

Religion Explained
The evolutionary origin of religious thought
(2001)
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1. WHAT IS THE ORIGIN?

Religion has many disparate and weird beliefs.

Our brain (not genes) has a predisposition to receive certain types of religious ideas.

Everyone has an opinion as to why religion.

Supernatural agents can be very different. Some gods die. many spirits are really stupid. Salvation is not always a central proposition. Official religion is not the whole of religion. You can have religion without having "a" religion. You can also have religion without having "religion".

Religious explanations make complex mysteries rather than simple understanding.

Our minds are not general explanation machines. Rather, minds consist of many, different explanation engines.

Progress box #1 – Religion as explanation

- The urge to explain the universe is not the origin of religion.
- The need to explain particular occurrences seems to lead to strangely baroque constructions.
- You cannot explain religious concepts if you do not describe how they are used by individual minds.
- A different angle: Religious concepts are probably influenced by the way the brains inference systems produce explanations without us being aware of it.

Progress box #2 – Emotion in religion.

- Religious concepts do not always provide reassurance or comfort.
- Deliverance from mortality is not quite the universal longing we often assume.
- Religious concepts are indeed connected to human emotional systems, which are connected to life-threatening circumstances.
- A different angle: Our emotional programs are an aspect of our evolutionary heritage, which may explain how they explain religious concepts.

Progress box #3 – Religion, Morality and society

- Religious cannot be explained by the need

to keep society together or to preserve morality, because these needs do not create institutions.

- Social interaction and morality are indeed crucial to how we acquire religion and how it influences peoples behaviour.
- An different angle: The study of the social mind can show us why people have particular expectations about social life and morality and how these expectations are connected to their supernatural concepts.

Progress box #4 – Religion and reasoning.

- The sleep of reason is no explanation for religion as it is. There are many possible unsupported claims and only a few religious themes.
- Belief is not just passive acceptance of what others say. People relax their standards because some thoughts become plausible, not the other way around.
- A different angle: We should understand what makes human minds so selective in what supernatural claims they find plausible.

Toolkit #1 Culture as memes

- Consider cultural transmission as the transmission of meme's in a 'genetic way'. A meme is a concept (a tune, a story, an idea). A successful meme is one that sticks in minds and is transmitted as a result. However, cultural meme's undergo, mutation, recombination, and selection inside the individual mind even more often than during transmission.
- Minds have a disposition to learn in particular domains (templates) which allows then to take information (concepts) and apply them far more extensively via inference.

Toolkit #2 cultural epidemics

Some concepts fit easily into common templates and spread as a result.

2. WHAT SUPERNATURAL CONCEPTS ARE LIKE.

Some concepts just sound like religious concepts. Religious concepts are not just strange.

Supernatural concepts involve taking an ontological category and violating some of the expectations (ie person + immortality or tool + consciousness)

Inference: to combine new info with previous representations.

Default inference: an inference that assumes all if the implied inference is true unless there is contrary info.

Expectations:

Ontological categories: Abstract concepts such as ANIMAL, TOOL, PERSON, PLANT, NATURAL OBJECT NUMBER.

Humans create new concepts by taking an existing concept and adding a bit (ie circle + dent). With a ghost we add the new but (translucent, goes thru walls etc) and we just infer all of the other aspects of PERSON)

A "man who walked thru a wall" (ontological violation) is better recalled than "a man with 6 fingers" (expectation violation, but not of those expectation that define the ontological category PERSON).

One violation at a time works. Two or more ontological violations are very rare in religion.

Serious religion and non-serious folk-tales come from the same basis but religion has some additional "bits".....

3. THE KIND OF MIND IT TAKES.

The brain is comprised a large number of (invisible) sub-systems.

The brain witnesses events but infers a huge amount of info as a result. For instance, the movement of coloured dots on the screen can change our inference from dots moving, to solid objects colliding to beings with intent chasing each other.

The mind has relatively simple flags that distinguish between one ontological category an another to enable the resulting inferences.

Impairment can be very specific. Autistic children cannot imply the mentality of others. EEG tests show that when we see the gestures of others, we imagine making the same gestures ourselves.

Progress box #5 Domain-specificity

- Perception and understanding of surroundings requires inferences and guesses about different aspects of objects around us.

- The mind is composed of specialised systems that produce inferences about these different aspects.
- Objects in different "ontological categories" activate different sets of these specialised systems.
- Each inference system is itself composed of even more specialised neural structures.

Animals are members of only one class. Artefacts can be a member of multiple classes.

Concepts are much less descriptions than skills. The 'animal' concept is the ability to recognize actual animals and make inferences about then a (pg113)

Progress box #6 – Development and specificity

- Inference systems make us attend to particular cues in environments and produce specific inferences from these cues.
- Skeletal versions of the principles direct knowledge acquisition from infancy
- All concepts develop as skills, which is why discussions of innateness are often meaningless.
- What principles you have depends on what species you are: which is why evolution is relevant to mental architecture.

Tool kit 3: evolutionary biology

- Humans are information hungry
- Humans are cooperators.
- Humans live in a cognitive niche. Examples of specialised, information based traits include a hypertrophied social intelligence (remember different peoples traits uniquely), a taste for gossip, adaptations for social exchange (giving and receiving), evaluation of trust, and coalitional dynamics.

Progress box #7 – Evolution, psychology, social mind.

- Specific inference systems were tailored by selection for their contribution to solving particular problems in ancestral environments.
- To describe them it is useful to combine predictions from the evolutionary background and independent experimental evidence.
- Crucial to our species are mental adaptations for social life, as information (notably that provided by others) is our ecological niche.

Decoupled cognition allows future planning, historical episodic review / re-evaluation, and external representations such as pictures, symbols

and maps (their interpretation requires inference of the authors intent). However there are constraints to do decoupled cognition. Usually one couple is severed while all of the other inferences run as per normal.

Progress box #8 – The mind it takes (to have religion)

- The mind it takes to have religion is the standard architecture that we all have by virtue of being members of the species. (We need no special mentality or mind)
- Because of decoupling and specialisation, human minds are sensitive to a particular range of cultural gadgets.
- (To anticipate:) Religious concepts too are probably successful to the extent that they activate inference systems.

4. WHY GODS AND SPIRITS?

When asked how God (Christian) might intervene in a sinking ship, answer along the lines of changing a nearby captains mind to go and rescue were much more frequent than physical intervention

Humans envisage god to be human-like (cockroaches likewise) but it is the human mind/intentionality that is always preserved rather than physical attributes.

Humans have hyper-active agent detection.

Humans spend a lot of time wondering if other people have access to strategic information.

Gods and, spirits are normal agents but with full access to strategic information. Strategic information here means information that is relevant to social interaction. (given a particular situation, and given some information that activates one's inference systems, one assumes that the full-access agent has access to than information)

Anthropological Tool-kit 4 - Relevance and transmission.

- Concepts that "excite" more inference systems, fit more easily into their expectations, and trigger richer inferences (or all of these) are more likely to be acquired and transmitted.
- The full-access agent is easier to represent (in our brain) because we do not need to figure out what strategic information that agent has. We can get straight onto estimating the result.

- I am interested in which religious agents you believe in because (if it is the same as mine) then I know that your behaviours will be modified in the same way as mine.

5. WHY DO GODS AND SPIRITS MATTER.

Morals in children do not come (entirely) from either reasoned principles or feelings. Some part is implicit.

Three evolutionary routes to selfless behaviour: 1. Kin selection, 2. Reciprocal altruism, 3.?

People have special inference systems to detect cheating and this has survival value for the group (thru cooperation) rather than for the individual.

People read misfortune into random events because our brains are overly adept at spotting patterns (spotting randomness has no Darwinian survival value).

The "evil eye" is an assumption that envy drives people to wish misfortune on others - effectively and many times unconsciously! It is in effect between people of the same social status, with an exchange relationship where some unexpected advantage is apparent (ie cheater). Not between people of different status. It has a "levelling" effect.

Witches are cheaters - deriving advantage from others misfortune.

General principals (termite infested buildings will collapse) do not provide specific answers (why me) so another "explanation" is required.

People are very clear about "why" a supernatural agent delivers misfortune but not "how".

People are in social exchange with supernatural agents (gods, spirits etc) and the have full access to strategic information so they are natural suspects for cheating.

6. WHY IS RELIGION ABOUT DEATH?

Dead people, like vegetables, can be pickled or preserved. You can also abandon them to the beasts of the field, burn them like rubbish or bury them like treasure. From embalming to cremation, all sorts of techniques are used to do something with the corpse. But the point is, something has to be done.

It seems that in many places beliefs about death are quite vague; only beliefs about dead bodies seem definite.

The reason why people feel the need to handle corpses, the reason why they have done that for hundreds of thousand years may well be something to do with the corpses themselves. Or, rather, something to do with the way a human mind functions when faced with that very particular kind of object.

Corpses are an actual source of pollution, and the human mind has an inbuilt avoidance of unseen pathogens no matter what the dose.

Human cognitive systems treat the death of animals and people differently.

Corpses induce dissonance by activating the human inference systems (animacy, person-file, grief and predator-avoidance) in conflicting ways. "while one system in the mind represents them as dangerous sources of unseen and barely describable danger, another system is producing inferences about interaction with them; yet another is assuming that they cannot have goals or interaction; and finally the circumstances of their death may in themselves inspire fear.

7. WHY RITUALS?

Rituals are undertaken in a special place in a particular manner by people with specific roles.

Rituals have a sense of urgency (if you do not perform them something terrible will happen) social effects (husband and wife, boy to man) and supernatural participation.

Ritual cleansing activates by the contagion system.

Sacrifices are about exchange with supernatural (Pig for protection) but a relaxation of exchange with other people - unconditional sharing with the whole group.

Rituals to turn boys into men typically promise a secret but it is never revealed. Rather it is often a painful prepayment to forming a risky coalition with other men.

Marriage rituals are very public to announce the change in social exchange relevant to the whole group, but...

While people have constant experience of social life they do not understand it very well.

Rituals are a way that people publicly commit the same commitments that others in the group have

committed to. The alternative is defection (cheating) The supernatural natural are easy to associate with rituals because it is easy to associate a non-visible change with a non-visible agent.

Rituals where supernatural agents do something (marriage) are rare (once per person) those where the supernatural agent is the beneficiary (sacrifice) and common.

8. WHY DOCTRINES, EXCLUSION AND VIOLENCE?

Religion are effectively guilds (as for a blacksmith, farrier etc) which guarantees a stable market share and price for its members at the exclusion of non-members for a small fee. This is very important for religious practitioners as their services are both dispensable and replaceable.

Religions succeed well if they gain centralized political power for the same reasons.

Converting a religion into a brand has all the same advantages as for business - distinct, saliency, consistency, exclusivity etc. Hence the use of prescribed texts (quality systems!) and heirarchical structure.

Theological texts do however create a divorce from the standard supernatural templates of local spirits and the like. Organised religions offer one god that anyone can interact with (a global brand)

Organised religion is plagued by local modifications and outbreaks due to the tedium of the repeated doctrine vs the loud (exciting) alternative.

Humans will rapidly form groups even based on abstract criteria (red group & blue group). groups don't form because of common ideals - coalitions form because of human groupiness and then the commonalities are inferred. Groups are about coalitions rather than categories.

Religious fundamentalism is a model phenomenon with a basic desire to return to how things were; before people were aware that there were alternatives. The key point is that defection is not costly therefore it is likely.

Fundamentalism is neither religion in excess or politics in disguise. It is an attempt to preserve a particular type of hierarchy based on coalition, when this is threatened by the perception of cheap and therefore likely defection.

9. WHY BELIEF.

The minds characteristic flaws pg.300 : the consensus effect, false consensus effect, generation effect, memory illusions, source monitoring defects, confirmation bias, cognitive dissonance reduction.

Religious thought is not just negligent thought because religious ideas are not just a relaxation of reason, they are of a very specific nature.

Also human minds recognise and the infer things rather the explicit chains of reasoning.

Religious thinking is not special in the brain - and they are not created by the specialist and degraded by the multitude.

Final Progress box – The full history of all religion (ever)

For aeons, people naturally have talked about millions of exceedingly parochial and contextual matters but also about some objects and things that are not directly observable. It is after all a hallmark of the "modern mind" - the mind that we have had for millennia - that we entertain plans, conjectures, speculate on the possible as well as the actual. Among the millions of messages exchanged, some are attention grabbing because they violate intuitions about objects and beings in our environment. These counter-intuitive descriptions have a certain staying power, as memory experiments suggest. They certainly provide the stuff that good stories are made of. They may mention islands that float adrift or mountains that digest food or animals that talk. These are generally taken as fiction though the boundary between a fictional story and an account of personal experience is often difficult to trace. Some of these themes are particularly salient because they are about agents. This opens up a rich domain of possible inferences. When you talk about agents, you wonder to what extent they are similar to unseen and dangerous predators. You can also try to imagine what they perceive, what they know, what they plan and so on, because there are inference systems in your mind that constantly produce such speculations about other people. Among these accounts, some suggest that counter-intuitive agents have information about relevant aspects of interaction between the people exchanging these messages. This gives speakers and listeners a strong motivation to hear, tell or perhaps challenge such stories. This also allows a further development, whereby people can combine their moral intuitions with the notion that such agents are indeed informed of the morally relevant aspects of what they do and what others do to them.

When counter-intuitive agents are construed in this way, it becomes easy to connect them to salient

cases of misfortune, because we are predisposed to see misfortune as a social event, as someone's responsibility rather than the outcome of mechanical processes. So the agents are now described as having powers such that they can visit disasters upon people, which adds to the list of their counter-intuitive properties and probably to their salience. People who have such concepts will probably end up connecting them with the strange representations and emotions caused by the presence of dead people, because this presence creates a strange cognitive state in which various mental systems - those geared to predation and to the identification of persons - produce incompatible intuitions. We sense both that the dead are around and that they cannot be around. If you have concepts like that, at some point it will make sense to connect them with the various repeated and largely meaningless actions that you often perform with some fear that non-performance will result in grave danger. So there are now rituals directed at these agents. Since many rituals are performed in contexts where social interaction has non-obvious properties, it will become easy to conceive of these agents as the very life of the group you are in, as the bedrock of social interaction. If you live in a large enough group, there will probably be some people who seem better skilled at producing convincing messages from the counter-intuitive agents. These people will probably be considered as having some special internal quality that makes them different from the rest of the group. They will also end up taking on a special role in ritual performances. If you live in a large group with literate specialists, these will probably at some point start changing all these concepts to provide a slightly different, more abstract, less contextual, less local version. It is also very likely that they will form a manner of corporation or guild with attendant political goals. But their version of concepts is not really optimal, so that it will always be combined in most people's minds with spontaneous inferences that are not compatible with the literate doctrine.

Additional Reading

Chapter #3 Ref 36 Evolution of capacities for music, Jerison, 2000.

Ruth Millican, philosopher, pg 113. :Concepts are music less descriptions than skills. The "animal" CONCEPT is the skill to recognize actual animals and make appropriate inferences about them.