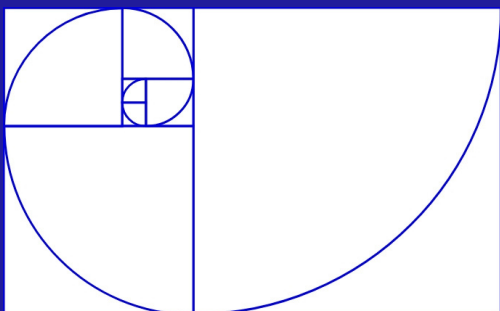


BOOK OF ABSTRACTS



IACESR

International Association for the
Cognitive and Evolutionary Sciences of Religion

Organized by IACESR committee

**MUNI
ARTS**

LEVYNA
Laboratory for
the Experimental
Research of Religion

together with LEVYNA, Masaryk University

IAHR special conference

IACESR 2026 conference

Applewhite, Courtney* - <i>Revisiting "Agent Detection": Numerical Over-estimation in Bereaved People</i>	7
Araujo, Paulo* - <i>Self-Referential Speech of Followers of Afro-Brazilian Religions in Possession Trance: What Do Slips of the Tongue and Ritual Languages Say About the Principles of Fusion and Displacement?</i>	8
Atkinson, Quentin* - <i>Religiosity and political conservatism</i>	9
Badiani, Feryl* - <i>Ritualising Patriarchy: Religious Internalisation and Gender Norms in Hindu Devotion</i>	10
Berniūnas, Renatas* - <i>Spirited Landscape and Decision-Making in Pastoral Mongolia</i>	11
Biro, Tamas* - <i>Religious innovation as phase transition: The case of 19th century Neolog Judaism in Hungary</i>	12
Biro, Tamas*; Schwezoff, Dávid - <i>The role of procedural memory in high-frequency non-special-agent rituals in Rabbinical Judaism</i>	13
Borhani, Khatereh*; Golbabaei, Soroosh; Lang, Martin - <i>Religiosity Attenuates the Effect of Empathy on Moral Decision-Making</i>	14
Brandao, Renato* - <i>Psychedelic Substances and Religious Experiences in Brazil</i>	15
Byrd, Nick* - <i>Analytic Atheism & Analytic Apostasy Across Languages</i>	16
Callizo, Carmen*; Calatrava, María; Rodríguez-González, Martiño; Stinus, Céline; Schweer-Collins, Maria - <i>Cognitive and Relational Predictors of Perceived Divine Forgiveness: A Registered Report Among Spanish-Speaking Catholics</i>	17
Callizo, Carmen*; Solana, Pablo; Wildman, Wesley ; Santiago, Julio - <i>Religiosity, Not Size, Predicts Abstract Cognition in Sacred Spaces: A High-Powered Registered Report</i>	18

Chvaja, Radim*; Lapyhina, Alisa; Kapanadze, Ketevani - <i>Is God Perceived as More Moralizing During War? Evidence from Ukraine</i>	19
Chyc, Paweł* - <i>In-group and out-group perceived magic efficacy in south-western Amazonia</i>	20
Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin - <i>Magic as a cultural immune program</i>	21
Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin - <i>Examining religious systems ethnographically: A methodological template</i>	22
Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin - <i>System-theoretic approaches in the CESR</i>	23
Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin - <i>Gods of Autonomy: Morality as autonomy-preserving regulation in multi-level social systems</i>	24
Corriveau, Kathleen* - <i>The Development of Cross-Cultural Religious Belief</i>	25
Deschrijver, Eliane* - <i>From worldview conflict to sheer difference discrimination: testing cross-domain links and the role of religion and political orientation</i>	26
Drezno, Magdalena*; Łowicki, Paweł - <i>Religiosity and Teleological Thinking: Evidence from a Newly Developed Comprehensive Psychometric Scale</i>	27
Ejova, Anastasia* - <i>Luck's six fingers: A multidimensional scaling analysis of social media luck stories</i>	28
Fewings, Alex* - <i>Intersections of Spiritual and Material Norms in a Spiritual-Syncretic Community</i>	29
Ford, Kathryn*; Kolios, Sotirios; Gervais, Matthew; Adair, Lora; Willard, Aiyana; Kline, Michelle - <i>I Belong in Glastonbury: The importance of belonging to Spiritual but not Religious individuals</i>	30
Geraty, Meara* - <i>Affective Polarization and Emotional Synchrony in Collective Political Events</i>	31
Gervais, Will - <i>Belief in Belief and Hidden Heathens: What Self Reports Aren't Telling Us About (Ir)Religious Cognition</i>	32
Gosiewski, Jędrzej* - <i>If religion is make-believe, then it's not here due to agency detection</i>	33

Haimila, Roosa*; van Mulukom, Valerie - <i>Understanding the morality of unbelievers: Non-theistic beliefs about right and wrong in ten countries</i>	34
Hampejs, Tomáš*; Banach, Stanisław; Zbiral, David - <i>Compliant Dissent: Gendered Moral Outrage in 1299 Bologna and CESR Theories of Moral Behavior</i>	35
Heiphetz Solomon, Larisa - <i>God Concepts Across Development</i>	36
Ishii, Tatsunori* - <i>The effects of behavioral synchrony on social bonding and preference transmission</i>	37
Jerotijevic, Danijela* - <i>Emotional Fit and Group Belonging in Women's Circles</i>	38
Karaoğlu, Yetkin* - <i>Embodied Cognition and Charismatic Authority in Omoto: Nao and Onisaburō Deguchi</i>	39
Kaše, Vojtěch* - <i>Beyond Traditions: Tracing the cultural evolution of religious ideas with contextual embeddings</i>	40
Kolios, Sotirios* - <i>Musical Sounds as Tools in Spiritual but not Religious Ritual Practices</i>	41
Kopecký, Robin*; Boschetti, Silvia; Binter, Jakub; Příplatová, Lenka; Talmont-Kaminski, Konrad - <i>Black and White Magic: Efficacy of In-group versus Out-group Rituals</i>	42
Kotherová, Silvie*; Popelka, Stanislav; Mentel, Andrej - <i>Embodied Attention: Can Meditation Bend Cultural Perception?</i>	43
Kundt, Radek* - <i>Maternal compliance with mate-guarding practices increases patrilineal child investment in Mauritius</i>	44
Kundtová Klocová, Eva* - <i>Perceptions of Costs and Benefits in Ritual Participation – What Motivates Participants to Continue Partaking in Painful and Costly Acts?</i>	45
Kuroli, Veronika* - <i>The tephilin as an embodied, high-frequency special-instrument ritual in Judaism</i>	46
Lang, Martin*; Maño, Peter - <i>Unpredictable Socioecology and the Context-Dependent Expression of Religious Norms in Mauritius</i>	47
Major-Smith, Daniel* - <i>Local gods, supernatural punishment, and the expansion of human society: A cross-cultural causal analysis</i>	48
Maño, Peter* - <i>Gods, karma and witchcraft in Mauritius: Beliefs in supernatural causation of diseases</i>	49

McKay, Ryan* - <i>Sleights of Mind: Using Magic to Manipulate Belief in God and Free Will</i>	50
Medeiros, Steve* - <i>Exploring Identity Fusion and Psychological Kinship in the U.S. Military: Training, Rituals, and Dysphoric Events</i>	51
Miklousic, Igor*; Lane, Justin; Kosnác , Pavol ; Pavlović, Tomislav; Bullock, Josh; O'Lone, Katherine ; Shults, LeRon - <i>Religiosity and the Regulation of Threat Perception in Modern Societies</i>	52
Muczková, Markéta* - <i>Ecological Validity in Decision-Making Research: A Triad-Based Study on Cognitive Biases</i>	53
Mwangi, John* - <i>Vigango Carvings Shrine; Kauma Traditionalism Religion Ritual Power Center.</i>	54
Mwangi, John*; Kusiak, Pawel ; Tarusarira, Joram; Dama, Sebastian Dama - <i>Reflexivity of Kauma Traditionalism, Religion, and Climate Change in coastal Kenya.</i>	55
Nenadalová, Jana*; Cigán, Jakub* - <i>Sensing gods, ghosts, and spirits: Feelings of presence across Mauritian religions</i>	56
Peiser, Benny* - <i>The age of immortality and its annihilation. A new theory of the Mesopotamian flood story</i>	57
Penner, Myron* - <i>"Religion as Adaptive System," Shifting Morality, and Deidentification</i>	58
Pugliese, Nastassja* - <i>Perceived Credibility of Spiritual Texts: AI vs. Religious Authority</i>	59
Purzycki, Benjamin* - <i>Gods, Games, and the Socioecological Landscape Project</i>	60
Příplatová, Lenka*; Boschetti, Silvia; kopecký, Robin; Binter, Jakub; Talmont-Kaminski, Konrad - <i>Sleep Paralysis: When Fear of the Dark Becomes Religion</i>	61
Rosun, Nachita*; Baimel, Adam; Burdett, Emily; Penner, Myron - <i>The Fault In Our Stars: Astrology As Social Signals For Dating</i>	62
Ružicková, Alexandra*; Borhani, Khatereh; Golbabaei, Soroosh; Lang, Martin - <i>Prosocial Reinforcement Learning in a Multi-Religious Society: Insights from Mauritius</i>	63
Sadanowicz, Ewelina* - <i>Folk healers in Eastern Poland. Healing Practices at the Margins of Orthodoxy</i>	64

Saraei, Mohammadamin*; Xygalatas, Dimitris - <i>Pilgrimage as Attunement: How Sacred Spaces Are Perceived Through Culturally-Shared, Embodied Affordances</i>	65
Shabani Vikaei, Anese*; Lang, Martin - <i>Beyond Punishment: How Religious Believers Use Contempt to Enforce Social Norms</i>	66
Sorensen, Tyrel* - <i>Systematizing the Sacred: Coding Divinatory Practices for Cognitive Analysis</i>	67
Špiclová, Zdeňka*; Nikki, Nina; Söderholm, Harri - <i>Mapping Moral Domains in the Sermon on the Mount: An Explorative Study</i>	68
Szymanek, Piotr* - <i>From priors to phantoms: Testing the predictive processing model of agency detection</i>	69
Talmon-Kaminski, Konrad*; Boschetti, Silvia; Kopecký, Robin; Příplatová, Lenka - <i>From Experience to Interpretation: Pattern Perception, Ritualisation, and Supernatural Explanation</i>	70
Timmermann Østerlund, Anton* - <i>Predictive Processing in Religious Experience</i>	71
Tokarz, Julia*; Łowicki, Paweł; Zajenkowski, Marcin - <i>God and self: exploring affective aspect of religious engagement in narcissism</i>	72
Uhrin, Michal* - <i>Small Acts, Strong Bonds: Trust, Low-Cost Rituals, and Subtle Religious Signals in Rural Christianity in Slovakia</i>	73
Van Eyghen, Hans* - <i>Mystical experience, cognition, and attention</i>	74
van Mulukom, Valerie* - <i>Understanding self-transcendent experiences through affective salience as instantiated in experiential consciousness</i>	75
van Mulukom, Valerie* - <i>42 Days of Summer: A diary study of awe</i>	76
Visuri, Ingela* - <i>The Third man factor: Sensed presence between religion and extreme cognition</i>	77
White, Cindel*; Aryaie, Mina - <i>The Dark Side of Recognition: How Evil Eye Beliefs Shape Emotional Responses to Personal Achievement</i>	78
Willard, Aiyana*; Kolios, Sotirios; Ali, Ayesha; Adair, Lora - <i>Innovation in Ritual and Religion among Neo-Pagans</i>	79
Wood, Connor* - <i>Major Depression and Pachamama Beliefs and Practices Among Lowland Kichwa in the Ecuadorian Amazon</i>	80
Wright, Devin*; Lane, Justin; An, Jisun; Shults, LeRon; Ahn, Yong-Yeol - <i>From Noise to Signal: Identity Fusion from Language at Scale</i>	81

Xygalatas, Dimitris*; Buck, Zach; Lang, Martin; Chvaja, Radim; Puryag, Pushkar; Mano, Peter; Kratky, Jan; Palenik, Julie - <i>A new mobile toolkit for CSR researchers</i>	82
Zawistowska, Alicja* - <i>Exploring the influence of Need for Cognitive Closure, Compassion and Religiosity on moral rigidity</i>	83

Revisiting "Agent Detection": Numerical Overestimation in Bereaved People

talk

Author(s): Applewhite, Courtney*

Bereavement hallucinations are common after loss, with between 30-60% of people reporting these experiences (Sabucedo et al., 2020). Several theories explain bereavement hallucinations, and these experiences are ideal case studies to further examine theories about sensorimotor expectations (Millar, 2021) and agent detection. If bereaved individuals show heightened agency detection or altered sensorimotor expectations, this should manifest in perceptual biases like overestimating human presence. One way to measure this tendency is with a human numerosity estimation task. We present analysis of an online task conducted among bereaved people who both have had bereavement hallucinations (H+) and have not had these experiences (H-). Bereaved participants (N=111) overestimated both people and boxes compared to controls (N=63), suggesting domain-general perceptual alterations rather than agent-specific biases. Within the bereaved group, H+ (N=48) and H- (N=63) participants showed no difference, contrary to hyperactive agency detection predictions. This effect varied by type of loss, with spousal loss showing higher estimation than other loss types. We discuss how these results add nuance about grief states and challenge agent-specific detection accounts (see van Leeuwen and van Elk (2019) and Andersen (2019)).

Self-Referential Speech of Followers of Afro-Brazilian Religions in Possession Trance: What Do Slips of the Tongue and Ritual Languages Say About the Principles of Fusion and Displacement?

poster

Author(s): Araujo, Paulo*

This paper explores a possible connection between the Cognitive and Evolutionary Science of Religion and Linguistics, focusing on the phenomenon of ritual languages by using Goffman's constructs designed to encompass face-to-face social interactions as analytical categories, primarily that of footing. The point of connection between the CESR and ritual languages is the religious phenomenon of possession trance. The aim is to demonstrate how the alignment of stereotyped speech patterns of different religious entities in medium trance is used to legitimize trance in Afro-Brazilian religions. The focus is mainly on slips of the tongue or errors of followers during trance, in which religious entities speak about themselves or about their "horses" (the term used for followers in some Afro-Brazilian religions such as Umbanda). In these situations, Cohen's (2007) principles of fusion and displacement are discussed, based on a linguistic analysis in which slips of the tongue demonstrate a preference for one principle or the other. The ethnographic results and linguistic analysis produced indicate that these slips of the tongue are subsequently corrected or simply ignored as a strategy to avoid disrupting the religious ritual.

Religiosity and political conservatism

keynote

Author(s): Atkinson, Quentin*

Religion is frequently presented as integral to understanding conservative politics around the globe. In support of this view, countless studies have demonstrated an association between religiosity and conservative attitudes and values. Yet the nature of this relationship remains unclear. In this talk, I present a series of studies that show the association between religiosity and conservatism is both more complex and more variable than is often portrayed. This includes work examining a range of measures of religiosity and conservatism across a range of different cultural settings. I attempt to synthesise these findings to draw some general conclusions about how exactly religiosity is connected to conservatism, as well as what this means for our understanding of both religiosity and conservatism as psychological constructs.

Ritualising Patriarchy: Religious Internalisation and Gender Norms in Hindu Devotion

talk

Author(s): Badiani, Feryl*

Religious belief and communal norms often co-evolve to help groups meet the socio-economic demands of their environment. We examine this dynamic within two Hindu Indo-linguistic communities in India, Gujaratis and Maharashtrians, who occupy distinct economic niches. Gujaratis are historically mercantile, relying on family-run trade networks in which trust, reputation, and adherence to convention are essential. Maharashtrians, by contrast, more often pursue salaried employment, where education rather than communal signalling underpins economic success.

Drawing on fieldwork and prior qualitative work, we show that these economic differences map onto distinct religious patterns. Gujaratis primarily pray to Krishna, whose mythology emphasises diplomacy and devotional caregiving, ritually enacted through the nurturing of Bal (baby) Krishna and reinforcing traditional gender roles that publicly signal stability within merchant networks. Maharashtrians predominantly worship Ganesha, the god of wisdom and learning, whose mythology aligns more closely with their education-oriented economic niche and exhibits looser gender role expectations.

Using nationally representative Pew Research Center data ($N = 20,503$), we tested whether these community-level patterns scale nationally. Gujaratis endorsed significantly stronger patriarchal attitudes than Maharashtrians, and individuals reporting greater closeness to Krishna scored higher on patriarchal values than those devoted to Ganesha or Lakshmi. Although causality cannot be inferred, these findings suggest a cyclical relationship between economic niche, gender norms, and religious devotion, with implications for reproductive rights policy.

Spirited Landscape and Decision-Making in Pastoral Mongolia

panel

Author(s): Berniūnas, Renatas

The talk presents a field experiment conducted among pastoral nomadic herders in Mongolia. The study examines how religiously salient landscape markers affect social decision-making. The main focus is on ovoo – sacred stone cairns that function as sites of ritual practice, territorial regulation, and interaction with local spirit masters. By adapting the Hawk–Dove game, the experiment is framed as a “Sheep Game” that models potential conflict over shared pastures under ecological pressure. Participants completed one of three differently-framed, one-shot strategic decision task presented with identical payoff structures: (1) a herding context without explicit reference to ovoo, (2) a herding context in which pasture boundaries are marked by an ovoo, and (3) an abstract, decontextualized version using neutral labels. In the Sheep Game, participants chose between expanding into a neighbor’s pasture or exercising restraint, with outcomes expressed as livestock gains. The study tests whether concrete representations of a spirited landscape (ovoo) systematically modulate cooperative and restraint-oriented choices beyond material incentives alone. After presenting the results, the talk briefly discusses methodological and conceptual challenges in applying framed economic experimental games in field settings.

Religious innovation as phase transition: The case of 19th century Neolog Judaism in Hungary

poster

Author(s): Biro, Tamas*

Religions can be understood as complex systems shaped by external ‘boundary conditions’, such as social, cultural and geographic factors. When these boundary conditions change, the internal organization of the system undergoes transformation. This process is analogous to melting, boiling and freezing, when external temperature changes.

Focusing on nineteenth century Neolog Judaism in Hungary, this paper examines how large scale social developments – modernity and the embourgeoisement of Hungarian society – triggered a phase transition within the Jewish religious system. Neolog Judaism is presented as a reconfigured equilibrium state encompassing beliefs and rituals, norms and values, social structures and institutions, architecture and aesthetics, and broader cultural practices embedded within a new social reality.

Drawing on the conceptual framework of CSR, I argue that emotions provide the key to understanding this historical change from pre-modern to modern Judaism. Sensory pageantry accompanying rituals, as well as feelings of pride and shame associated with Jewish identity are among the emotions that permeate and glue this system. Reformed rituals create novel identity construction mechanisms, which in turn contribute to the stability of this distinct religious movement under the new ‘boundary conditions’ of the nineteenth century.

The role of procedural memory in high-frequency non-special-agent rituals in Rabbinical Judaism

poster

Author(s): Biro, Tamas*; Schwezoff, Dávid

Biró (2013) argues that rabbinical Judaism is characterized by the absence of special-agent rituals, which may render it vulnerable to the tedium effect. Therefore, the long-term stability of its ritual system suggests that some additional mechanisms must also be at work. We propose that embodied cognition, and more broadly, 4E cognition provides the key. Alongside episodic memory and semantic memory, procedural memory plays a significant role in keeping a balanced ritual system over a prolonged period. While the ritual form – special agents acting in ritual actions – may not create emotional arousal, the real world context in which these rituals are enacted – hence, embodied, embedded, and extended by ritual objects and sacred spaces – introduces random emotional fluctuations. In what follows, we develop the argument that Rabbinical Judaism deploys a mode of religiosity based on procedural memory, and we contrast it with the doctrinal mode structured by semantic schemata and the imagistic mode shaped by episodic flashbulb memories.

Religiosity Attenuates the Effect of Empathy on Moral Decision-Making

talk

Author(s): Borhani, Khaterreh*; Golbabaie, Soroosh; Lang, Martin

Moral decisions of religious people, including responses to norm violations rely on both cognitive and affective mechanisms, yet the latter mechanism is currently understudied. Empathy, the ability to understand and share others' emotions, has been controversially linked to moral decision-making; yet, it is not clear whether and how it might affect moral decisions of religious individuals. Using moral vignettes, we experimentally manipulated empathy while recording physiological arousal via electrocardiography (ECG). We hypothesized that empathy-driven shifts in moral decision-making would be attenuated in individuals with more rigid moral frameworks, particularly religious individuals. A total of 137 participants (73 nonreligious) completed four task blocks (two high-empathy, two low-empathy), each containing eight vignettes. Empathy systematically predicted the probability of moral decisions, but crucially, this effect was stronger in nonreligious participants (although the interaction was not statistically significant). Drift diffusion modelling further showed that empathy biased the decision process, again more strongly in nonreligious individuals. Moreover, the association between heart rate variability (pNN50) and moral decisions was weaker in religious participants. These findings indicate that empathy exerts a context-dependent influence on moral decision-making, with physiological arousal as a contributing mechanism, while this malleability appears attenuated in religious individuals.

Psychedelic Substances and Religious Experiences in Brazil

talk

Author(s): Brandao, Renato*

This presentation investigates the relationship between psychedelic substance use and mystical or religious experience through a quantitative analysis of first-person narratives. Although research in psychology and neuroscience has increasingly focused on psychedelic-induced “mystical experiences,” much of the empirical literature relies on psychometric instruments that treat such experiences as relatively unified constructs. While methodologically robust, this strategy may overlook qualitative and substance-specific differences in how mystical meaning is structured, interpreted, and integrated.

Drawing on theoretical frameworks that emphasize the interaction between pharmacological effects, set (psychological traits and expectations), and setting (social and ritual context), this study examines how spiritual and religious meanings emerge in naturalistic environments. We analyze first-person reports from large online repositories in which users explicitly classify their experiences as mystical. These narratives offer ecologically valid material for investigating how transcendence, spirituality, and religious significance are articulated outside laboratory contexts.

Using quantitative textual analysis, we identify recurrent experiential dimensions across multiple psychoactive substances and compare substance-specific narrative patterns. The findings contribute to ongoing debates about the nature of psychedelic-induced mystical experience by clarifying both shared and distinctive features, and by highlighting the role of narrative construction and contextual factors in shaping religious meaning.

Analytic Atheism & Analytic Apostasy Across Languages

talk

Author(s): Byrd, Nick*

"Analytic atheism" refers to correlations between reflective decision-making and disbelief in God or areligiosity. These correlations have been observed in many studies. Recent cross-cultural surveys suggested that analytic atheist correlations were largely explained by analytic apostasy: those who lost their religion since childhood performed so much better than non-apostates on reflection test questions that analytic atheist correlations were no longer detected after removing apostates from the sample. So the survey instrument from that study was translated from English to seven other languages by native speakers in countries that speak primarily those languages and deployed back to such speakers and countries (Nick, 2000). The translations replicated small analytic atheism and analytic apostasy correlations in most languages as well as in internal meta-analyses. As in prior research, analytic aspirotuality correlations were slightly less reliable and slightly smaller. These data suggest that analytic atheism and analytic apostasy are detectable beyond English-speaking contexts.

Cognitive and Relational Predictors of Perceived Divine Forgiveness: A Registered Report Among Spanish-Speaking Catholics

talk

Author(s): Callizo, Carmen*; Calatrava, María; Rodríguez-González, Martiño; Stinus, Céline; Schweer-Collins, Maria

How do believers come to perceive that God has forgiven them? To identify the psychological and relational mechanisms underlying Divine Forgiveness Perception (DFP), we conducted a Stage-2 Registered Report with Spanish-speaking Catholics from Spain and Mexico (N = 429; 90% power), who completed validated measures of religiosity, guilt and shame proneness, confessor alliance, attachment to God, and spiritual struggle. Hierarchical models estimated the incremental contributions of intrapersonal, interpersonal, and transpersonal predictors using preregistered smallest effects of interest, robust estimation, and fully open materials, data, and code.

Consistent with predictions, higher religiosity, reparative guilt, stronger confessor alliance, and more secure attachment to God independently predicted greater DFP, with religiosity and divine attachment showing the largest effects. Shame-related withdrawal predicted lower DFP. Contrary to expectations, perceived clericalism and spiritual struggle showed negligible associations. An exploratory interaction suggested that supportive confessor relationships buffered the negative impact of shame. Patterns replicated across both cultural contexts.

These findings indicate that perceiving divine forgiveness reflects coordinated cognitive-affective representations of self, religious authorities, and a supernatural agent. DFP emerges not solely from doctrine but from relational and emotional mechanisms that shape how believers mentally model and experience God's responses.

Religiosity, Not Size, Predicts Abstract Cognition in Sacred Spaces: A High-Powered Registered Report

JMG talk

Author(s): Callizo, Carmen*; Solana, Pablo; Wildman, Wesley ; Santiago, Julio

Do sacred spaces such as cathedrals shape how people think? Integrating Construal Level Theory with the cognitive science of religion, we tested whether religious environments promote more abstract cognition. In a Stage-2 Registered Report ($N = 2,466$; 90% power to detect $d = .13$), participants were randomly assigned to experimentally induced place conditions varying in size (large vs. small) and religiosity (religious vs. secular; e.g., cathedral vs. room) and completed validated behavioral measures of abstraction (BIF/RBIF). Analyses followed a confirmatory plan including equivalence testing with a smallest effect size of interest ($d = .40$), robust regression, and open materials, data, and scripts.

Confirmatory results showed no meaningful effect of spatial size (statistically equivalent to zero). Instead, religiosity consistently predicted abstraction: religious (vs. secular) contexts, religious (vs. neutral) content, and higher personal religiosity independently increased abstract construal. A religiosity $\times$ content interaction indicated stronger abstraction when beliefs and task content aligned. Exploratory analyses suggested that spatial magnitude amplified abstraction only when coupled with religious meaning. Independent linguistic analyses converged with behavioral measures.

Overall, abstraction in sacred settings appears to arise less from physical vastness than from engagement with symbolic meaning systems, highlighting religiosity as a cognitive-motivational mechanism shaping high-level representation.

Is God Perceived as More Moralizing During War? Evidence from Ukraine

JMG talk

Author(s): Chvaja, Radim*; Lapyhina, Alisa; Kapanadze, Ketevani

It is widely argued that concepts of moralizing gods evolved as solutions to the problem of bonding large numbers of co-believers and co-evolved with intergroup conflict as a key selective pressure. We examine whether exposure to the ongoing war between Ukraine and Russia is associated with perceiving God as more moralizing among Ukrainians. We combine original survey data from Ukraine with fine-grained conflict indicators derived from the Armed Conflict Location and Event Data. War exposure is measured at the settlement level using counts of different violent events. To capture both direct exposure and the broader psychological climate of threat, we construct spatial spillover indices that incorporate weighted conflict intensity in nearby locations. Our identification strategy assumes that Russian attacks are not targeted based on regional religiosity, and we include regional fixed effects to account for historical religious differences and uneven conflict intensity. Pilot studies (n=261/130) support the validity of the measures (moralizing gods, war index). An analysis of data from 3,000 respondents will be available by the conference. Additionally, we will randomize survey section order to test whether engagement with detailed questions about war exposure prior to religion section amplifies the association between objective exposure and belief in moralizing gods.

In-group and out-group perceived magic efficacy in southwestern Amazonia

talk

Author(s): Chyc, Paweł*

My objective is to examine both ethnographic and experimental data on the perceived efficacy of magic, depending on whether the shaman is perceived as an in-group or out-group member. The experimental data are derived from my studies with the Moré indigenous people, who belong to the Chapacuran language family, in the southwestern Amazonia. Additionally, I investigate ethnographic materials spanning a much wider expanse of Western Amazonia, primarily focusing on the Jivaroan, Panoan, Southern Arawakan, and Chapacuran language families. Despite the existing cultural and linguistic variances, intriguing parallels can be found in the perceptions regarding the efficacy of magic within Western Amazonia. Furthermore, I analyze the similarities and differences that emerge when comparing ethnographic data with the results of more systematic, albeit limited, experimental studies. I also discuss how this type of experimental fieldwork needs to be culturally tailored to ensure its applicability among the indigenous peoples of the Amazonia.

Magic as a cultural immune program

panel

Author(s): Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin

This talk will outline a bio-cultural approach to magical ritual, focusing on its functional role in arbitrating between distinct levels of social organization – most notably that between a ‘nurture sphere’ (the extended family based on intimate-phatic communication) and a ‘community sphere’ (consisting of coalitions between such families arbitrated by symbolic communication). I will argue that magic – as part of cultural immune system – alleviates the tensions arising from dividing loyalties between family and group in the face of environmental pressures. I will argue that magical practices address problems inherent to the nurture sphere, potentially unbalancing the relations between nurture spheres forming a community. I will also argue that in large-scale societies, suppression and prohibitions of magical practices are a way to diminish the role, power, and autonomy of small-scale communities.

Examining religious systems ethnographically: A methodological template

panel

Author(s): Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin

The ethnographic question of why particular traditions are the way they are remains a peripheral focus in the CESR. Thankfully, a few exquisitely detailed case studies and sets of reliable, systematic data yielded by rigorous empirical methods provide an opportunity to answer this question while developing a universal theoretical framework. This talk first defines religious systems minimally as behaviors done with the stated intent to influence culturally postulated spiritual beings, and maximally including other elements such as myth, taboo, meaning, etc. It then surveys the vices and virtues inherent to various attempts to make sense of such systems ethnographically. It concludes with proposing a template to account for religious systems in ways that can provide cross-culturally relevant explanations, while accounting for local variability in form and content.

System-theoretic approaches in the CESR

panel

Author(s): Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin

The fields of systems theory and cognitive science have been closely intertwined since their nascence. Although this intertwining had no bearing on early cognitive science of religion, recent years saw an inclusion of insights from systems theory into cognitive-evolutionary interpretations of religion and related phenomena. Characteristics such as structural complexity, interdependence of multiple variables, precarious dynamics, and emergence of hierarchical organization – postulated by systems theory – are evident in human societies. Thus, theorizing about religion from a system-theoretic perspective provides an opportunity to create comprehensive, multi-faceted models of religious cognition. This panel will bring together three distinct examples of how system-theoretic approaches may expand the understanding of the role of religion, magic, and morality in human culture.

Gods of Autonomy: Morality as autonomy-preserving regulation in multi-level social systems

panel

Author(s): Ciołkosz, Matylda*; Teehan, John; Sørensen, Jesper; Purzycki, Benjamin

This talk will propose a redefinition of morality from the perspective of the second-order cybernetic account of life underlying enactive cognition. Departing from the concept of autonomy as a constitutive feature of living systems and their couplings, and drawing on the model of social cognition as participatory sense-making, I will argue that morality is a mechanism of such regulation of tensions in complex social systems that prioritizes the preservation of autonomy at different levels of organization. I will propose to reconceptualize the ongoing debate about the relation between morality and religion by broadening the understanding of the moral beyond the altruistic, and by rephrasing the hypotheses regarding the evolutionarily adaptive significance of religion in terms of autonomy preservation.

The Development of Cross-Cultural Religious Belief

keynote

Author(s): Corriveau, Kathleen*

Learning about religious cognition via first-hand experience can sometimes be time-consuming and costly. In this talk, I highlight the role of adult testimony as a mechanism for providing efficient and effective information transmission through focusing on insight from the Developing Belief Network: a cross-cultural global collaborative spanning 5 continents, 18 countries, and over 30 unique religious samples. By drawing on cross-cultural samples, I aim to highlight global universals as well as cultural-specific variability in the extent to which children attend to various testimonial features when acquiring religious belief. Such variability has broad implications for how religious information is acquired and then transmitted within and across generations.

From worldview conflict to sheer difference discrimination: testing cross-domain links and the role of religion and political orientation

lightning

Author(s): Deschrijver, Eliane*

Discrimination can emerge from minimal differences in the absence of meaningful groups (sheer difference account) as well as from conflict between groups' ideological worldviews (worldview conflict account). Despite their different theoretical emphases and mechanistic focus, both lines of research implicate social difference as a driver of bias. This preregistered study (N = 301; Prolific, US-based) tested whether these two forms of bias are associated, and whether religiosity and political orientation moderate this relationship. Participants assigned money to another person that agreed versus disagreed on dots estimations in the sheer difference task. Participants allocated more in the former versus the latter condition, demonstrating robust sheer difference discrimination, which was moderated by levels of religiosity. Perceived dissimilarity strongly predicted colder evaluations within feeling thermometer measures of 40 social and political groups, consistent with the worldview conflict account. While the preregistered cross-domain moderation (sheer difference discrimination $\times$ perceived dissimilarity) was not supported, higher levels of religiosity predicted warmer overall group evaluations. Exploratory analyses suggested that political orientation, but not religiosity, may shape the extent to which sheer difference discrimination relates to worldview conflict prejudice. Overall, the findings indicate partially overlapping yet dissociable pathways to discrimination.

Religiosity and Teleological Thinking: Evidence from a Newly Developed Comprehensive Psychometric Scale

poster

Author(s): Drezno, Magdalena*; Lowicki, Paweł

Understanding the cognitive foundations of religious belief is central to the cognitive science of religion. Teleological thinking - the tendency to interpret events and experiences as purposeful or part of a broader meaningful order - has been identified as one such foundational cognitive bias. Previous research suggests that religious individuals exhibit stronger teleological thinking; however, it is not limited to those who identify with a given religion.

We developed and validated a self-report scale of teleological thinking in a nationally representative sample of N=1039 Polish adults, then examined its associations with religiosity (n=521). Results indicated that teleological thinking was positively related to all dimensions of religiosity. In addition, it revealed a theoretically meaningful gradient: the strongest associations were observed for dimensions of Religious Experience, Beliefs, and Prayer, whereas weaker correlations emerged with public religious practice. This pattern suggests that teleological thinking aligns most closely with cognitive-experiential dimensions (personal beliefs and perceived divine intervention) rather than with behavioral-institutional aspects of religiosity.

The newly developed scale of teleological thinking tendency demonstrated high reliability and strong convergent validity. The observed religiosity patterns suggest that teleological thinking may serve as a core cognitive bias that supports primarily experiential and belief-oriented dimensions of religious involvement.

Luck's six fingers: A multidimensional scaling analysis of social media luck stories

talk

Author(s): Ejova, Anastasia*

Modern Western concepts of luck intersect with many other concepts, including ‘chance’ and ‘hazards’. We piloted a quantitative methodology for uncovering the logic behind broad conceptions of luck. Australian students (N=139) rated 48 social media stories about luck on 22 features derived from Gordon’s (2023; <https://doi.org/10.14324/111.9781800083592>) analysis of 20th century luck narratives in books and films. A multidimensional scaling of distances between the stories identified six dimensions, all accounting for roughly equal amounts of variance: severity of counterfactual negative outcomes (degree to which “it could have been worse”), amount of personal control available under the circumstances, degree of consistency with cultural notions of luck, storyteller’s trait carelessness, extent to which the story describes connected rather than singular events, and extent to which a spiritual force is a possible explanation for story events. The large number of dimensions accounts for the breadth of luck concepts. The concepts associated with the first dimension are new, since counterfactual reasoning is often considered a defining feature of luck, but spontaneous counterfactual reasoning is in an upward direction (“it would have turned out fine, had it not been for...”). Our findings around the first dimension support Gordon’s intuition that “luck is permanently tinged with fear”.

Intersections of Spiritual and Material Norms in a Spiritual-Syncretic Community

poster

Author(s): Fewings, Alex*

Spiritual and material concerns are often presented and perceived as antithetical, with opposing or even hostile goals. In this project, we examined how spiritual-syncretic community members in the town of Glastonbury, UK, navigate one specific aspect of this conflict: the use of money in spiritual contexts.

We conducted twenty semi-structured interviews with community members to explore real and ideal interactions between financial and spiritual concerns in individuals' lives. This was supplemented by quantitative analysis of advertisements for spiritual or spiritual-adjacent services, stores, etc. in Glastonbury placed in *The Oracle*, a free community magazine, between 2014 and 2024. We aimed to discover connections between spiritual styles and styles of pricing or reference to financial concerns or change over time.

Interview results suggest a division between 'sellers', 'consumers' and 'non-consumers' regarding moral anxiety or criticism towards combining spirituality and money, and the use of learned apologetics to manage this anxiety. Initial analysis of *The Oracle* suggests that non-specific pricing approaches are substantially more popular, and increasing over time, while the practice of giving specific prices has declined. This supports the observed anxiety over the role of money in spiritual contexts.

I Belong in Glastonbury: The importance of belonging to Spiritual but not Religious individuals

talk

Author(s): Ford, Kathryn*; Kolios, Sotirios; Gervais, Matthew; Adair, Lora; Willard, Aiyana; Kline, Michelle

Aim : Previous research exploring motivations of the Spiritual But Not Religious (SBNR) has framed spiritual seeking outside of the religious mainstream as a highly individualized process. Research on the cognitive and personality predictors of SBNR beliefs supports this. SBNR individuals are often characterized as being individualistic and not motivated by a need to belong. However, this characterization is due in part to a lack of clarity around the concept of belonging. This research explores the way SBNR individuals think about and value belonging.

Method: This qualitative project consists of 30 semi-structured interviews conducted with SBNR individuals in Glastonbury, UK. The interviews explore various aspects of participants' spiritual journeys, beliefs, and values. Interviews were transcribed and analysed using thematic analysis.

Findings: When belonging is conceptualized as an affective state rather than affiliation to a group or groups, it becomes clear that affective belonging is sought after and valued by SBNR individuals. It was also found that for our participants, affective belonging is found when they are in social environments that allow them to present as their most authentic selves, without fear of judgement or ostracization. For our participants, Glastonbury provides this environment.

Affective Polarization and Emotional Synchrony in Collective Political Events

lightning

Author(s): Geraty, Meara*

Political polarization is linked to group violence, yet remains poorly understood as a collective emotional process. Survey research often attributes rising affective polarization to increased hostility toward political out-groups (negative partisanship), yet physiological evidence for this is inconsistent, and often has poor ecological validity. Moreover, political emotion is typically studied at the individual level, despite politics being fundamentally coalitional and collective. Here, we investigate whether political polarization is better understood through group-level emotional coordination, drawing on cognitive-evolutionary theories of ritual and coalitional bonding. We examine collective emotional arousal during a real-world Presidential debate watch party for Democratic supporters, assessing synchronized electrodermal activity with multidimensional recurrence quantification analysis (MdRQA). Individual arousal showed slight differences between out-group speech and in-group or neutral (non-candidate) speech, and no difference between in-group and neutral speech. In contrast, shared emotional synchrony increased robustly during candidate speech—regardless of party—relative to non-candidate segments. These findings challenge the presumed dominance of negative partisanship and highlight the importance of group-level emotional dynamics. By conceptualizing political watch parties as ritualized collective events, this study extends cognitive and evolutionary theories of religion to contemporary political coalitions, which could offer insights into interventions for the prevention of political violence.

Belief in Belief and Hidden Heathens: What Self Reports Aren't Telling Us About (Ir)Religious Cognition

keynote

Author(s): Gervais, Will*

Most folks on earth say they believe in a god of some sort — but many of them are concealing private religious doubts. Many atheists say they've got no need for religion — but many of them harbor subtle pro-religious intuitions that Dennet might call “belief in belief.” In this talk, I want to ask: What's the deal? When (and why) do self-reports both over- and under-estimate religious commitment? And how do the answers to these questions impact our theorizing on the cognitive, cultural, and evolutionary bases of religious belief and disbelief? I don't have the answers, but it'll be fun, y'all.

If religion is make-believe, then it's not here due to agency detection

lightning

Author(s): Gosiewski, Jędrzej*

Van Leeuwen (2023) controversially argues that religious credences are usually not factual beliefs but more akin to make-believe imaginings. I argue that if his thesis is true, then agency detection mechanisms – contrary to the common supposition (e. g. Barrett 2004) - cannot be responsible for generation or maintenance of supernatural beliefs. That is because detection of supernatural agency is supposed to be an extension of detection of natural agency. Since the latter is specifically aimed (due to evolutionary reasons) at providing us with factual beliefs, so should we think of the former.

If my proposal is right, there is an internal tension in combining Van Leeuwen's understanding of religious credences with his recent IREM model (Van Leeuwen & Van Elk 2019). Although on the IREM model general religious beliefs (e. g., God exists) are supposed to be mostly the result of cultural learning, personal religious beliefs (e. g., God visited me last night) are the results of agency detection capacities at work. In such a case people's cognitive attitudes towards the contents of (at least) personal religious beliefs would be factual and not particularly distinct from other everyday cognitive attitudes.

Abstract references:

Justin L. Barrett (2004) *Why Would Anyone Believe in God?* Walnut Creek, CA: Altamira Press

Neil Van Leeuwen (2023) *Religion as Make-Believe. A Theory of Belief, Imagination, and Group Identity*. London: Harvard University Press

Neil Van Leeuwen & Michiel van Elk (2019) Seeking the supernatural: the Interactive Religious Experience Model, *Religion, Brain & Behavior*, 9:3, 221-251, DOI: 10.1080/2153599X.2018.1453529

Understanding the morality of unbelievers: Non-theistic beliefs about right and wrong in ten countries

talk

Author(s): Haimila, Roosa*; van Mulukom, Valerie

Similar to religious believers, non-theists in different cultures may share overarching narratives about morality and what it is founded upon. However, this possibility remains understudied. We utilised open-ended survey data to explore what non-theists from ten countries ($N = 996$) described as the basis of their right and wrong. The findings indicate cross-culturally recurring patterns in non-theistic beliefs and belief clusters concerning 1) important moral principles and 2) perceived sources of morality. The results support research indicating that a lack of belief in God does not entail moral relativism and question views on non-theists primarily seeing morality as self-constructed. Instead, our findings point towards a more prominent role of social interaction and ‘social contract’ in non-theistic views about the basis of right and wrong. In light of the results, we also suggest that predominant ways of measurement in moral psychology may currently engulf diversity in non-theistic moralities, such as more communal secular ethics.

Compliant Dissent: Gendered Moral Outrage in 1299 Bologna and CCSR Theories of Moral Behavior

talk

Author(s): Hampejs, Tomáš*; Banach, Stanisław; Zbiral, David

In 1299 Bologna, the public execution of two citizens condemned for heresy provoked widespread unrest. When the inquisition threatened excommunication for anyone who failed to confess to dissenting speech, almost 400 citizens presented themselves, 60% of whom were women - a puzzle, as women rarely appeared as prominent actors in public contestation. Institutional coercion explains why people confessed, but not who confessed or what they said: depositions contain varied moral content well beyond minimal compliance, gendered asymmetry, and penalty variation.

We utilise competing frameworks from the cognitive and evolutionary science of religion to address this puzzle. Identity fusion theory and coalitional psychology jointly predict gendered mobilisation driven by person-level alliance structures; the devoted actor model predicts cost-insensitive moral defense, with gendered participation reflecting differential proximity to the sacred values at stake; CREDs theory predicts gendered cost-efficiency in signaling, with women's confessions yielding high reputational credibility at disproportionately low material penalties. Using computationally extracted clauses from the inquisitorial register analyzed through multi-level regression, we test these predictions across the gendered topical distribution, within-deponent co-occurrence of cues of community solidarity and institutional critique, and penalty structure. Results are discussed within a framework distinguishing scales of targets of moral trust.

God Concepts Across Development

keynote

Author(s): Heiphetz Solomon, Larisa*

Developmental science has repeatedly shown that young children do not draw strong distinctions between their own mind and God's mind and that adults are more likely than children to conceptualize God's extraordinary mind differently from humans' ordinary minds. Meanwhile, social psychology has demonstrated cases in which adults view human minds and God's mind similarly. I bring these two literatures together to propose that God concepts change in two ways across development. First, greater theory of mind capacities allow adults, versus children, to draw stronger distinctions between human minds and God's mind in many cases. Second, when adults do view these two types of minds similarly, they may do so for a different reason than children. Thus, a developmental perspective is useful not just in examining similarities or differences across age but also in understanding consistency or change in the underlying mechanism. Such a perspective can also shed light on how shifting God concepts can affect cognition and behavior.

The effects of behavioral synchrony on social bonding and preference transmission

poster

Author(s): Ishii, Tatsunori*

Behavioral synchrony—matching one’s movements in time with others—is a core feature of many religious rituals and has been shown to enhance social bonding, yet its role in social learning remains unclear. This preregistered study (<https://doi.org/10.17605/OSF.IO/FK9TB>) examined the effect of synchronization on social bonding and the transmission of preferences using an online synchrony task and a gaze cueing paradigm (Bayliss et al., 2007). Japanese undergraduates completed an online synchrony task in which synchronization of arm-movement with a model was manipulated (Sync vs. Unsync). Participants then reported perceived social bonding with the model and completed a gaze cueing task in which they rated their liking for living objects the model either gazed at or gazed away from. Results showed, as expected, that participants in Sync condition reported higher social bonding (e.g., likability), but there was little evidence that synchronization facilitated preference transmission. Nevertheless, exploratory analyses revealed that when objects appeared on the right side of the model, liking ratings were higher for gazed-at than gazed-averted objects only in the Sync condition. These findings replicate the social bonding effects of behavioral synchrony in an online context and suggest that its influence on social learning via gaze cues may be spatially specific.

Emotional Fit and Group Belonging in Women's Circles

poster

Author(s): Jerotijevic, Danijela*

In alternative spirituality, women's circles are informal groups in which emotional experience is the primary means of practice and the main measure of value. Unlike in institutional settings, trust and commitment in these circles emerge through shared emotional experience rather than formal structures.

This paper examines emotional fit and group identification in women's circles. Building on research indicating that emotional fit and group identification reinforce each other over time (Delvaux, Meeussen & Mesquita, 2015), I suggest that the practices typical of these settings, such as ritualised emotional arousal, vulnerability and publicly expressing deeply personal emotions, foster emotional bonding among participants. As emotional fit deepens, group identification strengthens, which in turn increases emotional bonding among participants, and emotional fit also functions as an implicit selection mechanism. Those whose emotional experience aligns with the group's dynamic will deepen their identification and commitment, while those who do not likely disengage.

The ideal of authenticity as genuine self-expression operates as the dominant interpretive frame through which participants make sense of this dynamic. At an implicit level, these mechanisms may also function as costly signals, establishing trust in an institutionally unanchored environment.

Embodied Cognition and Charismatic Authority in Ōmoto: Nao and Onisaburō Deguchi

poster

Author(s): Karaoğlu, Yetkin*

This presentation examines the emergence and consolidation of charismatic authority in the Japanese New Religious Movement Ōmoto through the lens of embodied cognition, focusing on its founding figures Nao Deguchi and Onisaburō Deguchi. Moving beyond symbolic or doctrinal interpretations, the study approaches shamanic practices such as spirit possession, automatic writing, visionary experience, and ritual performance as embodied cognitive processes that actively shape religious experience and leadership. Nao Deguchi's experiences of possession and automatic writing are analyzed as forms of embodied religious cognition in which heightened affect, sensorimotor engagement, and altered states of consciousness generate authoritative claims of divine communication. In contrast, Onisaburō Deguchi's ritual creativity, performative charisma, and visionary practices demonstrate a more reflexive and strategic deployment of embodied techniques to stabilize authority and expand communal imagination. From a cognitive and evolutionary perspective, the presentation argues that these embodied practices function as cognitively efficient mechanisms that enhance emotional salience, reinforce intuitive models of supernatural agency, and foster group cohesion. By revisiting Ōmoto through embodied cognition, this study contributes to broader discussions on ritual, charisma, and leadership in the cognitive and evolutionary sciences of religion.

Beyond Traditions: Tracing the cultural evolution of religious ideas with contextual embeddings

talk

Author(s): Kaše, Vojtěch*

This paper integrates theoretical insights from Historical Psychology, Cognitive Linguistics, and Lexical Semantics with methodological approaches from Natural Language Processing and Cultural Phylogenetics to propose a unified framework for studying the history of religious ideas at scale. Following recent advancements in automatic Word Sense Disambiguation and Induction, Concept Induction, and Lexical Semantic Change Detection, the study employs contextual word embeddings to capture how word meaning evolves over time and to model how new senses emerge from older senses through branching (e.g., via metaphorical extension). Operationally, “ideas” are treated as diachronic lineages of induced senses tied to historically attested usages in dated corpora. Drawing on large-scale digitized corpora of Greek and Latin texts spanning from Homer (ca. 8th c. BCE) to early modern prints of the seventeenth century CE, the paper introduces a series of case studies from the history of Greco-Roman and Judeo-Christian religious thought. By focusing on individual ideas/concepts rather than coherent religious groups or traditions, we avoid assumptions that are often built into group-based cultural evolutionary models of religion, yet are poorly suited to historical contexts characterized by high levels of plurality, heterodoxy, inclusivism, and syncretism.

Musical Sounds as Tools in Spiritual but not Religious Ritual Practices

lightning

Author(s): Kolios, Sotirios*

Among the Spiritual but not Religious, music may function as a mechanism for ritual innovation, yet its role in transforming ritual experiences remains largely unexplored. Ritual and music are often treated as distinct ontological domains, despite the fact that religious rituals almost always involve musical sounds. It has been proposed that music enhances the efficacy of rituals by amplifying their psychological and social functions. Rituals have been shown to promote social bonding, regulate emotions, and support wellbeing, while music exerts comparable effects, facilitating emotional regulation, social affiliation, and well-being.

Ritual behaviour has also been linked to humans' tendency toward over-imitation, the replication of non-instrumental actions that may serve to preserve cultural knowledge and constrain innovation. From this perspective, the rigidity often ascribed to ritual practices would appear to limit opportunities for creative modification, including the use of tools such as musical sounds to affect ritual outcomes. However, our ethnographic research among spiritual practitioners in Glastonbury, UK, challenges this assumption. Analysis of 30 semi-structured interviews indicates that practitioners consciously use musical sounds as functional tools to shape emotional states, intentions, and perceived energies. These findings suggest that ritual innovation can emerge through the deliberate and creative manipulation of musical sound.

Black and White Magic: Efficacy of In-group versus Out-group Rituals

talk

Author(s): Kopecký, Robin*; Boschetti, Silvia; Binter, Jakub; Příplatová, Lenka; Talmont-Kaminski, Konrad

This study examines how assessments of the efficacy of rituals intended to harm or help are affected by whether the ritual performer is an in-group or out-group member. Participants from a US sample (N=702) were asked to estimate the effects of rituals in six scenarios (3 helpful, 3 harmful), where the performer (Christian priest, Muslim imam, or spiritual healer) was varied between subjects. Their religiosity was explored using the DUREL and CREDs scales. Christian participants (N=351) judged helpful rituals as significantly more effective when performed by an in-group priest, and harmful rituals as significantly more effective when performed by an out-group imam. The non-religious participants (N=351) did not assess ritual efficacy differently based on the performer. For Christians, intrinsic religiosity predicted higher efficacy for helpful rituals, while private religious practice was associated with lower efficacy in some conditions and higher harm ratings for negative rituals. Religious upbringing had no significant effect. These findings show that assessments of ritual efficacy are strongly affected by in-group/out-group dynamics and that different dimensions of religiosity have distinct predictive relationships with these assessments. This has far-reaching implications for the study of supernatural beliefs, highlighting the methodological difficulty in studying relationship between magic and religion.

Embodied Attention: Can Meditation Bend Cultural Perception?

poster

Author(s): Kotherová, Silvie*; Popelka, Stanislav; Mentel, Andrej

Recent cognitive research suggests that religious practices may shape cognition not only through explicit beliefs, but also via embodied mechanisms of attention and perceptual habits (Barsalou, 2008; Lutz et al., 2008). Both broader culture and specific meditative practice create embodied habits through the lifespan. While early cultural environment may establish relatively stable perceptual tendencies, later religious practices, such as meditation, may induce practice-dependent modulation of perception. The question is how meditation practice influences attentional habits shaped by broader culture and how the effects of meditation are transferable across cultures.

This paper presents a work in progress by proposing an experimental design to compare attentional habit between Czech and Thai Theravāda meditation practitioners and matched non-meditating controls using the Navon task (Navon, 1977), measuring global–local attention dominance. The eye tracking measure allows differentiation between early perceptual orienting and later strategic control, enabling a more precise interpretation of attentional differences (Henderson, 2003; Rayner, 2009). Two competing hypotheses will be examined. Meditation practice leads to a significant change in global–local attention dominance, or the global–local dominance given by broader culture remains relatively intact by meditation practice. Research could thus contribute to understanding the layer in which our embodied perception is modulated.

Maternal compliance with mate-guarding practices increases patrilineal child investment in Mauritius

talk

Author(s): Kundt, Radek*

Across human societies, maternal caregiving is frequently supported by a broader network of helpers, who play a vital role in ensuring offspring's well-being. Because the amount of provisioning depends on relatedness, one important factor that elicits support from fathers and their kin is perceived paternity certainty. We examine how practices aimed to control and suppress female sexuality (mate-guarding) in the Mauritian context, rooted in traditional patriarchal religious systems, are associated with patrilineal investment. In Study 1 ($N = 359$), we identify key culturally relevant concepts related to compliance with mate-guarding practices using free lists. In Study 2 ($N = 252$), we operationalize the most salient strategies—such as religious involvement, obedience, and modesty—into measurable mate-guarding conformity items. We find that female mate-guarding compliance is associated with increased investment from fathers and, to a lesser extent, from fathers' relatives. Further analyses suggest that only certain strategies (modest speech, participation in public religious activities, wearing marriage symbols, and obedience) are effective in securing patrilineal investment. We discuss these strategies as potentially strategic signals of pro-familial values and sexual exclusivity that benefit mothers' child-rearing strategy by fostering paternal and patrilineal support.

Perceptions of Costs and Benefits in Ritual Participation – What Motivates Participants to Continue Partaking in Painful and Costly Acts?

talk

Author(s): Kundtová Klocová, Eva*

Many religious rituals require a high cost in time, money, and often physical energy or pain from people who choose to take part. Previous evidence suggests that participation can bring various benefits, including reputation, social ties, and cooperation. Considering these benefits, what then stops others from participating? Looking at potential cognitive mechanisms, intuitive processes coupled with social affiliation may exaggerate either the perceived costs or benefits of participation, shaping individuals' decisions to engage or abstain. To test this prediction, we gathered responses from 369 respondents in Mauritius, focusing on the perceived benefits and costs of engaging in the Kavadi ritual. Their responses provide rich insights into how individuals weigh spiritual, social, and personal rewards against the physical and financial demands of ritual participation. Focusing on differences in cost-benefit perceptions between in-group (Tamil) and out-group (Christian) participants, the results reveal that religious affiliation shapes subjective evaluations of ritual participation: in-group participants estimated material costs as larger than out-group participants, physical costs as lower, and benefits as larger. By highlighting these perceptual discrepancies, the study sheds light on the broader interplay between belief systems, cognitive biases, and collective practices in human societies.

The tephilin as an embodied, high-frequency special-instrument ritual in Judaism

poster

Author(s): Kuroli, Veronika*

In Jewish ritual, a male adult participant prays every weekday morning with tephilin donned on his head and hand — it is a positive mitzvah, a commandment. The tephilin boxes contain four passages from the Torah that are written on parchments prepared in a way prescribed in Jewish legal texts, and the scribe who writes them must do his work with the proper intention. Any deviation from the prescribed requirements during the preparation of tephilin renders them unfit for use. To participate in the ritual, this instrument is indispensable. According to Lawson and McCauley's ritual form hypothesis (RFH), the donning of tephilin can be described as a special instrument ritual, and it represents a unique variation of it. It is not the intention of the person praying that matters, but that of the person who makes the tephilin, and how it is made. Since this act is performed every morning, it can be considered a high-frequency ritual. The Torah texts contained within the tephilin boxes embody all the meaning carried by those texts. The participant literally takes the commandments upon themselves, binding them onto their own body.

Unpredictable Socioecology and the Context-Dependent Expression of Religious Norms in Mauritius

poster

Author(s): Lang, Martin*; Maño, Peter

Normative decision-making is central to collective action, as it often requires individuals to forgo partial personal gains in order to sustain broader within-group equality. Religious traditions have been theorized to foster such normative conduct through mechanisms including beliefs in punitive supernatural agents and participation in collective rituals. Yet these effects may not operate uniformly across contexts. Given that religions are multifunctional cultural systems, their norm-regulatory role may vary with local socioeconomic conditions. We tested this idea among 198 Mauritian Christians recruited from neighborhoods differing in material, economic, and social security. Participants reported religiosity and socioeconomic indicators, stated how much people should donate to charity (local religious norm), and then made real, incentivized contribution decisions. We found that religiosity was associated with stronger endorsement of prosocial contribution norms among individuals of low economic status, but not among individuals of high status. However, this heightened endorsement did not consistently translate into higher contributions. Instead, more religious participants in economically marginalized contexts exhibited a larger gap between endorsed norms and actual behavior. Moreover, religiosity was associated with longer response times when people failed to match their stated standards with actual contributions, suggesting cognitive conflict. Interpreted against the backdrop of Mauritius' history of structured inequality, these findings suggest that economically marginalized individuals may draw on religiosity as a means of stabilizing cooperative networks and fostering norms of sharing and mutual support. Nevertheless, behavioral realization of these norms depends on material possibilities, indicating that commitment alone does not guarantee compliance when resource are scarce.

Local gods, supernatural punishment, and the expansion of human society: A cross-cultural causal analysis

panel

Author(s): Major-Smith, Daniel*

Do beliefs in punitive and omniscient supernatural agents promote cooperation among distant and unrelated individuals, facilitating large-

scale cooperation? While previous cross-cultural research suggests it might, many open questions remain, chief among them the extent to which beliefs regarding local

deities - as opposed to more traditionally ‘morally-concerned gods’ - may enhance cooperation. Here, we extend this previous work by including data from seven new sites (total sites=22: total n=ca. 2,800) with data on experimental measures of cooperation towards distant co-religionists in the local religious tradition (using Random Allocation Games [RAG] and Dictator Games [DG]). Our estimand is the joint causal effect of supernatural punishment and omniscience/monitoring beliefs on cooperation with distant co-religionists, and whether this is moderated by ‘moralising’ vs ‘local’ religious traditions. Analyses will use aggregated binomial (for RAG) and ordinal (for DG) multi-level Bayesian models, with g-computation to calculate marginal causal effects of interest. These results will identify whether any effect of supernatural punishment on cooperation is specific to moralising religious traditions or applicable to deities more broadly, with implications for understanding the interplay between religion and cooperation throughout human evolution. Data collection for this project is currently in progress, and analyses will be finalised by the conference.

Gods, karma and witchcraft in Mauritius: Beliefs in supernatural causation of diseases

talk

Author(s): Maño, Peter*

In this paper, we address one of the core issues in ritual studies - the perception of ritual power and its practical application. Specifically, we examined disease treatment among Mauritian Hindus and the perceived efficacy of ritualized procedures in cases where a.) the cause of the disease was known vs. unknown, and b.) the disease was mild vs. severe. Our subsequent hypotheses were that in cases of a.) uncertainty (unknown cause of disease) and b.) lack of control over the outcome (severe disease), people would prioritize costlier religious solutions (e.g., costly communal rituals) rather than alternative approaches (e.g., seeing a guru), medical treatments (e.g., seeing a doctor) and less costly rituals (e.g., prayer). Our underlying assumption was that ritual participation costs would proportionally reflect the desired effects in the presented scenarios. In other words, greater uncertainty and less control would lead to greater reliance on religious rituals and greater sacrifices. Finally, we also investigated whether uncertainty and lack of control lead to increased attribution of supernatural causation of diseases - that is, whether they could be caused by the gods, karma, or witchcraft, and why that would be so.

Sleights of Mind: Using Magic to Manipulate Belief in God and Free Will

talk

Author(s): McKay, Ryan*

Classic techniques from performance magic — sleights of hand, misdirection, and props — can be used to influence people’s beliefs and decisions. In this talk I will argue that such techniques can be valuable additions to the cognitive scientist’s toolkit.

First, I will describe three studies in which we “magically” exposed participants to reversals of their originally indicated beliefs about questions such as the existence of life after death and whether religion is a cause for good in the world. A substantial portion of our participants not only failed to detect these reversals, but constructed coherent arguments supporting the opposite of their original position. Moreover, our experimental manipulation had a large effect on subsequently measured religious attitudes, which moved in the manipulated direction.

Second, I will present ongoing work with a paradigm that incorporates elements of performance magic to emulate plausible future neurotechnologies. Using this paradigm, we can offer participants a compelling experience that we can predict — or even control — their future decisions.

I will argue that with stringent ethical safeguards, these paradigms hold great promise for illuminating contentious topics in the cognitive science of religion.

Exploring Identity Fusion and Psychological Kinship in the U.S. Military: Training, Rituals, and Dysphoric Events

talk

Author(s): Medeiros, Steve*

Identity fusion describes a profound sense of “oneness” and “shared essence” with a group, often producing psychological kinship (Buhrmester, 2015). Fusion may increase willingness to fight, kill, or die for one’s in-group (Whitehouse et al., 2018). Although the causal roots of identity fusion remain underdeveloped (Bautista et al., 2025), prior research suggests that shared rituals, hardships, and close physical and psychological proximity in military life may foster fusion and psychological kinship (Buhrmester et al., 2015; Winslow, 1999). This aligns with the shared-dysphoric-experiences pathway, which posits that collectively experiencing traumatic or painful events (e.g., combat, intense initiation rituals) promotes identity fusion (Whitehouse et al., 2018). Using identity fusion scales; willingness to fight, kill, and die scales (Swann et al., 2009); and in-depth semi-structured interviews with current U.S. military personnel (N=62). This research examined the impact of shared negative (dysphoric) and positive (euphoric) events, military rituals, and self-selection (i.e., Military Occupational Specialty) on the development of identity fusion. Results suggest an interplay of causal factors. Shared euphoric experiences overwhelmingly accompanied shared dysphoric experiences in participants’ recollections of identity fusion and psychological kinship. Additionally, combat orientation (e.g., infantry vs. administrative roles) significantly influenced the emergence of psychological kinship.

Religiosity and the Regulation of Threat Perception in Modern Societies

poster

Author(s): Miklousic, Igor*; Lane, Justin; Kosnáč, Pavol; Pavlović, Tomislav; Bullock, Josh; O'Lone, Katherine ; Shults, LeRon

Evolutionary accounts propose that religion regulates threat and uncertainty while coordinating coalitions. Religious belief may provide meaning and perceived control, whereas ritual participation may reduce anxiety through predictability and shared practice. At the same time, religion can structure group boundaries and shape interpretations of social risk.

Using a national online survey of Croatian adults ($N = 1,004$; December 2025–January 2026), we examined whether self-rated religiosity and frequency of religious service attendance are associated with perceived threat across domains including general societal concerns, evolutionarily recurrent threats, AI-related risks, and belief in a dangerous world. We also analysed identification with family, nation, Europe, humanity, and religious groups.

Religiosity did not show a consistent threat-buffering effect. It was most clearly associated with higher concern about immigration and cultural change, an association that weakened once political orientation and identification patterns were considered. Ritual attendance showed weak associations with lower generalised danger beliefs. Overall, religion's link to threat appears domain-specific and embedded in broader coalitional alignments.

Ecological Validity in Decision-Making Research: A Triad-Based Study on Cognitive Biases

lightning

Author(s): Muczková, Markéta*

Superstitious beliefs and cognitive biases frequently influence decision-making under uncertainty. I investigate whether superstitious objects serve as heuristics—mental shortcuts that reduce cognitive load when facing unknown outcomes and unclear patterns. My research uses the "Amulet Game," in which participants choose between two boxes, with the option to purchase a symbolic "Amulet" that can influence the outcome each round. The core of this study is a methodological triad consisting of online testing, laboratory eye-tracking, and a physical real-life simulation with eye-tracking glasses. Testing across these diverse environments ensures ecological validity and data reliability. It allows a comparison of behavioral patterns between digital settings (where participants may attribute outcomes to an algorithm) and real-world interactions. To maintain consistency for cross-environment analysis, the reward structures and game settings remain standardized across all three realms. I hypothesize that purchasing the Amulet correlates with faster decision-making. That suggests that superstitious beliefs function as heuristics to manage uncertainty. By integrating eye-tracking data from both stationary and wearable devices, I aim to map the visual attention patterns that characterize these—often biased—processes. I will present preliminary data from the Amulet Game, with the primary aim of demonstrating the importance of ecological validity.

Vigango Carvings Shrine; Kauma Traditionalism Religion Ritual Power Center.

poster

Author(s): Mwangi, John*

The prestigious vigango carvings are produced as objects of veneration among the Kauma natives of Kenya, found in kaya shrines, honoring elders who were initiated into the secret Gohu society. These carvings are erected following posthumous communications, often reported through dreams in which deceased kin appear to living family members, typically coinciding with periods of misfortune or social disturbance. Within Kauma traditional religion, this practice is embedded in a broader cosmological framework centered on the kaya, a ritually potent sacred grove and shrine that embodies spiritual authority and ancestral power. The Kaya serves as a site for ritual healing, rites of passage, and other ceremonial activities, including those involving contemporary political figures. Kauma religious cognition revolves around the dream world and mental experience, which are understood as key mechanisms through which ancestral presence, moral order, and ritual knowledge are communicated and enacted. The study employed a Qualitative Ethnographic Case Study research design with a Cognitive Focus on memory and meaning-making. Justin Barrett's agency detection theory lens to investigate vigango shrines, which house active spiritual agents in the form of ancestor spirits. Kauma Vigango ancestral spirits are perceived as intentional beings who are custodians of the family.

Reflexivity of Kauma Traditionalism, Religion, and Climate Change in coastal Kenya.

talk

Author(s): Mwangi, John*; Kusiak, Pawel; Tarusarira, Joram; Dama, Sebastian Dama

The Kauma community of coastal Kenya, before the arrival of Europeans in Africa, was a prosperous grain farming community; nevertheless, today, poverty levels are very high, plagued by new diseases. Kauma's traditional religion has had a strong influence on how they relate to nature, with rainmaking powers especially cherished. Social scientific scholarship on the relationship between religion and the climate change crisis reveals a gap, in a pressing need for more robust quantitative data from beyond the Eurocentric world, especially in the Global South, African traditionalist religious rural settings, where there is scant data. The study investigated how Kauma traditional religious beliefs shaped their climate views, during global climate change in terms of floods and famines perceived as God's punishment vis-à-vis human-induced causes, such as the eco-massacre of their Kaya forests, which has generated a fierce inter-generational conflict between younger-generation denialism and the older generation's acclaimed forest stewardship on decline. This study examined how evolved cognitive dispositions, including beliefs in supernatural agents and communal identity, shape interpretations of climate-related threats. Methodologically, the study drew on Religious Ecology and Reflexive Modernization theories, enabling a non-Eurocentric and reflexive analysis of religion as an adaptive and dynamic force within the climate change discourse.

Sensing gods, ghosts, and spirits: Feelings of presence across Mauritian religions

talk

Author(s): Nenadalová, Jana*; Cigán, Jakub*

Feelings of presence (FoPs)—sensations that another agent is nearby even though no one is around—are common across cultures. Often, they are part of subjective experiences within various religious and spiritual traditions and sometimes even purposefully trained. However, so far, FoPs were predominantly studied in the WEIRD population and treated as a homogeneous phenomenon, more closely linked to individual psychological traits than to cultural practices.

Thus, in the present study, we examined FoP experiences in greater detail, focusing both on the role of practices and the psychological trait of fantasy proneness. We collected survey data from the non-WEIRD population of 319 Mauritian adults from diverse ethnic and religious backgrounds (Hindu, Christian, Muslim, Tamil, and Telegu), measuring two basic types of FoPs (pleasant and unpleasant) across relevant sensory modalities (touch, bodily feelings, smell/taste, vision, hearing), religious/spiritual practices, and individual differences in fantasy proneness. The quantitative survey was enhanced by interviewing 5 adults who reported intensive FoP experiences. We found that while certain practices are indeed positively associated with FoPs (across their pleasant and unpleasant forms and across different sensory modalities), fantasy proneness showed only rare credible associations. The findings thus provide valuable insights into how religious practices influence FoP, supporting learning-based models of spiritual experiences and encouraging further research in this area.

The age of immortality and its annihilation. A new theory of the Mesopotamian flood story

poster

Author(s): Peiser, Benny*

This paper assesses some of the major discoveries Assyriologists have published in recent decades and that have significantly changed our understanding of the Mesopotamian flood traditions. New insights have allowed researchers to develop novel theories of how and why Old Babylonian flood motif may have come into existence. The paper suggests that the Mesopotamian traditions of a universal flood and human (near) extinction are aetiological myths that emerged in response to the creation of the Sumerian King List. It describes the historical context and ideological rationale for the creation of global flood traditions as cognitive aetiologies that attempt to explain the apparent termination of immortal kingship, the annihilation of the first human race and the end of an apparent age of immortality. It questions conventional paradigms and proposes new explications surrounding some of the ancient Near East's key ideas and religions.

"Religion as Adaptive System," Shifting Morality, and Deidentification

talk

Author(s): Penner, Myron*

This paper applies Purzycki and Sosis's model of "religion as adaptive system" to two relatively recent examples of religious change. The first example is the shift among American evangelical leaders on the necessity of high moral character in the President of the United States. In *Jesus and John Wayne*, historian Kristen Kobes Du Mez demonstrates how evangelical endorsement of Donald Trump in 2016 was the natural conclusion of historical trajectories within twentieth-century American evangelicalism. I argue that alongside Du Mez's historical analysis, Purzycki and Sosis's model of religion as an adaptive system can explain why evangelical leaders shifted from their negative assessment of President Clinton, to de-emphasizing moral character in their endorsement of Donald Trump.

The second example of religious change draws on recent work on religious deidentification. In *Done: How to Flourish After Leaving Religion*, Daryl Van Tongeren suggests that many religious participants feel cognitive dissonance when they experience what Van Tongeren dubs "the four horsemen of religion's apocalypse." I argue that an additional way of interpreting Van Tongeren's research is that feeling the effect of the "four horsemen" prevents some from receiving the adaptive benefits of the religious system as described by Purzycki and Sosis.

Perceived Credibility of Spiritual Texts: AI vs. Religious Authority

talk

Author(s): Pugliese, Nastassja*

This presentation reports findings from an experimental study investigating how authorship attribution influences the perceived credibility, depth, and emotional impact of spiritual texts. Using a between-groups design, participants were randomly assigned to read the same spiritual-like statement attributed either to artificial intelligence, to a religious leader, or to an unknown source (control). The study was conducted online and included measures of perceived credibility, impact, depth (Likert scales), religiosity (DUREL), and beliefs about the soul-body relation.

Results indicate systematic attribution effects. Participants in the Religious Leader condition showed the highest mean scores for credibility and depth, whereas the AI condition yielded lower evaluations overall. In the control group, most participants classified the authorship as unclear, suggesting that source labeling plays a decisive role in interpretive framing. Memory validation tests showed that approximately 70% of participants correctly recognized stimulus content, supporting task engagement.

These findings contribute to ongoing debates about AI-generated spiritual discourse and authority perception. By isolating source attribution while keeping textual content constant, the study clarifies how epistemic trust and religious authority are socially constructed and cognitively mediated in contemporary digital contexts. The presentation will report these results and discuss their significance.

Gods, Games, and the Socioecological Landscape Project

panel

Author(s): Purzycki, Benjamin*

From the serene mountaintop rituals of Inner Asia to the intense Sundance rites of the American Plains, traditional religious practices exhibit considerable variation around the world. What accounts for this variation? While generations of social scientists have observed important relationships between religion and social cohesion, only recently have researchers actively pursued this question ethnographically using state of the art methods from the natural and social sciences. If religion contributes to the kinds of cooperation that bolster societies, the kinds of cooperative challenges that people face should play an important role in the content and form of religious expression. To what extent do religious systems conform to local challenges to cooperation? Are they effective in overcoming these challenges? How expansive is this cooperation? Is it limited to local communities or do traditional religions mediate relationships between groups? By rigorously studying some of the dazzling variety found in the world's religious traditions, the Gods, Games, and Socioecological Landscape Project seeks answers to these questions. This panel will profile some of our efforts.

Sleep Paralysis: When Fear of the Dark Becomes Religion

talk

Author(s): Příplatová, Lenka*; Boschetti, Silvia; Kopecký, Robin; Binter, Jakub; Talmont-Kaminski, Konrad

Sleep paralysis (SP) is a common liminal state in which REM atonia persists into wakefulness, often paired with vivid hallucinations, a sensed presence, and intense bodily sensations. Across cultures, such episodes are readily available “raw material” for supernatural interpretation—but the experience itself does not automatically translate into supernatural belief. In this talk, we argue that SP is best understood as an anomalous experience whose downstream meaning depends on stable cognitive styles that bias people toward or away from supernatural explanation. Using a moderate Czech-language online sample, we compare participants with (n=285) and without SP (n=222) and measure cognitive styles (rational/experiential subscales), supernatural belief, and exposure to credibility-enhancing displays, alongside detailed SP phenomenology. We then (i) test whether SP history moderates the association between thinking style and supernatural belief, and (ii) map heterogeneity within SP via latent class analysis of sensory and emotional profiles. Our results indicate that SP experience primarily amplifies the link between cognitive style and belief: rationality is more strongly protective against supernatural belief among SP experiencers, whereas intuition and emotionality relate more strongly to supernatural belief in this group. Furthermore, latent class analysis suggests that sleep paralysis is heterogeneous, with experiencers clustering into two distinct experiential profiles. Taken together, the results sharpen the question of how—and for whom—anomalous experiences in general are translated into supernatural interpretations.

The Fault In Our Stars: Astrology As Social Signals For Dating

talk

Author(s): Rosun, Nachita*; Baimel, Adam; Burdett, Emily; Penner, Myron

The prevalence of astrology and its role in romantic relationships have become increasingly visible in the modern dating market. Online dating platforms observe a growing number of individuals disclosing their star signs, raising questions about the social functions of this belief system. Research on the social coordination functions of supernatural beliefs predominantly focuses on religion. Our research extends this literature by looking at how star signs, which are comparatively less costly signals, shape 1) social perceptions and 2) mating assortment in the modern world. We approach this through 2 online studies with a UK sample.

Study 1 (N= 100) qualitatively explores social perceptions associated with astrological signalling. Experimental study 2 (N = 1000) presents dating profiles 1) with and 2) without star signs to understand their influence on social perceptions of theoretically relevant traits (trustworthiness, prestige, promiscuity). We look at cooperative consequences through participants' willingness to engage in short- and long-term relationships.

Preliminary results suggest gender asymmetries in the social functions of astrology. Examining astrology through a cooperation lens addresses a gap in cognitive science of religion and tests how supernatural beliefs detached from institutional religion structure social coordination in modern mate markets.

Prosocial Reinforcement Learning in a Multi-Religious Society: Insights from Mauritius

talk

Author(s): Ružičková, Alexandra*; Borhani, Khaterreh; Golbabaei, Soroosh; Lang, Martin

Across religions, supernatural agents are believed to reward or punish people for how they treat others, reinforcing behaviour aligned with community norms. Yet the cognitive processes underlying such prosocial learning remain unclear. We examined how positive feedback (rewards) versus negative feedback (absence of rewards) shapes learning to benefit others in need compared with learning to benefit oneself. Using a computerized reinforcement-learning task with a multi-religious Mauritian sample, we fitted a computational model estimating positive and negative learning rates when learning for oneself and for others in need, and tested whether these rates systematically varied along religiosity, views of God, and morality. Preliminary analyses did not support the hypothesized effects of religiosity or morality on prosocial reinforcement learning, neither the prediction that belief in punitive God would predict larger negative learning rates during prosocial learning. However, participants learned more effectively from negative feedback when learning to benefit themselves, whereas they were more sensitive to positive feedback when learning to benefit another person in need. These results indicate that prosocial learning is particularly supported by positive reinforcement, regardless of individuals' religious beliefs or morality. Religiosity or particular views of God therefore does not appear to alter how people learn to benefit others.

Folk healers in Eastern Poland. Healing Practices at the Margins of Orthodoxy

talk

Author(s): Sadanowicz, Ewelina*

The paper examines the contemporary practice of *szeptuchy* (folk healers) in the Podlasie region of Eastern Poland through the theoretical framework proposed by Pascal Boyer in his works on religions in the wild and wild traditions (2019, 2021). Operating within a cultural environment dominated by Orthodox Christianity, *szeptuchy* represent a form of informal religiosity focused on pragmatic problem-solving rather than on institutional worship.

Using Boyer's model, the presentation sees their practices as a response to illness and personal crises, addressed through appeals to supernatural agency. The activity of *szeptuchy* reflects the core features of "wild traditions": the absence of institutionalized theology, the central role of individual specialists, orientation toward everyday concerns.

The analysis suggests that the authority of *szeptuchy* is grounded not in church structures but in the search for reliable sources in situations of uncertainty. Their persistence, despite the long-standing presence of organized religion, supports Boyer's claim that informal religious forms are cognitively resilient and tend to reappear even under institutional pressure.

Drawing on ethnographic material from Podlasie, the paper argues that *szeptuchy* should be understood not as marginal folklore, but as a contemporary expression of a broader and enduring pattern of human religiosity functioning alongside religious institutions.

Pilgrimage as Attunement: How Sacred Spaces Are Perceived Through Culturally-Shared, Embodied Affordances

talk

Author(s): Saraei, Mohammadamin*; Xygalatas, Dimitris

Sacred spaces profoundly shape human experience, yet the perceptual and embodied mechanisms underlying their influence remain unclear. Across two virtual reality studies with university students, we investigated how sacredness modulates affordance perception and psychophysiological states.

In Study 1 (N=95), spaces framed as sacred elicited feelings of awe and a cognitive "small self." Paradoxically, these same spaces triggered an embodied proprioceptive expansion in a VR affordance task, indicating that participants perceived their bodies as larger and more capable. Thematic analysis further identified unique ritual affordances (e.g., to pray, to perform rituals) and prohibitions embedded in these settings.

In Study 2 (N=96), sacred environments significantly enhanced postural stability and gait smoothness after exposure, suggesting that stillness and controlled movement are embodied correlates of reverent engagement with sacred space. Heart rate variability analysis revealed a pattern consistent with heightened cognitive absorption and engagement across all VR conditions, while self-reported piloerection was not corroborated by objective physiological measurement. Cultural consensus analysis confirmed a strong shared model of sacred affordances across participants.

Together, these findings suggest that sacredness is a relational property, directly perceived through embodied affordances via attunement. This attunement humbles visitors cognitively through awe while simultaneously enabling them physically through enhanced stability and expanded proprioception, offering a non-representational account of how sacred environments impact human experience.

Beyond Punishment: How Religious Believers Use Contempt to Enforce Social Norms

talk

Author(s): Shabani Vikaei, Anese*; Lang, Martin

While punishment sustains social norms and cooperation, it is personally costly and therefore vulnerable to free-riding. Previous research has proposed that beliefs in moralizing gods reduce these costs by offloading punishment to supernatural agents. However, such offloading is vulnerable to invasion by free-riders who feign belief while avoiding enforcement of norm transgressions. We argue that believers therefore complement supernatural punishment with contempt toward transgressors. Expressed through exclusion, social coldness, and withdrawal of support, contempt represents a low-cost yet powerful and understudied mechanism of norm enforcement.

To test this idea, we survey 400 U.S. Muslim participants, an understudied population in this field, and randomly assign them to respond to norm breaches either by punishing the transgressor or by expressing contempt. We aim to replicate prior findings on punishment offloading, predicting that higher religiosity is associated with reduced punishment, while hypothesizing that religiosity does not reduce contempt toward norm violators. We additionally examine whether these decisions to punish/withdraw support are more intuitive or deliberative among religious participants. Data collection is ongoing and will be completed, including analyses, by the time of the conference.

Systematizing the Sacred: Coding Divinatory Practices for Cognitive Analysis

talk

Author(s): Sorensen, Tyrel*

Divination has been practiced across cultures and throughout time. Frequently, it is associated with institutional and lived religious practices, either as an accepted part of, or an antagonist to, orthodox practice. Yet divination remains an uncommon, though not untouched, topic in the cognitive science of religion. Quite likely, divination has not attracted much attention because the class of divinatory practices is broad and the variety therein bewildering. My goal in this paper is to present the preliminary results of an attempt to qualitatively code and organize the vast array of divination practices into a formal system with three key parameters. These are 1) the directness of involvement by a superhuman agent; 2) the amount of human involvement; and 3) the degree to which interpretation is either intuitive or programmatic. Additionally, I will argue that delineating divination practices along these parameters provides the starting point for determining what differing cognitive processes may be associated with different divination techniques and which processes are likely to be activated for people occupying the various divinatory roles (e.g., professional diviner, spectator, etc.). Finally, I will suggest that this organizational scheme shows divination to exist on a spectrum with some kinds of scientific prediction practices.

Mapping Moral Domains in the Sermon on the Mount: An Explorative Study

poster

Author(s): Špiclová, Zdeňka*; Nikki, Nina; Söderholm, Harri

This poster presents an explorative study examining the applicability of Morality-as-Cooperation theory to the Sermon on the Mount in the Gospel of Matthew. MAC theory, coined by Oliver Scott Curry, conceptualizes morality as a set of evolutionary grounded solutions to recurrent cooperative problems and, with the help of game theory, divides them into seven moral domains. Five participants from the universities of Helsinki and West Bohemia, with education in biblical studies, independently coded 102 segmented units of the Koine Greek text of the Sermon according to these domains, and the resulting data were analyzed using mixed qualitative computational methods. The results demonstrate that all seven MAC moral domains are substantially represented in the Sermon, with reciprocity and deference emerging as particularly prominent, supporting the view that early Christian moral discourse can be fruitfully interpreted through this theory. At the same time, significant inter-annotator divergence highlighted the interpretative ambiguity inherent in metaphorical and theologically charged religious texts, raising important methodological challenges. The poster will present both the substantive findings and the methodological implications for the broader application of MAC theory to early Christian corpus.

From priors to phantoms: Testing the predictive processing model of agency detection

talk

Author(s): Szymanek, Piotr*

The Predictive Processing model of Agency Detection (PPAD) proposes that false perceptions of agency arise from prior expectations interacting with low sensory reliability. This contrasts with the HADD model, which has been invoked to explain the persistence of religious beliefs. In my talk, I would like to present findings from a series of collaborative studies testing the predictions of PPAD and HADD.

In the first two experiments, we administered biological motion and voice detection tasks, manipulating sensory noise and participants' expectations about the likelihood of perceiving an agent. In both studies, expectations biased agency detection, with effects strongest under degraded sensory input. In the third study, we employed virtual reality to examine whether the feeling of threat increases agency detection; no reliable effect was observed. Moreover, across all three studies, agency detection was not associated with supernatural belief.

Taken together, these findings support the view that agency detection operates via predictive mechanisms rather than a specialized hyperactive detector. While the existence of agency-related biases cannot be ruled out entirely, the results suggest that accounts such as HADD require theoretical refinement, and support PPAD as a plausible mechanism underlying encounters with supernatural agents.

From Experience to Interpretation: Pattern Perception, Ritualisation, and Supernatural Explanation

talk

Author(s): Talmont-Kaminski, Konrad*; Boschetti, Silvia; Kopecký, Robin; Příplatová, Lenka

By focusing on “experiences deemed religious”, Ann Taves reshaped how religion can be analysed within the cognitive science of religion, encouraging a clear separation between experience and the interpretations through which it acquires religious meaning. Our own research repeatedly points to a similar distinction. We have found that undergoing sleep paralysis hallucinations, for example, is only weakly connected to holding supernatural beliefs. Such experiences tend to be interpreted in supernatural terms primarily when a person’s thinking style supports such a link. Likewise, in studies of spontaneous ritualisation, patterned and apparently superstitious behaviour emerges directly from attempts to detect and control structure under uncertainty, without requiring any corresponding belief. This distinction maps closely onto the model-free versus model-based reasoning distinction used by Chris and Uta Frith and others: ritualised behaviour can arise from pattern search without engaging interpretive reasoning. Taken together, these findings suggest a broader research programme concerned with how pattern perception and causal inference relate, and in particular with the conditions under which people move from behavioural adaptation to supernatural explanation. In this talk, I outline the argument for this programme and the approach we propose to pursue.

Predictive Processing in Religious Experience

talk

Author(s): Timmermann Østerlund, Anton*

As descriptions of predictive processing and religious experience have grown increasingly complex, scholars have emphasized the role of several hierarchical cognitive layers operating at distinct spatiotemporal scales. A key methodological challenge, however, is how to capture such dynamics in ecologically valid religious contexts. This presentation will address this challenge by demonstrating how a mixed-methods design, combining free-listing tasks, portable eye-tracking, and micro-phenomenological interviews, can provide deep and highly detailed analyses of religious experiences, measured before, during, and after their occurrences. In a study, I invited participants to a moment of silence and to engage in contemplation within Danish churches, allowing for the study of religious experience in naturalistic settings. The findings illustrate the complexity of religious experience, showing that participants oscillate between periods of online perceptual cognitive engagement and reflexive offline cognition. These dynamics are reflected in participants' prior expectations and experience with the church (before), oculomotor behavior (during), and retrospective self-reports (after). The study argues that only by integrating multiple complementary measures is it possible to adequately capture the hierarchical and temporally distributed nature of religious experience, and to empirically represent key features of the predictive processing framework in ecologically valid settings.

God and self: exploring affective aspect of religious engagement in narcissism

poster

Author(s): Tokarz, Julia*; Lowicki, Paweł; Zajenkowski, Marcin

Although the relationship between narcissism and religiosity remains ambiguous, a closer examination of these multidimensional constructs may reveal specific patterns. Previous studies suggest that individuals with narcissistic traits may be drawn to religion for social or emotional benefits and may also experience greater difficulties in their spiritual life. The present study explored the affective dimension of religious engagement in relation to different aspects of narcissism. A sample of 380 adults completed measures assessing facets of narcissism (agentic, antagonistic, neurotic, communal), emotions toward God, attachment to God, God image, and divine entitlement. The results revealed distinct affective profiles associated with different narcissistic facets. Higher grandiosity was associated with more secure attachment to God, loving God image, and more positive emotions. In contrast, vulnerable and antagonistic narcissism were linked to more negative emotional experiences in the relationship with God. Notably, the antagonistic aspect was related to anxious attachment toward God both directly and indirectly through perceiving God as a punitive figure. Taken together these findings suggest that different facets of narcissism may be linked to distinct affective patterns of relating to God, potentially reflecting differences in the emotional meaning of religious engagement for individuals with varying narcissistic traits.

Small Acts, Strong Bonds: Trust, Low-Cost Rituals, and Subtle Religious Signals in Rural Christianity in Slovakia

talk

Author(s): Uhrin, Michal*

Since the 1990s, the cognitive and evolutionary study of religion has offered influential frameworks for understanding ritual as a system of communication. One prominent approach, costly signalling theory, emphasizes ritual participation as credible indicator of commitment and trustworthiness. Drawing on longitudinal ethnographic research conducted in three Roman Catholic and Greek Catholic communities in rural Slovakia, this paper demonstrates that low-cost, high-frequency rituals, low-cost and low-frequency practices, and subtle signals constitute a central and effective signalling system in contexts where costly rituals are rare or absent. The analysis shows that these forms of signalling play a crucial role in communicating commitment, maintaining cooperation, and building trust and group cohesion. Particular attention is paid to subtle signals, which are often private, repetitive, and directed toward the self or supernatural agents, and which may function through self-signalling and anxiolytic effects. The paper argues that signals of varying cost and frequency must be analysed relationally and contextually, taking into account reputation, cumulative behaviour, and receiver evaluation. Methodologically, it highlights the value of longitudinal ethnography combining participant observation and interviews for capturing the dynamics of religious signalling systems.

Mystical experience, cognition, and attention

talk

Author(s): Van Eyghen, Hans*

Cognitive theories of religion assign a central role to the activation of domain-specific cognitive mechanisms in the formation and maintenance of religiosity. Some of these mechanisms are understood to be part of the individual's evolved cognitive architecture (e.g., agency detection, theory of mind), whereas others are social learning processes (e.g., prestige bias, credibility-enhancing displays).

Contemporary accounts of mystical unitive experiences by contrast tend to stress how general cognitive mechanisms are deactivated. The ordinary sense of self (including the sense of ownership and of boundaries) loses its force on cognition (Yan et al. 2019), and modular gating between brain regions is reduced (Gattuso et al. 2023). Similarly, neurocognitive accounts of psychedelic and meditative states propose that ordinary top-down constraints on cognition are temporarily relaxed (Carhart-Harris and Friston 2019; Laukkonen and Slagter 2021).

The paper analyses how both approaches can be connected. There is evidence that subjects continue to detect agents and reason about their mental states during at least some mystical experiences. At least in some cases, subjects continue to draw upon culturally transmitted representations of supernatural agents. The paper will defend a model of heightened attention during mystical experiences where increased focus increases the saliency of some cognitive mechanisms while at the same time reducing that of others.

References

Carhart-Harris, Robin L., and Karl J. Friston. 2019. "REBUS and the Anarchic Brain: Toward a Unified Model of the Brain Action of Psychedelics." *Pharmacological Reviews* 71 (3): 316–44.

Gattuso, James J., Daniel Perkins, Simon Ruffell, et al. 2023. "Default Mode Network Modulation by Psychedelics: A Systematic Review." *International Journal of Neuropsychopharmacology* 26 (3): 155–88.

Laukkonen, Ruben E., and Heleen A. Slagter. 2021. "From Many to (n) One: Meditation and the Plasticity of the Predictive Mind." *Neuroscience & Biobehavioral Reviews* 128: 199–217.

Yan, Chao-Gan, Xiao Chen, Le Li, et al. 2019. "Reduced Default Mode Network Functional Connectivity in Patients with Recurrent Major Depressive Disorder." *Proceedings of the National Academy of Sciences* 116 (18): 9078–83.

Understanding self-transcendent experiences through affective salience as instantiated in experiential consciousness

poster

Author(s): van Mulukom, Valerie*

Self-transcendent experiences (STEs) present a paradox: the self feels simultaneously diminished through ego dissolution and expanded through connection to something larger than oneself. This paradox is solved through the dual-self state framework, which suggests that, in STEs, the reflective self is reduced, but the experiential self is enhanced. The reflective self, supported by the Default Mode Network (DMN), supports self-referential processing underlying narrative identity and autobiographical memory. Conversely, the experiential self represents a non-propositional, embodied mode of awareness supported by the Salience Network (SN), specifically the anterior insula and anterior cingulate cortex, which integrate interoceptive and exteroceptive signals to monitor for salience and coordinate autonomic and affective responses. Within a predictive processing framework, transition to the experiential self state (supported by SN) involves recalibrating dopaminergic prediction errors to determine motivational significance. I will examine this transition within the context of meditation practice: Initial stages use bodily consciousness as an attention anchor, whereas advanced practice involves a shift from top-down regulation to a bottom-up mode, where interoception is moved to the background, which allows the subject to cultivate meta-awareness. By using this framework and a building block approach, the hope is that we can get a more fine-grained understanding of STEs.

42 Days of Summer: A diary study of awe

talk

Author(s): van Mulukom, Valerie*

While nonreligious individuals may not experience religious events, awe appears to be a universal experience, similarly involving self-transcendence and meaning-making, and as such we investigated it as a potential route to fulfilling spiritual yearning in nonreligious individuals. Often, awe has been studied in laboratory contexts or via distant recollection, but this leaves questions about how it unfolds naturalistically. We report a naturalistic longitudinal study with 200 British, nonreligious adults (via Prolific) who completed a baseline survey before summer and follow-up surveys at two points during summer and once afterwards, each time reporting recent experiences of three types of awe: transformative epistemic awe, reverential awe, and amazement awe. Participants described the events associated with these experiences and answered questions about insights into self and others, cognitive and affective openness, feelings of connectedness to various targets, feelings of spiritual yearning, and wellbeing. By minimising the delay between awe experiences and reports, the design reduces reminiscence artefacts and allows a more fine-grained characterisation of awe events. We will present patterns in the frequency and contexts of different awe types, and their distinct short-term and cumulative associations with openness, connectedness, spiritual yearning, and wellbeing across the summer in a nonreligious population.

The Third man factor: Sensed presence between religion and extreme cognition

talk

Author(s): Visuri, Ingela*

This paper presents the results from a pilot study of the so-called “Third Man Factor,” widely reported among endurance athletes and adventurers. The phenomenon refers to the felt presence of a perceived social other during extreme physical or psychological strain, often described in supportive terms. Despite clear similarities to experiences reported in religious contexts, the phenomenon has not yet been studied by scholars in religious studies.

Drawing on survey data including self-reports of specific experiences, the analysis suggests a multidimensional structure comprising (1) social agentivity (perceived personhood and intentionality), (2) altered self-processing (dissociative and temporal distortions), and (3) functional guidance (perceived support or direction). These findings align with predictive processing accounts of social cognition under extreme uncertainty and resonate with models of “felt presence” as minimally interpreted experiential building blocks.

The paper argues that Third Man experiences occupy a liminal space between religious and non-religious experience, illustrating how shared experiential structures may be framed as supernatural, psychological, or functional depending on situational context.

The Dark Side of Recognition: How Evil Eye Beliefs Shape Emotional Responses to Personal Achievement

talk

Author(s): White, Cindel*; Aryaie, Mina

Cultural evolutionary theories argue that belief in the evil eye – the power to cause magical harm through a simple glance – builds on expectations about interpersonal envy, especially in highly competitive zero-sum cultures. We test whether belief in the evil eye’s magical harm impacts how people feel about having their successes recognized by other people. Psychological research typically argues that sharing one’s achievements has positive consequences, enhancing one’s reputation, wellbeing, and social bonds through capitalization. In two studies, we test whether fear of magical harm from the evil eye leads to more negative consequences when sharing achievements, in religiously diverse North American samples. Study 1 (N = 598) found that when people imagine sharing news of a personal achievement with another person, evil eye believers felt more negative emotions themselves and expected more malicious envy and destructive responses from observers, whereas non-believers felt more uniformly positive emotions. Study 2 (N = 596) found that when recalling a compliment about one’s past achievements, evil eye believers were more likely than non-believers to report negative emotions, discomfort, and anxiety. Results suggest that evil eye beliefs can diminish positive feelings and undermine social relationships in the context of personal achievement.

Innovation in Ritual and Religion among Neo-Pagans

talk

Author(s): Willard, Aiyana*; Kolios, Sotirios; Ali, Ayesha; Adair, Lora

The high levels of innovation in contemporary neo-pagan practices presents an interesting counter point to the static nature of ritual often presented in the cultural evolution of religion literature. In this talk, we suggest that neo-pagan communities are developing a somewhat novel approach to ritual that prioritises the repetition of the emotional experience over the repetition of prescribed actions, enabling rapid evolution of these practices. This shift allows neo-pagan movements to adapt quickly to the changing needs of people in the contemporary West and could explain why these practices are growing so rapidly. We examine three case studies from the UK pagan community that illustrate different dimensions of this innovation. First, we analyse how the major public festivals of Beltane and Samhain are updated and redesigned each year to better serve dual functions: introducing curious newcomers to pagan practice and reinforcing a group identity that is itself rapidly changing. Second, we explore how group rituals in the Goddess movement incorporate novelty as feature, requiring group ritual performances to be a largely new experience each time they are conducted, allowing for a consistent sense of awe and transformation even in regularly performed rituals. Third, we investigate neo-pagan witchcraft practices where practitioners emphasize intention over prescribed ritual actions, allowing individuals to improvise rituals that feel personally authentic and accessible. These cases reveal a reconceptualization of religious ritual itself and offer us insight into how religious ritual practices might be innovated and adapted to new cultural contexts.

Major Depression and Pachamama Beliefs and Practices Among Lowland Kichwa in the Ecuadorian Amazon

panel

Author(s): Wood, Connor*

Religious practice appears to be associated with mental health. However, relevant studies typically focus on “Big God” religions in developed or market-integrated societies. Would local or small-scale religious practices show similar associations? This study, conducted among lowland Kichwa of Napo province, Ecuador, as part of the worldwide “Gods, Games, and the Socioecological Landscape” project, seeks to address this question from a behavioral ecological perspective, in which severe or clinical depression indicates (and causes) failure to solve problems of survival and reproduction. Thus, we sought to investigate whether Pachamama beliefs and practices provide adaptive adjustments to local behavioral ecological constraints. The Kichwa are the largest indigenous group in Ecuador; our field site was about 50% market-integrated, and respondents were adherents of both Catholicism and local beliefs in Pachamama, an agriculture and nature goddess. Respondents provided their beliefs about Pachamama and related ritual and prayer practices (both Likert scale frequency and free-list descriptions). They also responded to a Spanish-language version of the Major Depression Inventory (MDI; Pech et al., 2001). Here, I report results ($N = 75$) of validation tests for the MDI among Spanish-speaking Kichwa, as well as preliminary tests of the relationship between Pachamama-related religious practices and depression.

From Noise to Signal: Identity Fusion from Language at Scale

lightning

Author(s): Wright, Devin*; Lane, Justin; An, Jisun; Shults, LeRon; Ahn, Yong-Yeol

Identity fusion predicts extreme commitment, from costly self-sacrifice to political violence, yet remains difficult to study beyond surveys and small-scale field settings. This presentation introduces the Cognitive Linguistic Identity Fusion Score (CLIFS), a method for measuring fusion directly from natural language by integrating cognitive linguistics, implicit metaphor detection, and LLMs. CLIFS enables scalable, automated measurement while remaining closely aligned with established psychological measures and substantially outperforming prior automated approaches and human annotation. Across cross-cultural datasets from the United States, the United Kingdom, and Singapore, CLIFS reliably predicts fusion scores and generalizes across social, temporal, political, and religious contexts, enabling previously impractical large-scale, cross-cultural, and longitudinal studies of commitment, cohesion, extremism, and sacred devotion. Applied to extremist manifestos, CLIFS improves violence risk prediction by more than 240% and reveals two distinct high-fusion pathways to violence: one in which ideologically driven individuals conceptualize the self in terms of the group and form stronger kinship bonds, and another in which grievance-driven individuals conceptualize the group in terms of the self. Together, these findings refine theories of identity fusion while establishing a practically deployable framework for AI-based threat detection, supporting scalable identification of high-risk signals—the metaphorical drop in the ocean of online media.

A new mobile toolkit for CSR researchers

talk

Author(s): Xygalatas, Dimitris*; Buck, Zach; Lang, Martin; Chvaja, Radim; Puryag, Pushkar; Mano, Peter; Kratky, Jan; Palenik, Julie

Most research on religion and cooperation relies on cross-sectional designs, lab-based tasks, and convenience samples, limiting ecological validity and causal inference. We present a new mobile research platform designed to study how religious beliefs and practices shape cooperative behavior in everyday life. The SPARRC app integrates experience sampling, behavioral measures, passive sensing, and naturalistic experimental modules within a longitudinal framework, capturing both momentary and long-term dynamics. Its modular architecture allows researchers to adapt protocols to local religious contexts and incorporate new measures over time. We describe the platform's design, outline its theoretical grounding in debates on religious prosociality and ritual bonding, and present preliminary validation data. By making SPARRC openly available, we aim to support cumulative, ecologically valid, and culturally diverse research on religion and cooperation.

Exploring the influence of Need for Cognitive Closure, Compassion and Religiosity on moral rigidity

poster

Author(s): Zawistowska, Alicja*

Why do some individuals revise their moral judgments when circumstances and information change, while others remain rigid? This study addresses this question using abortion—a paradigmatic morally contested issue—as an empirical case. It introduces the concept of abortion judgment rigidity, defined as the persistence of moral evaluations despite variation in contextual features.

The study conceptualizes moral rigidity as the outcome of an interaction between Need for Closure (NFC), religiosity, and compassion, three factors that shape moral judgment under uncertainty through distinct mechanisms. NFC reflects a motivational preference for certainty and is expected to promote reliance on stable moral schemas. Religiosity functions as a source of epistemic and normative certainty, anchoring moral judgments in stable belief systems that reduce openness to contextual variation. Compassion, by contrast, is an affective response to perceived human suffering that increases attention to concrete individuals and situational detail, potentially reducing moral rigidity.

Based on this framework, the central hypothesis is that higher NFC and higher religiosity jointly predict lower sensitivity to abortion-related contextual variation, whereas compassion promotes greater contextual responsiveness—unless constrained by strong epistemic and normative closure.

The analysis draws on a nationwide online survey of 1,712 Polish adults employing randomized vignette-based abortion scenarios with systematically varied contextual features. Preliminary findings indicate that higher NFC is associated with greater abortion judgment rigidity, while compassion shows a limited effect on abortion acceptance, largely independent of religiosity. It suggests that affective responsiveness alone may be insufficient to alter moral evaluations.