

Psychology, Evolution and Religion

Going to be talking about psychology primarily, and how religion fits into the psychological understanding of human behaviour. And psychiatric disorders.

Some preliminaries – **schizophrenia, what is it?**

Religious Belief

Schizophrenia, why does it exist? What is the adaptive value?

In contemporary form, by definition it is a maladaptive (leaves fewer children).

There are no hidden advantages to schizophrenia → diseases related to it may have advantages.

Genes get value from context.

Sickle cell anaemia

Not by chance that sub-Saharan Africa (malaria)

No bad genes, only bad settings for particular genes:

Tay-Sachs disease

Mainly Jewish, complete cortical failure; partial Tay-Sachs TB resistance

Explains medieval beliefs that Jews were protected (poisoning wells etc.)

Cystic fibrosis

Full blow inflammatory, lungs fill with fluid (Dead by 20).

Partial is protection from cholera, cholera is dehydrating cf. Mucus protects

If you have enough people with the partial version, full blow version can be afforded in small number.

What is a mild genetic version of schizophrenia?

Kety, a psychologist from Harvard, went to Denmark looked at families surrounding adoptees, interviewing people for schizophrenia. By end of decade talked to more families surrounding schizophrenics in history – normally just intermittent sessions from psychiatrists.

They noticed, on average, there were some quirky personality traits in biological family members – higher than expected. This mild form is now called Schizotypal PD – schizotypalism. Biological, genetic – adopting parents didn't show these traits.

Schizotypalism

Schizotypal & Schizophrenia are on a continuum.

SPD Symptoms,

Loose associations

Social withdrawal this is lighthouse keeper, cinema projectionist, etc.

Not Schizophrenia which is disabling

Metamagical thinking – not thought disorder, psychosis – just believes strange things.

Into sci-fi and fantasy – new age stuff (ESP, UFOs, etc.) – extremely concrete interpretation of religious beliefs. Tend towards fundamentalism.

Mild version of schizophrenia – standard diagnostic category in psychiatry

Where does this come from?

What does schizotypalism look like in non-traditional societies (not west forever)?

Answer from anthropology – in traditional human societies there are a category of “half crazy” – shamans, witch doctors etc. (Paul Radin)

Shamans are the ones who speak in tongues, converse with the dead, transform into hyenas to protect people.

Ackerknecht said, “Healed man men”.

Kroeber (started Berkeley, grand old man in field),

“the shaman displays his possession by a spirit by publicly re-enacting his specific personal experience, that of a man suffering from a particular mental affliction, his projections, his hallucinations, his journey thru space and time, thus became a dramatic ritual and served as the prototype of all future concepts of the religious road of perfection”.

This was recognition, in 30s and 40s that shamanism is socially controlled version of metamagical thinking.

Shamans aren't schizophrenics – people don't tolerate mentally ill, in west, anywhere.

Shamans aren't people who speak in tongues during the silence of the hunt, only at the right moment.

Here voices at right time – schizotypalism, hearing voices at the wrong time –schizophrenia.

Schizotypals not reproductively maladaptive – has done wonderfully.

In right settings peripheralising traits become “sanctioning” traits.

Anecdote, Kroeber:

At ritual of Native Americans (winnebagos) – informant relayed upon seeing the shaman speaking in tongues, rolling on floor etc., “we are lucky to have him in our village, he’s amazing etc. however, lucky we don’t have two – one is fine”.

Get it just right, you can have too many – some hunters are needed.

Shamans act as catalysts in mass experiences.

Anthropologists have noted for long time, metamagical thinking is prevalent in all human cultures and often praised.

Cultures have had such a need for shamans that they can put up with the occasional schizophrenia, as long as the ratio is right.

Anthropology has suggested 1 – 2% rate of schizophrenia, in traditional village sizes, etc. – works about right.

Throughout history, there have been many more schizotypals than schizophrenics.

This is not just about tribal people from the National Geographic. For many years anthropologists were writing about the “primitiveness” of non-western societies, in this climate anthropologist Devereux said (1940s), “primitive religion is organised schizophrenia” . This is anthropologists early insight into “contextualised schizophrenia”. However this was all about the primitive societies.

However, Ackerknecht wrote long essay about cultural chauvinism how saying shamans were “half healed mad men” etc. was incredibly condescending etc. – “those cultures are irrational in contrast to us”.

Ackerknecht said, “Our culture is unique in outlawing the irrational” – some recent stats...

Early 2000s, Gallop Poll (Americans)

25% Believe in Ghosts

36% ESP

47% UFOs

>50% in Devil, and that he influences daily activities.

These people who can vote, in jurys, etc.

We live in a world which is highly irrational... this is all societies – all belief systems are permeated by irrationality.

Some versions in the west are frothy modern inventions, “crystals, channelling, etc.”.

Other versions of our westernised irrationality are institutionalised and pervasive.

Not considered sane to be hearing voices coming out of burning bushes – worrisome sign, diagnostic. Conversations with someone who is dead and risen from the grave – diagnosable problems.

Who invented these things?

7 days, snakes apples, birth virgin – not designed by committees, formed by schizotypals.

Religious leaders invented this – metamagical thinking falls into schizotypal spectrum.

Get it wrong – cults, religious fringe groups, Waco, Charles Manson (diagnosed schizophrenic) – highly metamagical.

Get it right – people won't have to go to work on your birthday for the next couple of millennia.

Sanctioned Cultural Context (Kroeber)

What is religion about?

- Structural Building Blocks
The Law, 10 commandments, One God Allah & Mohammed is his prophet, etc.
- Religion is about community, motivation for good works – West.
- What Religion has been about for most of history is performance of ritual.

Henry Ward Beecher, preacher 1830s,

“religion is daily bread, not just cake on Sunday” – religion is in small acts of daily rituals

Not just abstract theological claims (virgin birth, etc.)

Religious Practices

Explained by another mild form of psych disorder → OCD.

I guarantee that during an anxious period (deadlines, etc.), you rearrange your desks, your room, etc. and perform excessive double checking (did I lock things, did I really post that?).

Fall into obsessive rituals during times of anxiety.

Random thoughts come into your head, music, etc. distracting – loose productivity because of stupid jingle.

Useless, arbitrary but highly structured – imposed during times when everything feels shaky... order is lost in your thoughts.

Some people do this *all the time*, this disorder destroys their lives.

Full blown much more significant than pen arranging, double checking etc.

6hrs/day washing hands

Obsessive focusing on hygiene, worrying that somehow they are unclean

Relationships, jobs, etc. impossible

Go through rituals. Cleaning requires seven different kinds of soap, the water has to be a certain temperature. Then first level of washing, first towel, then second level of washing, then second towel. Over and over for two hours. If on leaving room, brush door – have to start over...

Stop them and say, “you will miss the job interview, etc.” – they will say if they don’t wash, cannot function.

Person has no insight – not “help I need to wash 6hrs/day” → “help I can never get clean”.

OCD – constant sequences of numbers, jingles, can’t stop thinking, intrusive thoughts,

“What if I don’t stop at these lights”

“did i hit someone”(goes back) “no...”

(5 miles later)

“oh maybe they rolled in to bush...”

Double checking over and over – lights on, doors locked, gas on, etc.

Intrusive thoughts, “what if, what if, what if”...

Paralysis about entering/leaving places → cannot leave until prime number of taps, etc. numerology.

Symmetry in utensils, etc. required before can eat.

Pathological attempt to impose control (anxiety).

Fixed action patterns (eg. dog circles before sleeping, until it cant be bothered) → OCD person never escapes, consumed by rituals.

Example of Obsessive Beliefs Everyone Has

Ordering into a straight line (: : : ‘ . → : : : :)

All feel compulsive need to get rid of extra overhanging segment of food:

How many because, “that piece doesn’t really count”

How many because you’re, “reducing the perimeter of the open segment so it will stay fresher”

How many, “getting at you, smoothing out edge”?

Yes, we all do that, and then we start over because that isn’t quite right, and so on.

Why aren’t OCD depressed, etc.? Constant belief that perfection of the ritual is possible, not 17 times now, but 18 times – always figuring out next step

Secular context for mild OCD → into university, gives tremendous advantage to learning, etc.

Religion is about “counselling the troubled”, “good works” – not throughout history... often those at the head of a crusade, most vivid images about heaven/hell etc. MAINLY most accomplished at carrying out rituals

Orthodox Hinduism, Brahman: 6hrs/day cleansing rituals, detailed rules → sequences about which hand to wash, which check to wash first, what sleeping position, what the first thing you should see in the morning is, direction for defecating, entering a temple, leaving temple. Breaths thru’ nostrils during prayer, etc.

Orthodox Judaism – many laws around food prep, time interval between food eating, cleansing rituals (putting utensils in dirt for months), special prayers that have to be said, how you enter and leave a holy place (special ritualistic touches on doors, etc.). Lots of magic numbers (eg. 18 – pray strings with 18 knots, 18 people in pray groups).

Numbers with magic powers:

365 – no. Days in year

248 – no. Bones people believed humans had in middle ages (when this evolved)

= 613

Therefore there are 613 rule, 365 prohibitions, 248 things that have to be done – every day.

Very often in religious rituals have numbers, helps learning. Base 10 society has 10 commandments.

“No. Things cannot do = days in year; no. things can do = bones in body. Good now I remember”.

No one remembers the content!

Rules weren't written down fully so now rabbis make a living out of arguing about what were the 365 things you aren't meant to do!

Numbers become more important than content. Classic obsessive numerology.

Islam – rules about food (how killed, what the first food to eat each day is), how enter and leave a holy place, ornate cleaning after defecating, cleansing rituals (order for hands, how to do it etc.). If you happen to touch penis, have to start all over again. 7, 10, 70, 100 have magical powers.

Muhammad said “many who says prayer with clean teeth 70 times better off than saying prayers without them”.

Christianity → rosaries, 3 magic number, number of times to say prayers, rules for entering and leaving churches. Catholicism!

Take Lutherans (considered one of the least ritualistic), still have rules for which prayers said during even years, which said during odd.

All these versions of orthodoxy have rituals centred around – cleansing, food prep, entering/leaving significant places, numerology.

Same list as ocd.

Freud ocd, “individual religiosity”; Religion, “universal obsessive compulsion”.

Same conclusion reached by Religious leaders, 15th C., St. Ignatius of Loyola, wrote longer letter about “scrupulosity” (definition: someone going thru' re ritual for its own sake), wrote to catholic priests to watch out for people who were super-devote but were just going thru' rituals without thinking about content

Talmud (orthodox Judaism) → you read it by heart, but must be from book. Must think about content. Dont do it in a wrote way.

Muhammad: people who give prayers without thinking about content, don't count.

Back to Right Context Again

In religious setting OCD behaviour is NOT to make anxiety go away, it is to SHARE. Take nameless dread, give it a name – produce rituals for making it go away.

Why?

Why is it the disposition of teenagers of every generation to invent a culture to set them apart from their parents, etc.? Why individuation with community?

Applications of Ritualism

Author Franz Kafka, hunger artist, performs starving – comes into town, city centre in cage, people come to watch sounds bizarre – happened in middle ages.

Performing Rituals

Leaders make a living performing rituals.

eg. Hindu. Gayatri Mantra, Brahmanism – meant to be said Two Million Four Hundred Thousand times during life time to guarantee good after life – what happens, aging rich people hire Brahmins to come and say it for you – hire 240 to say it 10,000 times each (rules for the feasts you throw for them, tents provided etc.)

Judaism – jobs from ritualistic prep of food. Kosher, etc. 1st level slaughterers. 2nd level watching – rabbis ensure it's done properly.

High school graduation, president swore in – clergymen come to say prayer.

Who pays wages? Peasant now has to make two loves.

Xenocide, Author Orson Scott Card, Multi-planet Empire. A particular planet produces highly intelligent people who were suspect: high propensity for producing revolutionaries – a virus was invented which caused OCD and a subset of this was infected on this planet – what happened over generations? – this became a priestly class – people didn't have enough time etc. to think about revolutions- had to feed priestly class. Paralysis built around class which does nothing but ritual.

16th monk Luder (Martin Luther) → son of violent father, extremely obedient to him. One day panic attack because of lightening devotes himself to god. Became monk (Augustinian), very nervous about getting religious rituals wrong, 3x restarting mass. 5hrs/day in confession. Washed hours/day, “the more i washed the dirtier i became”.

Mentor eventually says, “God isn't angry with you. You are very angry with god. God doesn't care about how many times you wash your hands”.

Who invented knocking on wood? 18 jew? 24 hindu? God was obsessed with the number of bones in body?

OCD – religion can provide sanctuary... probably had something to do with invention of these rituals.

Why are the Rituals so Similar?

OCD explains, top four categories of rules in Religion are top four in OCD:

Cleansing of body,

Food Prep,

Entering/Leaving Significant Places,

Numerology

Sure because Cleanliness and Food – but also OCD clearly influential.

OCD incidence (1 – 10%, depending on def.) → continuum

During period of persecution/social anxiety → OCD person comes with order people uptake, catches on and reinforced by community.

Parallelism

Schizotypalism, metamagical → religion

OCD → religion

Context not peripheralising, power-giving.

Religion and Causality

What about Religion and Depression?

Very strong, one of the best things you can do to avoid depression is be religious. After control factors (alcohol, etc.).

Depression loss of, Control, Predictability, Explanation etc.

Stanford pigeon experiment → superstition

Why do we need shamans?

Same as pigeons: control, predictability, explanation, etc.

Take animals, damage hippocampus (more trouble making cause/effect judgments) – when rats have hippocampal damage, more vulnerable to superstitious conditioning.

Philosophic Religion and Theology

Temporal lobe epilepsy. Type of epilepsy, something happens to belief system → Geschwind published paper on “temporal lobe personality” → personality traits that TLE people tend to have.

TLE doesn't mean seizing all the time. Naturally every six months or so, and relatively well controlled with medication today.

Symptoms of TL PD (control: other types of epilepsy with similar severity)

Serious and humourless

Neophobia (don't like new things)

Hypergraphic (pressured need to write)

Obsessive with Religious & Philosophic Subjects

When meets a psychiatrist, “person should be more than symptoms, therefore here's my 60page philosophy on life, meaning etc.” – next week, 40page, etc.

Not get religious, but interested in religion.

Anecdote, neurology resident (for Geschwind), said, about 13yo patient with TLE, “clearly doesn't have TL personality.”, How come?, “i asked him if he were religious, he said no he's not”, Idiot! Goes storming down the hall goes into patient's room, performs general exam, talking to patient, “do you like baseball, etc.”. Offhand says, “are you religious?” – No – “how come?” then the 13yo gives 1hr long lecture on inconsistencies of sermon on mount, epic of Gilgamesh, Russell's critique etc. – Geschwind leaves resident to it.

St. Paul – seizures documented, clearly serious, Religious interests, hypergraphic (?).

Eg. Nun – dissatisfied with empty ritualistic life, starts having visions, etc. becomes star of convent (publishing books about it, people coming to see her)... become apparent she has tumour in temporal lobe.

Conclusions

Not saying:

Crazy to be religious – nonsense psychiatrically

Religious people psych. Suspect – no

Schizotypalism & OCD is Important in Generating and Maintaining Religion Practice and Principle