

Invisible hands and sacred unicorns:

‘Occulture’ as a schema for supernatural ascriptions in the millennial generation.

Ingela Visuri

Cognitive science teaches us that the tendency of reducing complex phenomena saves energy and effort, but this is also what underpins the formation of stereotypes and categorical dichotomies in which one side is privileged over the other (McGarty, Yzerbyt and Spears, 2002). The inclination to think in terms of ‘good’ and ‘bad’ categories of science is – naturally – also found within the study of religions. There are however scholars who strive towards conciliation between disciplines, and the endeavour Ann Taves has taken on in bridging the ontological and epistemological divide between the naturalist-oriented psychology of religion and the constructivist-oriented scholars study of religions is a good example of such an aspiration. While most researchers tend to remain within the theoretical and methodological boundaries of the tradition one comprehends better, Taves argues that it is possible to reframe and undercut “the old binary distinction between reductionism and uniqueness” (Taves, 2009, 7).

In collaboration with Egil Asprem, Taves is developing models for such work from the interdisciplinary platform of the cognitive science of religion (CSR). Their work departs from the so-called *building block approach* (Taves, 2013), in which complex cultural concepts (CCCs) such as ‘magic’, ‘religion’, and ‘esotericism’ are *reverse-engineered* (Asprem, 2016) and deconstructed into minor elements, as opposed to operationalizing concepts according to a specific definition. The authors argue that such an approach allows for a non-binary, cross-cultural, and interdisciplinary approach to studying phenomena which otherwise tend to cause divides between scholars: “Focusing on the components that interact to produce events thus allows us to integrate lines of research that are often pursued in disciplinary isolation.” (Asprem and Taves, 2017, 89)

Another central element is the focus towards emic descriptions. Taves argues that by paying attention to *attributions* (causal explanations) and *ascriptions* (the characteristics assigned) made by those we study, scholars may spot what people ‘on the ground’ deem as special, sacred or non-ordinary (Taves, 2009). In summary, Taves and Asprem encourage scholars from different disciplines to identify various components at play by working bottom-up towards a multilevel model of the phenomena studied.

Heeding to this call, I will in this chapter present an empirical and methodological example of an interdisciplinary study on religious cognition that is much aligned with the building blocks approach suggested by Taves and Asprem. While autism is the focal point of the research project, the study also highlights a generational shift in the ascription of non-ordinary powers, which in these millennials¹ appears to depart from occult phenomena in Western popular culture; termed *occulture* by Christopher Partridge's (2004, 2005). Besides illustrating how emic ascriptions of things set apart from the ordinary may vary between different generations, the chapter also provides a multilevel model of how unusual embodied experiences – which appear to be especially prevalent on the autism spectrum – are understood in terms of occult schemas derived from popular culture.

Participatory research and mixed methods

The study of atypical cognition, such as in autistic individuals, poses specific challenges. There is currently a debate within critical autism studies, in which autistic scholars argue that faulty stereotypes – caused by clinical autism research – are reinforced by a lack of subjective perspectives from autistic subjects (see McGrath 2017 for an extensive discussion). Such methodological and ethical arguments were taken into consideration when designing this study, and I set out to find a method that would allow for my autistic participants to become actively involved as subjects and partners, and which would support me in bracketing my own expectations.

Another challenge concerned how to find a persuasive form of communication for scholars with differing epistemological, methodological and theoretical viewpoints, such as the historians of religion, anthropologists, psychologists, cognitive scientists, and clinical as well as critical autism researchers that I wanted to engage in dialogue with. The project eventually came to involve mixed methods: questionnaires and psychometric testing – to provide data that would ‘speak’ to a nomothetically oriented audience – and a ‘photographic life-story interview’, to capture narratives on religiosity and spirituality from an autistic point of view. These materials were then triangulated (e.g. “put in dialogue”; see Mertens and Hesse-Biber, 2012, p. 78) in order to find common patterns.

17 young adults (16-21 years old), diagnosed on the high functioning end of the autism spectrum and labelling themselves as ‘religious’ or ‘spiritual’, were recruited in order capture thick and rich emic descriptions. In line with norms for psychological research, I also put

¹ ‘Millenials’ is the colloquial term for the generation born 1982 and later.

together a non-autistic comparison group, carefully matched regarding gender, age and views of life to allow for quantitative comparisons between populations.² Overturning the traditional preparation of interview questions, each of the autistic participants³ got a disposable camera and a notebook, and were instructed to prepare their own interviews by taking photos of things (e.g. foods, sounds, experiences, relations, places, objects, ethics) that they deemed as significant for describing their own worldviews.⁴

The material derived from this study can be described in terms of personal ‘building blocks’, and the research process is in many ways aligned with Taves’ and Asprem’s model for exploring emic ascriptions of things set apart from the ordinary:

If we want to understand how anything at all, including experience, becomes religious, we need to turn our attention to the processes whereby people sometimes ascribe the special characteristics to things that we (as scholars) associate with terms such as “religious,” “magical,” “mystical,” “spiritual,” et cetera. (Taves, 2009, 8)

In other words, the participants in this study have provided their personal ascriptions of things and events that they consider to be ‘religious’, ‘spiritual’, ‘supernatural’, ‘magical’, and ‘non-ordinary’. The use of mixed methods has generated a rather extensive material, and I will therefore zoom in on two findings that illustrate (a) the role of magical narratives, and (b) the process of ascribing supernatural qualities to unusual bodily experiences.

Fantastic narratives

A rather surprising discovery was that several participants included characters from popular culture in their emic definitions of ‘spirituality’. Catzzy for instance brought pictures of her favourite goddess Nocturnal from the computer game *Oblivion*, with whom she interacts in gaming to get better luck: “I mean, for me I’m spiritual if anything, because I don’t believe in that [religious] stuff a lot. At least not quote and quote ‘real’ gods or anything like that, but for me it’s more games and stuff I find in movies that is interesting.”

² The comparison group was also formed based on the Autism quotient test (Baron-Cohen, 2001) to make sure that the cognitive style of participants was not too close to the autism spectrum. One of them was replaced due to high scores.

³ Since qualitative studies are time consuming to conduct and difficult to compare, only the autism group took part in the interviews.

⁴ Some of the participants chose to use mobile phones or show images from the internet on their laptops instead, and a few who found it difficult to illustrate their narratives visually only prepared notes.

She goes on to discuss the *Transformers* universe and the animated movies that depict the fight between two groups of robots: the good Autobots and the evil Deceptacons. Several of these animated and made-up characters have come to life to her, such as the Autobot Jazz, whom Catzzy identifies with for being cheeky and funny, and Optimus Prime whom she describes as a wise and safe. When facing problems that need to be solved, she creates inner scenarios in which she interacts with these characters: “I usually make up like a fantasy world but it’s like my life, and then I am kind of involved, it’s like a mix of the real world and then the Transformers movies.”

Andrew similarly describes how he gets absorbed into the magical worlds of the British author J. K. Rowling’s book series about the young magician Harry Potter, *Eragon* and *Lord of the Rings* (see Visuri, 2018a), and fantasizes about having his own unicorn or winged horse. For him, the Bible similarly represents a piece of literary work, “it’s like another narrative but in our world, but it also feels like a fairy world”. This is where he searches for answers about life, and Andrew describes how this commitment has taught him compassion: “I have realised that showing respect, showing availability, that you can be there for someone, not because you are religious but because it is part of being a human, and that you can try to do things better despite the bad things that have happened before.”

These narratives suggest that imaginary worlds and popular characters fill important existential functions and meaning making processes in the lives of the participants. David for instance describes how he during pre-school “fell in love” with the Greek goddess Pallas Athena, identifying with her for being the goddess of wisdom:

This thing when I was younger and I kind of got bullied, since then I have always been praised for my extreme verbal and intellectual capacity. [...] I’ve always kind of identified with this geeky four-eyes [laughs] and I mean, she’s often described as a safe virgin goddess, but she’s also the goddess of rational war and it’s very comforting to have such a protector when you are a child.

When other kids harassed him for being different, he gained strength from his relation with the goddess. David adds that he has found strength through “art, music, the creative, and then more from spirituality”, which has helped heal this trauma.

Historian of religion Carole Cusack (2018) argues that fantastic narratives, such as Harry Potter, provide one of many alternatives to the institutionally ‘sacred’, and maintains that these are sources for personal meaning-making:

Since the mid-twentieth century fictional narratives have been used to affirm ultimate concerns for certain people, making fiction fulfil the roles and functions of religious texts. Imaginative practices (such as visual and performing arts, reading and viewing fiction) can provide alternative meaning templates that are now understood by some to meet requirements that were once considered unique to religion. For this to occur, the fictional text must draw upon and reflect human concerns, and afford space for contemplation so individuals can devise or extract personal meaning from the story.

The fantastic and mythical narratives described by the participants fulfil several of Cusack's criteria: they are emotional; feature unprivileged characters striving for a better existence; and involve struggle between good and evil. The narratives are moreover used as springboards into 'otherworlds' that transcend everyday reality, which make up platforms for imaginary interaction with the characters. What for others may function as casual entertainment is here described as existentially significant and set apart from the ordinary.

Embodied supernatural experience

A second finding regards embodied, sensory experiences that the autistic participants label in terms of supernatural agency, such as sensed presence of spirits, out-of-body experiences, feeling touch, and seeing visions without external input of somatosensory stimuli (see Visuri, 2018b for a detailed description). While such experiences occur within the whole population, it appears in the *quantitative* material that the autism group scores significantly higher than the comparison group, both regarding 1) how many different types of religious experiences each individual has had ($M=4,71$; $SD=3,69$, vs. $M=1,94$, $SD=0,90$) and 2) how often each type of experience occurs within the group (e.g. 13 participants in the autism group have felt the presence of a spirit, compared to three (3) in the comparison group). It also emerged that embodied experiences are more common among the autistic participants, while the comparison group mostly reports of traditional experiences such as prayer responses and feeling the presence of God in a mosque or church.

When analysing the *qualitative* material, such embodied elements were described by 14 of the 17 participants. Anastazia for instance describes how spirits in her house make themselves known to her on a daily basis, making books fall out from bookshelves, moving things, and whispering in her ear when she least expects it. Gustav similarly senses the presence of spirits and demons, and describes how he turns to occult reality TV-shows where

psychic specialists visit haunted houses, to learn more about such agents. Sometimes he burns sage to make the more aggressive demons go away, while simultaneously feeling empowered by his ability to sense energies that are hidden to others.

Boyan, who is Muslim, also describes herself as psychic. Just before falling asleep during a trip with her family, she hears frightening sounds from footsteps coming up the stairs towards the room where the family sleeps: “I didn’t have the Quran with me, and [since the non-Muslim parents were also in the room] I couldn’t pray to Allah because then I would have to go out of the bedroom to pray but that was where the evil force was.” There are also narratives of physical touch, such as Catzzy feeling a hand on her shoulder when home alone, which she interprets in terms of a visit from a deceased relative.

Several of participants describe how they have struggled to grasp such experiences, and how they gradually have developed a magical framework for making sense of potentially frightening incidents (see Visuri 2018b). A close reading of these narratives moreover reveals that their ascriptions bear close resemblance to occult descriptions in popular media; a finding which is aligned with scholarly arguments on how magical content is interwoven into everyday lives through fantastic literature, scary movies, computer games, and occult reality-TV (see Moberg, 2015; Thurffjell, 2015; Partridge, 2004–2005). I therefore argue below that this result points to a generational shift, in which secular representations of magic are activated in terms of supernatural attributions and interactive, mental partners, much resembling descriptions of religious relations (c.f. Luhmann, 2012).

Discussion

Let us consider how the building blocks approach has contributed to bringing forth the results above. To begin with, previous studies on religious cognition in autism have mainly departed from hypotheses testing on ontological *beliefs* (e.g., Banerjee & Bloom, 2014; Coleman, 2016; Gervais, 2013; Lindeman & Lipsanen, 2016; Maij, van Harreveld, Gervais, Schrag, Mohr, & van Elk, 2017; Norenzayan, Gervais, & Trzesniewski, 2012; Reddish, Tok, & Kundt, 2016), which so far has yielded inconclusive results. When instead departing from emic descriptions, it surfaces that it is rather *experiences* that are central for these participants, such as the experience of being in relation to a fantastic character, or the sense-making process of unusual sensory experiences.

The results moreover highlight a generational shift in the choice of attributions. The studies mentioned above all draw on *naturalness hypothesis of religion*, which departs from the assumption that beliefs and relations with invisible agents are underpinned by a

hypersensitivity to detecting intentionality in the world; a cognitive ability which has supported survival throughout evolution (see Barrett, 2004). By working bottom-up, it however emerges that a new type of agents is considered significant in this younger, Western, and highly individualized generation. Numerous scholars within the study of Western Esotericism have taken an interest in this phenomenon which Partridge terms *occulture*, but – to the best of my knowledge – this phenomenon has so far been overlooked within the CSR.⁵

Partridge (2004-2005; 2012) argues that esoteric and occult ideas, in the sense of being secretive and hidden, now have become broadly available through a cultural shift in which these concepts are spread by popular media, such as computer games, fantastic literature and horror movies:

While there are of course occult traditions in organizations that are styled as such, concerned with a sense of gnostic privilege, the culture in which they are embedded is no longer, I would argue, hidden or unfamiliar to most people anymore. It is ordinary, and it is every-day. The well-documented shift from religion to spirituality, the turn to the self, the change of focus from external authority to indirect experience has significantly increased the appeal and respectability of esotericism in the modern world. (Partridge, 2012)

The study presented here indeed illustrates how relational and embodied cognition is understood in terms of ideas available in popular culture: Catzzy for instance activates an inner dialogue with characters from animated movies in times of crisis, while Boyan draws on an occult understanding of sounds in a house which she thinks is haunted by ghosts. While it has often been argued that *cross-cultural* data is crucial to the building of hypotheses in the CSR (e.g. Boyer, 1994), the emic descriptions in this study suggest that also collective *cross-generational* appraisals of non-ordinary powers need to be considered. Put differently, there appear to be ‘cultures within cultures’.

Yet another aspect of the building blocks approach is that of reverse-engineering. Taves (2009) argues that the deconstruction of complex cultural concepts allows scholars to connect

⁵ There are a few publications that relate to cognition and esotericism: Egil Asprem and Markus Altena Davidsen (2017) have co-edited a special issue of *Aries* on ‘Esotericism and the Cognitive Science of Religion’, including an introduction which they both have authored, and an article by Asprem (2017) on kataphatic (imagery-based) practice and predictive coding. There is also the chapter *How to Read Miracle Stories with Cognitive Theory: On Harry Potter, Magic, and Miracle* by István Czachesz (2014). I have however not been able to find any CSR-study acknowledging *occulture*, apart from my own an article on sensory supernatural experiences and autistic cognition (Visuri 2018b) which draws on the same sample and approach that is discussed in this chapter.

pre-linguistic forms of experience with discursive practices, and to illustrate such interaction, the findings in this study have been formed into a *multilevel model of unusual sensory experience in autism* (see figure 1). The model departs from Armin Geertz's (2010) biocultural theory which is described in neurobiological, cognitive-psychological, sociological, semantic-semiotic levels of reality, and highlights cognition as embraced, embodied, encultured, extended and distributed.

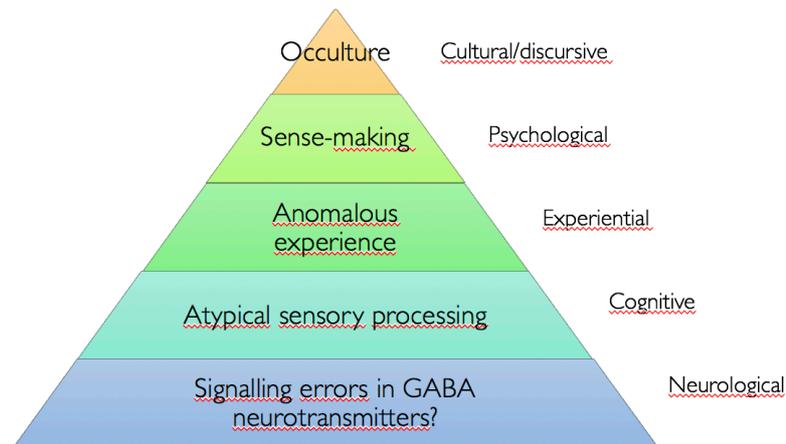


Figure 1: A multilevel model of unusual sensory experience in autism, illustrating the interaction between pre-linguistic and discursive levels of cognition.

The categories in the model are built from an analysis of how these autistic millennials arrive at occultured description of reality, as well as the current discussion on sensory processing in autism. Beginning with the three bottom levels, autism researchers have suggested that the prevalence of atypical processing of sensory input, which in some cases present as anomalous perceptual experiences (e.g. feeling touch and seeing visions without external input of sensory stimuli) may be caused by imbalance in neural excitation and inhibition in GABA neurotransmitters (see Horder, Wilson, Mendez, Murphy, 2014; Milne, Dickinson and Smith, 2017).

Moving towards the upper levels, the participants describe how such experiences may be confusing, and even terrifying. The attribution of supernatural agency appears to be part of a supportive sense-making process in which they gradually find a means of framing and coping with their experiences: imagining that an invisible touch is caused by a beloved grandmother transforms the sensation into a positive experience, and learning how to deal with evil spirits supports proactive behaviors, such as burning sage or reading the Quran. Occultural narratives come through as central in this discursive process. The model thus

illustrates how the experience of atypical sensory processing gradually becomes attributed to non-empirical agents.

A final remark concerns the mixed methods that were applied to enable a conversation with scholars from differing disciplines. While the quantitative measurement highlighted differences between the groups regarding supernatural experiences, the qualitative interviews revealed the role of occulture. Had the design involved only one of these approaches, the interaction between the cognitive and the (oc)cultural framework would have been lost. By applying methods from both naturalist and constructivist frameworks, and by paying attention to the emic categories of the participants, two new findings – that have previously been overlooked – have emerged.

Conclusions

The study presented here is an example of how disciplinary boundaries can be bridged methodologically. By combining a quick, quantitative measure that captured overarching trends in the sample, such as the high prevalence of embodied experiences in autistic subjects, and the slower qualitative process, which elicited narratives on occult ascriptions –the dynamics between cultural input and cognitive underpinnings is elucidated. Put differently: rather than arguing that one discipline is of greater importance than the other, scientific value is added when naturalist and constructivist methodologies are combined.

The study moreover bridges the gap between critical and clinical autism studies, which draw on differing epistemologies and methodologies. By merging the study of autistic cognition with subjective narratives, and introducing perspectives from the scholarly study of religions, we are able to connect pre-linguistic dimensions with discursive practices. These connexions have – to the best of my knowledge – not been addressed previously, which may be due to the tendency of staying put within scientific boundaries. Taves and Asprem encourage us to cross such borders, and their building blocks approach has served as a dynamic and useful tool in the uncovering of how these young, Western, autistic participants come to interlace relational and embodied experiences with magical content found in popular media.

References

- Asprem, E. (2016). Reverse-engineering 'esotericism': how to prepare a complex cultural concept for the cognitive science of religion. *Religion*, 46, 2, 158–185.
- Asprem, E. & Taves, A. (2017) Connecting events: experienced, narrated, and framed. *Religion, Brain & Behavior*, 7, 1, 88–93.
- Banerjee, K., & Bloom, P. (2014). Why did this happen to me? Religious believers' and non-believers' teleological reasoning about life events. *Cognition*, 133(1), 277–303.
- Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J. & Clubley, E. (2001). The Autism-Spectrum Quotient (AQ): Evidence from Asperger Syndrome/High-Functioning Autism, Males and Females, Scientists and Mathematicians. *Journal of Autism and Developmental Disorders*, 31, 5–17.
- Barrett, J. (2004). *Why would anyone believe in God?* Walnut Creek, CA: Altamira.
- Boyer, P. (1994). *The naturalness of religious ideas: A cognitive theory of religion*. Berkeley: University of California Press.
- Coleman, T. J., III. (2016). *The social brain in human and religious evolution: Elucidating the role of theory of mind in (non)religious belief*. University of Tennessee at Chattanooga.
- Cusack, C.M (2018). Harry Potter and the Sacred Text: Fiction, Reading and Meaning-Making. In C.M. Cusack, V.L.D Robertson & J.W. Morehead (Eds.), *Fantastic Fan Cultures and the Sacred*, Jefferson, NC: McFarland & Company Inc. (forthcoming).
- Geertz, A.W. (2010). Brain, Body and Culture: A Biocultural Theory of Religion. *Method and Theory in the Study of Religion*, 22, 304–321.
- Gervais, W. M. (2013). Perceiving minds and gods: How mind perception enables, constrains, and is triggered by belief in gods. *Perspectives on Psychological Science*, 8, 4, 380–394.
- Guthrie, S. (1993). *Faces in the clouds: A new theory of religion*. New York, NY: Oxford University Press.
- Horder, J., Wilson, C.E., Mendez, M. A., Murphy, D. G: (2014). Autistic Traits and Abnormal Sensory Experiences in Adults. *Journal of Autism and Developmental Disorder*, 44, 6, 1461–1469.
- Lindeman, M., & Lipsanen, J. (2016). Diverse cognitive profiles of religious believers and nonbelievers. *The International Journal for the Psychology of Religion*, 26, 3, 1–8.
- Luhmann, T. M. (2012). *When God Talks Back: Understanding the American Evangelical Relationship with God*. New York: Vintage Books.

- Maij, D. L. R., van Harreveld, F., Gervais, W., Schrag, Y., Mohr, C., & van Elk, M. (2017). Mentalizing skills do not differentiate believers from non-believers but credibility enhancing displays do. *PLoS ONE*, 12, 8, e0182764.
- McGarty, C., Yzerbyt, V.I., and Spears, R. (2002). *Stereotypes as explanations: The formation of meaningful beliefs about social groups*. Cambridge: Cambridge University Press.
- McGrath, D. J. (2017). *Naming Adult Autism - Culture, Science, Identity*. London: Rowman & Littlefield International.
- Mertens, D. M., & Hesse-Biber S. (2012) Triangulation and mixed methods research: Provocative positions. *Journal of Mixed Methods Research*, 6, 2, 75–79.
- Milne E., Dickinson, A., Smith, R. (2017). Adults with autism spectrum conditions experience increased levels of anomalous perception. *PLoS ONE*, 12(5): e0177804.
- Moberg, J. (2015). Hemsökta hus och medielogikens spöken: Spiritualistiska mediers inträde i svensk television under 2000-talet. *Aura: Tidskrift för akademiska studier av nyreligiositet*, 7, 5–35.
- Norenzayan, A., Gervais, W. M., Trzesniewski, K. H. (2012). Mentalizing deficits constrain belief in a personal god. *PLoS ONE*, 7(5), e36880.
- Taves, A. (2011[2009]). *Religious experience reconsidered: a building-block approach to the study of religion and other special things*. Princeton, N.J.: Princeton University Press.
- Taves A. (2013). Building Blocks of Sacralities: A New Basis for Comparison across Cultures and Religions. In R. F. Paloutzian & C. Park (Eds.) *Handbook of the Psychology of Religion and Spirituality*.
- Taves, A., & Asprem, E. (2017). Experience as event: Event cognition and the study of (religious) experience. *Religion, Brain & Behavior*, 7, 43–62.
- Thurfjell, D. (2015). *Det gudlösa folket: de postkristna svenskarna och religionen*. Stockholm: Molin & Sorgenfrei.
- Partridge, C. H. (2004–2005). *The re-enchantment of the West: alternative spiritualities, sacralization, popular culture, and occulture* (Vols. 1–2). London: T & T Clark International.
- Partridge, C. H. (2012) Occulture is Ordinary. Keynote speech at Stockholm University, August 12, 2012. Retrieved from: <https://contern.org/online-lectures/christopher-partridge-occulture-is-ordinary/>
- Reddish, P., Tok, P., & Kundt, R. (2016). Religious cognition and behaviour in autism: The role of mentalizing. *The International Journal for the Psychology of Religion*, 26, 2, 1-36.

Visuri, I. (2018a). Rethinking autism, theism & atheism: Bodiless agents and imaginary realities. *Archive for the Psychology of Religion*, 1, 1-31.

Visuri, I. (2018b). Sensory supernatural experiences in autism. *Religion, Brain & Behavior*.
(in press)