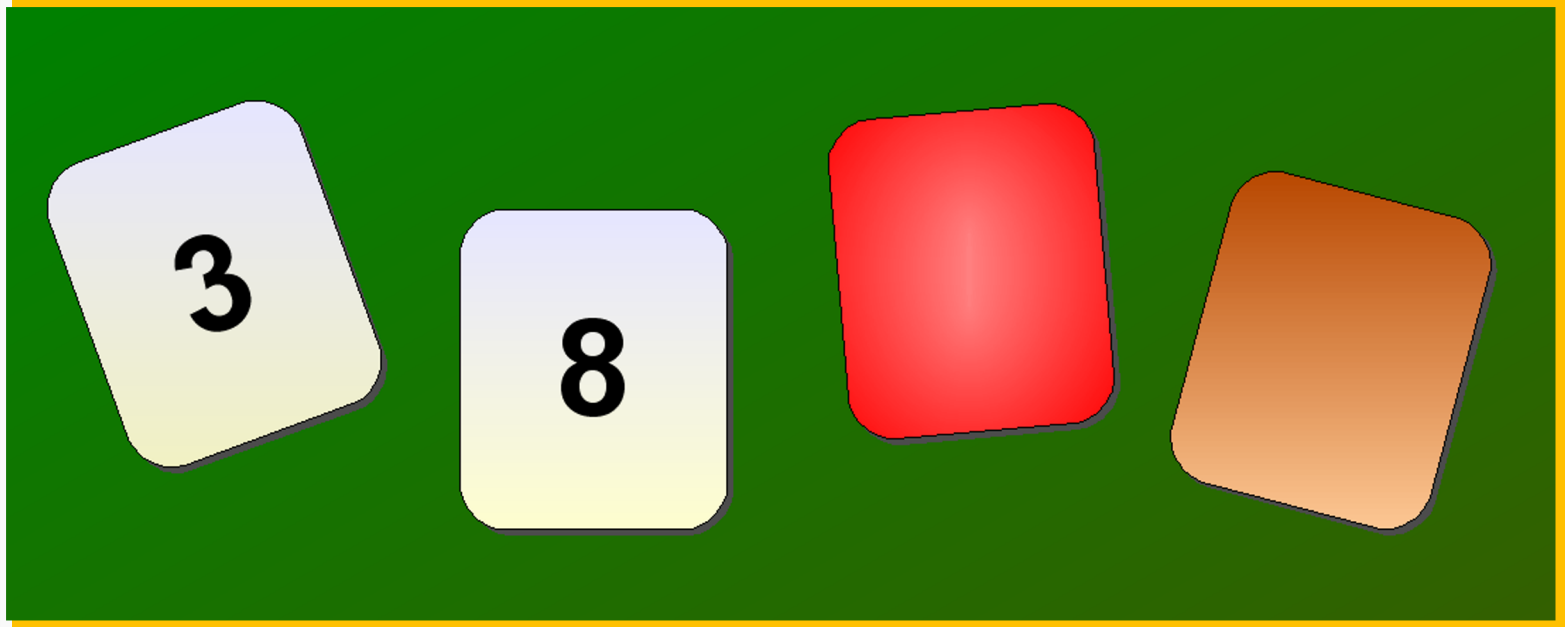
Our brains are adapted to the recurring problem of the "Environment of Evolutionary Adaptation"





Example: reasoning

Each card has a number on one side, and a patch of color on the other. **Which card(s) must be turned over to test the idea that if a card shows an even number on one face, then its opposite face is red?**



Wason Selection: Social Task is easier.

Each card has an age on one side, and a drink on the other. Which card(s) must be turned over to test the idea that if you are drinking alcohol then you must be over 18?

Cosmides and Tooby argue for specialised “cheater detection” circuits.

What does this tool do?

Once we know the functional target, the tool's design becomes apparent.

Cognition meets evolution

1. Evolution might be able to clarify how thought is framed by:
    a. Telling researchers what to look for?
    b. Clarify otherwise puzzling aspects of human psychology.

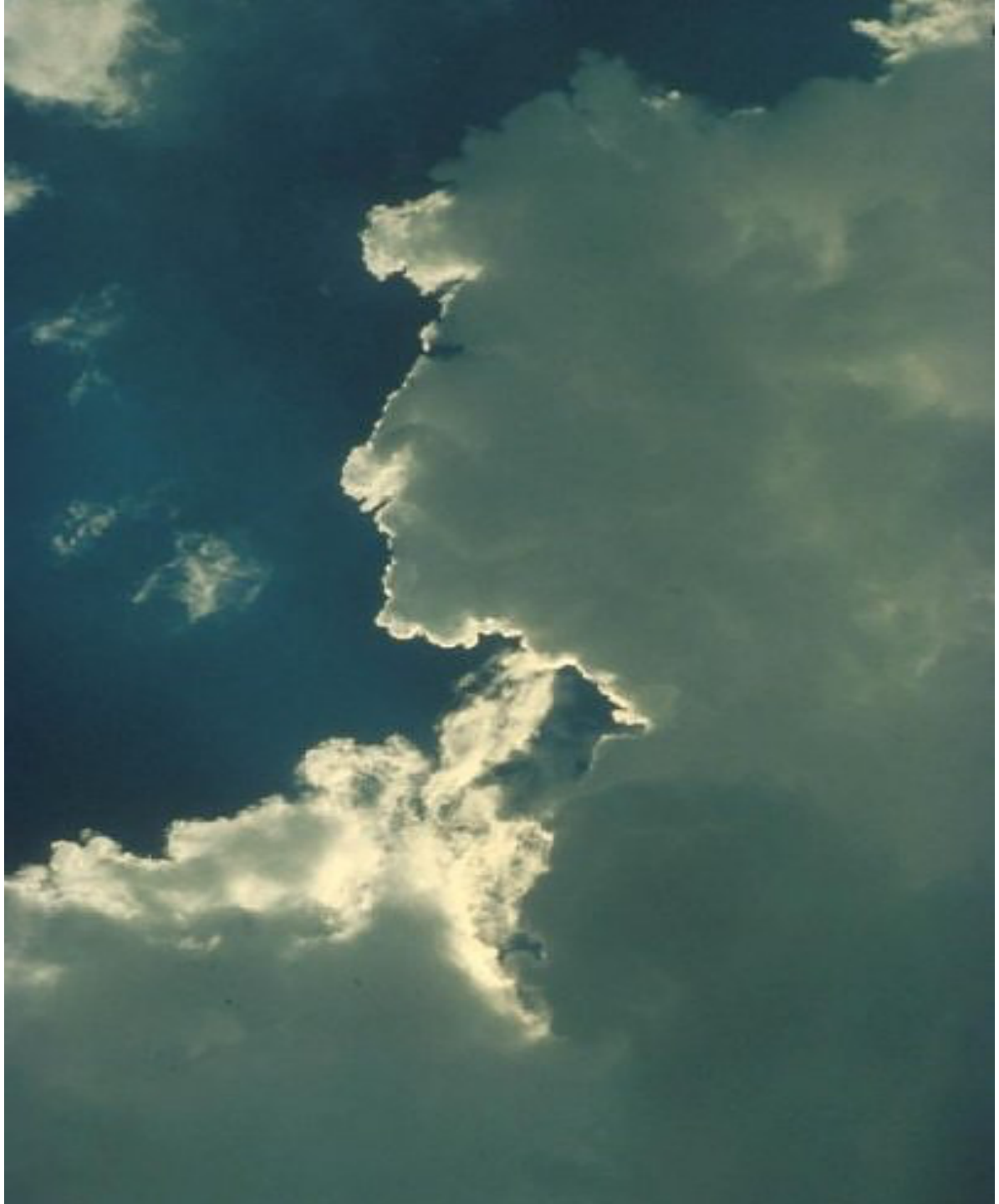
Evolutionary Psychology (Cosmides and Tooby's Primer)

- **"Principle 1. The brain is a physical system. It functions as a computer. Its circuits are designed to generate behavior that is appropriate to your environmental circumstances."**
- **"Principle 2. Our neural circuits were designed by natural selection to solve problems that our ancestors faced during our species' evolutionary history."**
- **"Principle 3. Consciousness is just the tip of the iceberg; most of what goes on in your mind is hidden from you. As a result, your conscious experience can mislead you into thinking that our circuitry is simpler that it really is. Most problems that you experience as easy to solve are very difficult to solve -- they require very complicated neural circuitry"**
- **"Principle 4. Different neural circuits are specialized for solving different adaptive problems."**
- **"Principle 5. Our modern skulls house a stone age mind."**

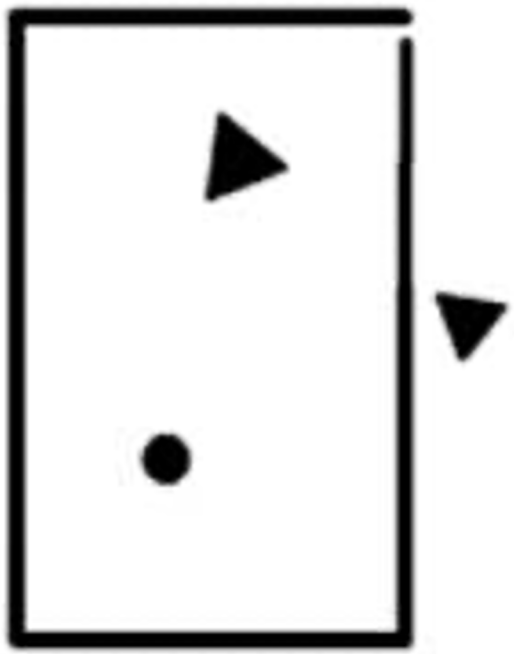
Can an evolutionary psychological approach clarify why Gods are believed to assume a human form (anthropomorphism)?

4th Century BCE: Xenophanes: “the Ethiopians say that their gods are flat-nosed and black and the Thracians that theirs are fair and ruddy. But if cattle and horses and lions had hands and could create with their hands and achieve works like those of men, horses would render their conceptions of the gods like horses, and cattle like cattle, and each would depict bodies for them just like their own…”


ОБЗОР



WTC attacks 2001



Heider and Simmel 1944 : animism
https://www.youtube.com/watch?v=sx7lBzHH7c8

But how do we get from perceptions to beliefs in human-like gods?

Stewart Guthrie’s Theory

1. Perception = betting.

Stewart Guthrie’s Theory

1. Perception(BELIEF) = betting.
2. Perceiving humans is a safe bet.

Stewart Guthrie's Theory

Payoff matrix

	Payoff Not Perceive	Payoff Perceive
Person there	Big cost →	Big Benefit
Person not there	Neutral ←	Small cost

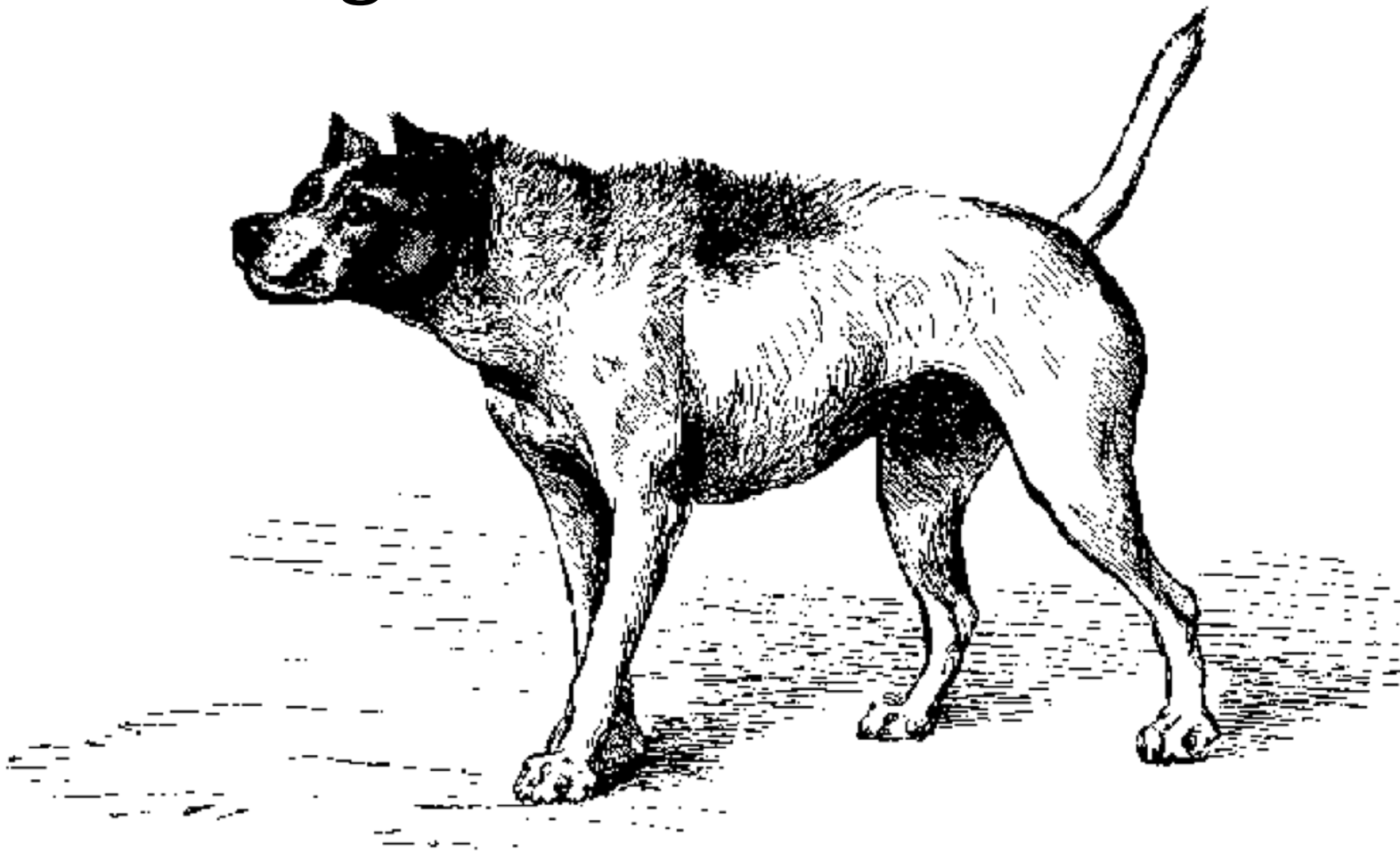
Stewart Guthrie’s Theory

1. Perception(BELIEF)= betting.
2. Perceiving humans is a safe bet.
3. Anthropomorphism = “strategy of interpretation.”
4. Religion is “systemised anthropomorphism: continuous with ordinary (unconscious) thought.”

Anthropomorphism = perceptual betting can lead to beliefs: Darwin's Dog

'My god, a full-grown and very sensible animal was lying on the law during a hot and still day; but at a little distance a slight breeze occasionally moved an open parasol, which would have been wholly disregarded by the dog, had anyone stood near it. As it was, every time that the parasol slightly moved, the dog growled fiercely and barked. He must, I think, have reasoned to himself in a rapid and unconscious manner, that movement without any apparent cause indicated the presence of some strange living agent, and no stranger had a right to be on his territory.'

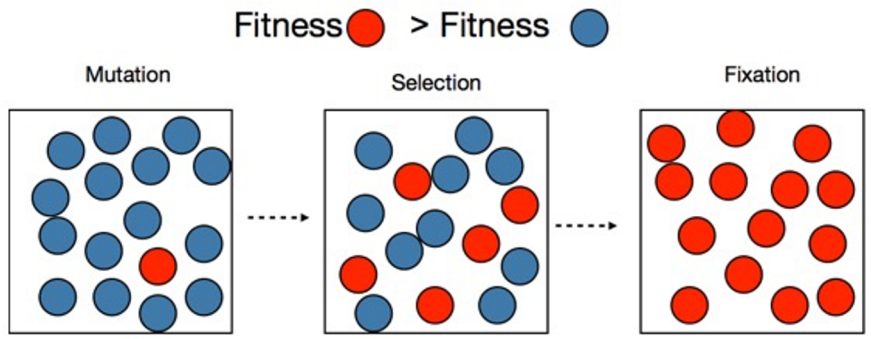
-- Descent of Man, p.67



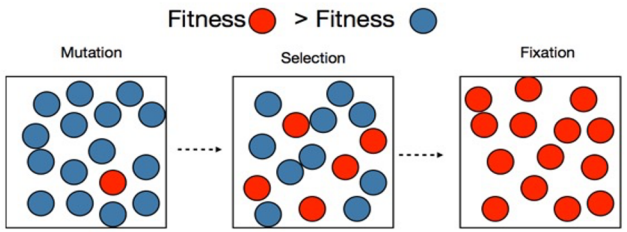
Key idea: evolution need not be perfect

Where the costs of a design are lower than the benefits, we can expect selection to ratify the design, even if the design isn't perfect

Recall earlier that we are prone to make various mistakes when tracking colours through different lighting intensities.



Questions to put to Guthrie



Is there a big benefit to perceiving a random person?

How do we get from perception to the Pyramids?

Summary

Gurthrie argues that religions is systematic anthropomorphism

He's argument is interesting because:

it has an evolutionary logic: perception "gambles" to people

This logic is subtle: it does not require that religion, as such, is good for people.

However, lots about religion that is left out of this explanation. How might we fill in the gaps?

Summary:

Cognitive science: thinking requires modularity (mind works like an assembly line)

Human universal: God/s are conceived as person-like

Guthrie: we evolved to be perceive persons, which selected for anthropomorphic beliefs.

https://www.youtube.com/watch?v=zSiSwgZej04&feature=youtu.be

Interview with Stewart Guthrie