



Counterintuitiveness as the hallmark of religiosity

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Abstract

This article presents empirical evidence for the hypothesis that persons consider counterintuitive representations more likely to be religious than other kinds of beliefs. In three studies the subjects were asked to rate the probable religiousness of various kinds of imaginary beliefs. The results show that counterintuitive representations in general, and counterintuitive representations involving a conscious agent in particular, are considered much more likely to be religious. Counterintuitiveness thus seems to be an important element in a folk-understanding of religion.

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It has been claimed by cognitive scientists of religion that religion is typified by ‘counter-intuitive’ representations (see Boyer, 1994a,b, 2001; Barrett, 2000; Pyysiäinen, 2001a,b, 2002, 2003). By this claim is meant that religious representations involve violations of panhuman intuitive expectations with regard to basic ontological categories, such as solid objects, living kinds and personal agents. Although persons have *explicit* beliefs about gods, demons and spirits that may seem perfectly natural to them, these beliefs nevertheless violate their *implicit* expectations of how entities usually behave. However, the claim that counterintuitiveness is the necessary but not sufficient criterion of religion (Pyysiäinen, 2002) is based only on anecdotal evidence and theorising about religious documents. So far, we have empirical experimental evidence only about the mnemonic effects of counterintuitiveness.

Justin Barrett and Melanie Nyhof (Barrett and Nyhof, 2001) and Pascal Boyer and Charles Ramble (Boyer and Ramble, 2001) have presented empirical evidence to support the hypothesis that counterintuitive representations are, *ceteris paribus*, better recalled than other kinds of representations (odd and intuitive). Thus they are more likely than other kinds of representations

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to become widespread in human populations. This, fact might explain the cultural success of various kinds of religious beliefs (see Boyer, 1994b, 2001). Scott Atran (Atran, 2002), however, has provided evidence suggesting that counterintuitive representations may actually be more easily forgotten than other kinds of representations but that in the long run they are more persistent. That is, what is not immediately forgotten has strong staying power. He also points out that counterintuitiveness seems to serve as an ingredient that helps persons remember larger wholes of which counterintuitiveness is only a part. We are dealing with the recall not of isolated items but of meaningful wholes.

Counterintuitiveness and the cognitive science of religion

The counterintuitiveness hypothesis has been presented within what has come to be known as ‘cognitive science of religion’. This school of thought emphasises that religion is an instance of human thought and behaviour which can be scientifically explained just like any other form of human activity. Of central import are the cognitive processes underlying religious behaviour. The cognitive science of religion aims simply at explaining how religious life functions, not at criticising or defending it. Religion thus is viewed as a natural part of human psychic and cultural life, and the study of it is considered a scientific enterprise taking place in the context of other scientific disciplines. Religious ideas are not interpreted in the light of other kinds of religious ideas, but rather are explained in the light of what we know about human cognition and behaviour in general (see Barrett, 2000; Boyer, 2003; Lawson, 2000; Malley, 1996; Pyysiäinen and Anttonen, 2002).

The cognitive science of religion has three general innovations to offer. First, individual cognitive processes have largely replaced the notion of the ‘cultural’ as an explanation of the way religious ideas are acquired and transmitted (see Barrett, 2000; Boyer, 1994a,b, 2001, 2003; Lawson, 2001; McCauley, 2000; McCauley and Lawson, 2002; Pyysiäinen, 2001b). Second, the focus of study has shifted from psychodynamic factors to cognitive processes (see Barrett, 2001; cf. Pyysiäinen, 2001b, pp. 77–142). Third, the Piagetian theory of cognitive development as a domain-general process proceeding one stage at a time has been replaced by a view of the human mind as essentially domain-specific, or modular (see Atran, 1998, 2002; Boyer, 1998, 2001; Cosmides and Tooby, 1994; Gopnik et al., 2001; Hirschfeld and Gelman, 1994; Keil, 1996; Olson and Torrance, 1996; Tooby and Cosmides, 1995).

Boyer (1994a,b, 1996a, 1998, 2001) has studied extensively what he calls ‘intuitive ontologies’ and the role played by violations of them in the cultural transmission of religious representations. Intuitive ontologies express the basic ontological domains of physical objects, natural kinds and personal agents as well as the proper modes of explanation applicable in each domain. This division derives from Keil’s (Keil, 1979) application of Sommers’ (Sommers, 1959) study of the ontology of ordinary language. Keil and others have shown that even young children have intuitive knowledge, not due to any explicit instruction, in such domains as psychology, biology and physics. They cannot verbalise it, but it can be experimentally shown that this is the way they think. They learn spontaneously that people have minds (whatever those may be), that living kinds are different from physical objects, and that the behaviour of solid objects is constrained by certain general principles (they cannot, for instance, be in two places at once). Children also

correctly attribute intentions only to humans and animals, and biological functions, such as growth, to living kinds; they also restrict exclusively physical explanations to natural objects and artefacts (see Elman et al., 1998; Gopnik et al., 2001; Karmiloff-Smith, 1992; Keil, 1979, 1996; Perner, 1993).

Counterintuitive representations are produced by violating these intuitive ontological expectations: a representation either lacks a feature that it intuitively should possess or else includes a feature that it intuitively should not have. Thus, counterintuitiveness does not mean strange, funny or erroneous. It simply means involving a violation of tacit, intuitive ontological expectations. Typical examples of counterintuitive representation are personal beings lacking biological and physical characteristics (e.g., ‘spirits’) and physical objects that have psychological characteristics (e.g., a statue that hears prayers). According to Boyer, such counterintuitive representations constitute the category of ‘religious ideas’, and a concept that merely confirms intuitive ontologies is *ipso facto* nonreligious, although counterintuitiveness as such is not a sufficient criterion for religion (see Boyer, 1994a, p. 408; Boyer, 1994b, pp. 122, 124; see also Atran, 1996, p. 234; Atran, 1998, 2002). It is important to realise that, while it is highly unnatural that a person will not, for instance, have a body, for the believer such exceptional persons can still exist (see Atran, 1996; Boyer, 1994b). As Boyer (1996a) writes, intuitively unnatural things can be considered to be definitely real. Although they are counterintuitive with respect to *tacit* human intuitions about their subject matter, believers’ reflective reasons for accepting them may yet be intuitively compelling (see Sperber, 1994).

As not all counterintuitive ideas can be regarded as religious, the following question emerges: if religion is produced by the same cognitive mechanisms as other ideas, what makes some counterintuitive ideas religious? According to Boyer, all the evidence points to the conclusion that there is no domain specialisation in ‘religious thinking’. In other words, there is no distinct domain of ‘religious cognition’. Religious representations are not produced by specialised, ‘religious’, cognitive mechanisms. Religion is a heterogeneous domain containing many kinds of things which cannot be accounted for by any one theory (see Boyer, 1994b, 1996b). It is, then, not surprising that there is disagreement among scholars as to what religion actually is (see Idinopulos and Wilson, 1998; Platvoet and Molendijk, 1999). We cannot empirically explore the question of whether a certain kind of counterintuitiveness is a necessary characteristic of religion because the answer depends on our definition of religion. The problem is conceptual, not empirical. What can be empirically studied are persons’ conceptions of the concept of ‘religion’. Such a study can yield information about what persons consider religion to be. That information can then be used as a starting point for scientific theorising about religion, much as folk biology sets certain constraints for scientific biology (see Atran, 1998).

Our hypothesis, according to which religion is typified by representations of counterintuitive agents, is based on the claim of Thomas Lawson and Robert McCauley that religious conceptual schemes and rituals are best typified by the presence of ‘culturally postulated superhuman agents’ (Lawson and McCauley, 1990, p. 61; see Lawson, 2001; McCauley and Lawson, 2002). By an agent is here meant an entity that seems to be self-propelled, as though it has some internal source of energy or force, acts and reacts teleologically in pursuit of goals, and possesses cognitive capacities (see Leslie, 1994, 1996). According to Leslie (1994, 1996), the capacity to reason about agents is based on a specific cognitive module. Others, such as Karmiloff-Smith (1992), suggest that the child’s theory of agency may be based on certain genetically specified predispositions and

is formed out of such basic attentional biases as a bias towards human faces and human speech, without necessarily constituting an encapsulated module. What is common to all these views is that reasoning about agents is a domain-specific capacity and that it is present even in infants. It is on this basis that Lawson (2001) argues that postulating the existence of superhuman agents is a natural outcome of the basic human cognitive make-up.

If we substitute ‘counterintuitive’ for ‘superhuman’, we arrive at a more precise concept (see Pyysiäinen, 2001a,b; Lawson, 1998) and are able to claim that it is counterintuitive *agents* in particular that are central to religion. Barrett and Boyer, for example, claim that what has previously been considered ‘anthropomorphism’ in concepts of God may be better explained by the human capacity to recognise intentional agents: because gods are seen as agents, they are also pictured as human-like in their outward form. What is important is that gods have the cognitive properties of an agent. The human-like form is only secondary (see Barrett and Keil, 1996; Barrett, 1998, 2001; Barrett et al., 2001; Boyer, 1996c; Guthrie, 1993).

To determine whether counterintuitiveness in general, and beliefs about counterintuitive agents in particular, activate a religious interpretation in subjects, we carried out three empirical studies. In our first two studies, we wanted to investigate whether persons do in fact regard counterintuitiveness in general as a marker of religion. We therefore formed the hypothesis that persons are more likely to classify as religious such representations that include a counterintuitive element. In our third study we explored whether counterintuitive representations that involve agents in general, and agents that have knowledge of and interest in human affairs in particular, are considered more likely to be religious than counterintuitive representations of mere objects.

These studies follow the standards of cognitive psychology. The basic presupposition is that, as religious thought and behaviour are in part governed by unconscious cognitive mechanisms, we need to use methods by which it is possible to gain information that direct report measures cannot tap. In other words, we have tried to elicit responses the nature of which escapes conscious awareness. At the same time we are studying not linguistic categories but persons’ implicit cognitive categories, categories that they may not always be able to verbalise. It is not the words ‘religion/religious’ that we are studying but the intuitive concepts that these English words name.

Study 1

Method

Participants and procedure

The subjects participating in the study were university students, numbering 85. Of the 85, 64 were female and 18 male; three did not report their sex. The participants were recruited from three countries: 40 social psychology undergraduate and graduate students from Finland, 14 religion and gender studies undergraduates from the Republic of Ireland, and 10 psychology undergraduates from Calvin College, USA. The questionnaire, described below, was administered to the participants during a class.

Measures

The subjects were given a list of 39 statements, grouped in 13 sections of three statements each. Each section consisted of two intuitive and one counterintuitive statement. The counterintuitive elements were formed by transferring human cognitive properties to an animal, or by transferring psychological properties to an artefact or to a natural object or phenomenon, or by denying physical or biological properties to an intentional agent. The subjects were asked to rate how likely each of the beliefs and events described in the statements was to be religious, on a scale from 1 (extremely unlikely) to 5 (extremely likely). All the statements are shown on the self-organising map (SOM) in Fig. 1.

Results

To test the hypothesis, the scores on the 26 intuitive items and 13 counterintuitive items were averaged. The reliabilities (Cronbach's α) were .93 for intuitive statements and .90 for counterintuitive statements. In comparisons without a specific hypothesis, the comparisons were conducted using Bonferroni's method, controlling the error rate by setting the alpha level at .01. The subjects judged the counterintuitive representations to be more likely religious ($M=3.52$) than the intuitive ones ($M=2.14$), $t(85)=10.91$, $P<.001$. Since the participants came from different countries, separate analyses were first conducted for the participants from Finland, the Republic of Ireland and North America. The results were the same for all groups of participants. No sex differences were found.

The distribution of the ratings of intuitive and counterintuitive statements is illustrated in a self-organising map (SOM) in Fig. 1. We have used this technique because it clearly illustrates the distribution of the results. In fact, we do not know of a better way to show to the reader at once the whole distribution of the results. The SOM algorithm (see Kohonen, 1995; Kohonen et al., 1996; Honkela, 1997) has been developed for the analysis of large masses of data. It performs a clustering analysis and projects the data nonlinearly on to a two-dimensional plane in such a way that the original structure of the data is retained. The SOM is today often used also as a statistical tool for multivariate analysis, and it has been applied in hundreds of areas for the analysis of complex phenomena (see Kaski et al., 1998). The SOM can also be considered an artificial neural network model of the brain, capturing some of the fundamental processing principles of the brain. Furthermore, it can be viewed as a model of unsupervised machine learning and as an adaptive knowledge representation scheme. Here we use it only as a technique for producing illustrations. Because the SOM algorithm performs the topographical mapping in a non-linear fashion, the two dimensions of an ordered map do not have a simple interpretation. However, the maps here presented can be read simply as indicated in the figure captions.

Study 2

Method

As the fact that the test sentences were grouped in sets of three sentences, where always one alternative was counterintuitive, might have had an effect in the ratings, a second study was carried out. The subjects were 22 first or second-year undergraduate students of language or

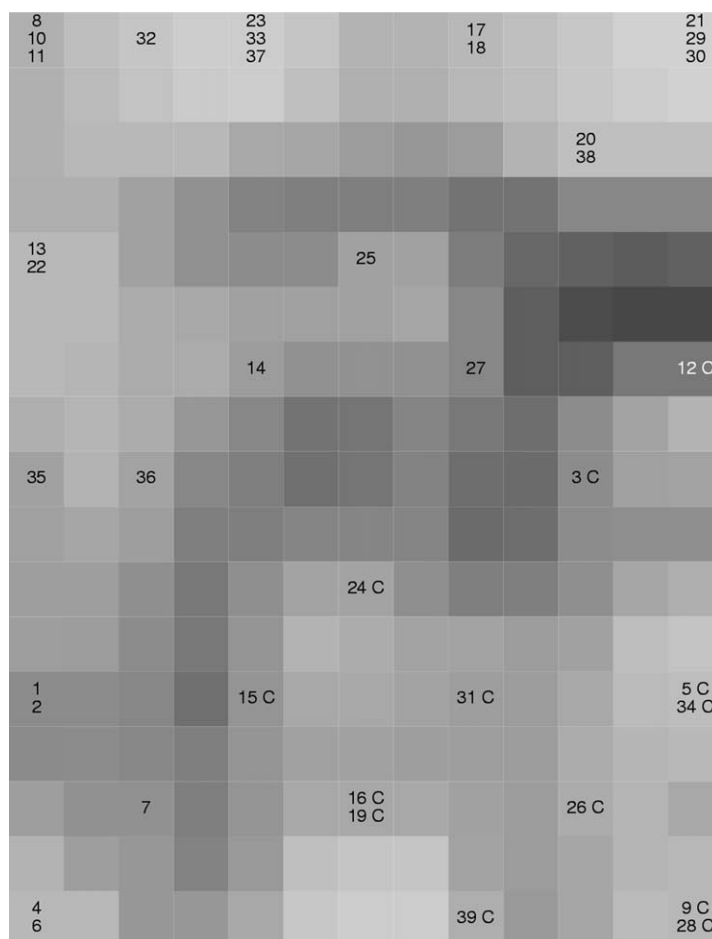


Fig. 1. This self-organizing map shows how the sentences presented to subjects in Study 1 differ from each other according to the ratings by the subjects. Items that appear very close to each other are such that the distribution of their ratings has been very similar. Items widely separated have received very different ratings. In addition, the darker the background is the greater the differences among the scores in question are. Here counterintuitive representations (marked with C) clearly form a group of their own at the lower right-hand corner of the map. The sentences are:

1. The old man Cluang wept while listening to John's sad story.
2. The people in the village of Zanong wept while listening to John's sad story.
3. The wooden statue of Bonong wept while listening to John's sad story.
4. The Hopo believe that an evil-doer will be punished.
5. The Hopo believe that an evil-doer will be eaten up by invisible beings.
6. The Hopo believe that an evil-doer will have to suffer himself/herself.
7. A voice in his heart said: "You should not do that!"
8. The chief said: "You should not do that!"
9. A voice from the sky said: "You should not do that!"
10. It was rumoured that in the village of Almol people kept cows that were very fat.
11. It was rumoured that in the village of Almol people kept cows that yielded much milk.
12. It was rumoured that in the village of Almol people kept cows that could talk.

linguistics (6 males, 16 females) from the *Dynamique du langage* laboratory at MRASH, Lyon. This time the sentences were translated into French and presented in mixed order. Moreover, the participants were given an example before they did the ratings: they were told that the questionnaire contained such sentences as “There are persons with long hair” and “There are persons that live forever,” and that they would have to assess how likely each of the sentences is to be related to religion. The analysis of data was carried out in the same way as in Study 1.

Results

Again, counterintuitive representations were assessed as more likely religious ($M=3.46$) than intuitive ones ($M=1.80$), $t(22)=-10.29$, $P<.001$. No sex differences were found. The distribution of the ratings can be seen in Fig. 2.

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13. The perplexed woman sat under a big tree in the valley of Fejung to figure it all out.
 14. The perplexed woman went to the great river Yong-Yong to figure it all out.
 15. The perplexed woman went to the crying rock of Hau-Hau to figure it all out.
 16. The Vezzi believe that the sceptre of the king can read people's thoughts.
 17. The Vezzi believe that the sceptre of the king is made of fine gold.
 18. The Vezzi believe that the sceptre of the king is decorated with diamonds.
 19. The girl always kept in her purse a tiny benevolent stone that brought her good luck.
 20. The girl always kept a photograph of her grandmother in her purse.
 21. The girl always kept a good deal of cash in her purse.
 22. It was rumoured that the hermit was very wise.
 23. It was rumoured that the hermit was very old.
 24. It was rumoured that the hermit was able to live without food.
 25. Boming is present at great celebrations.
 26. Boming is present everywhere at once.
 27. Boming is present in the hills.
 28. The man had been struck by lightning because of his evil deeds.
 29. The man had been struck by lightning because he had stood under a tree.
 30. The man had been struck by lightning because he was so tall.
 31. In that village lived a tribe of invisible warriors.
 32. In that village lived a tribe of furious warriors.
 33. In that village lived a tribe of brave warriors.
 34. The woman was known of her ability to walk through walls.
 35. The woman was known of her ability to comfort those in grief.
 36. The woman was known of her ability to endure pain.
 37. The Diggi believe that tigers are dangerous.
 38. The Diggi believe that tigers are lazy.
 39. The Diggi believe that tigers are their brothers.

Study 3

Method

Participants and procedure

Participating in the study were 71 subjects (32 males, 37 females; two did not report their sex). The participants were undergraduate philosophy students at Emory University, Atlanta ($N=46$) and anthropology students at Fordham University, New York ($N=25$). The subjects filled out a questionnaire during a class.

Measures

The questionnaire included 25 statements, of which 15 were counterintuitive (Cronbach's $\alpha=.88$) and 9 intuitive ($\alpha=.80$). The counterintuitive statements consisted of three types of statements: those involving no agent (4 items, $\alpha=.70$), those with a conscious agent that has knowledge about and interest in the affairs of humans (6 items, $\alpha=.80$), and those involving an agent not knowledgeable about human affairs (4 items, $\alpha=.63$). The reliability of those involving either kind of agent was .86 (11 items). The participants were asked to rate on a five-point scale how likely the statements were to be religious. The statements are shown in Fig. 3.

The subjects were also asked why they had considered some sentences more likely to be religious than others. Two independent assessors assigned the answers ($N=53$, reliability 85.93%) to the following eleven categories, according to which criteria had been considered important:

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16. The Vezzi believe that the sceptre of the king can read people's thoughts.
 17. The Vezzi believe that the sceptre of the king is made of fine gold.
 18. The Vezzi believe that the sceptre of the king is decorated with diamonds.
 19. The girl always kept in her purse a tiny benevolent stone that brought her good luck.
 20. The girl always kept a photograph of her grandmother in her purse.
 21. The girl always kept a good deal of cash in her purse.
 22. It was rumoured that the hermit was very wise.
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 30. The man had been struck by lightning because he was so tall.
 31. In that village lived a tribe of brave warriors.
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 33. In that village lived a tribe of furious warriors.
 34. The woman was known of her ability to walk through walls.
 35. The woman was known of her ability to comfort those in grief.
 36. The woman was known of her ability to endure pain.
 37. The Diggi believe that tigers are dangerous.
 38. The Diggi believe that tigers are lazy.
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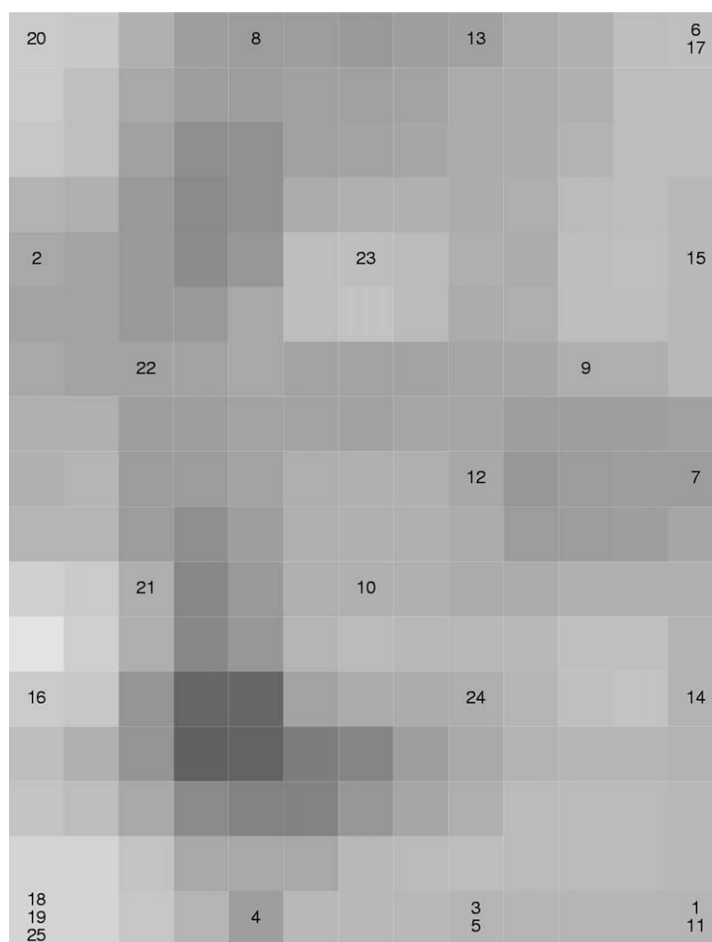


Fig. 3. On this map (Study 3) counterintuitive representations in general appear on the right side of the map. Those involving a counterintuitive agent that is interested in and knowledgeable about the affairs of humans (13, 6, 17, 9, 7) are in the upper right corner, whereas the ‘ignorant’ agents (23, 15, 12, 10) occupy a middle position. Counterintuitive representations not explicitly involving an agent occupy a position at the lower righthand part of the map (1, 11, [3], 5, [14], 24). Thus these groups differ from each other fairly clearly in their probable religiousness. The sentences are:

1. In the village of Zanong, there were tables that were always invisible on Wednesdays.
2. During the great feast, the king always gave food to the poor.
3. It was rumored that in the great village of Almol people had fat sheep that could fly.
4. It was rumored that the old man owned more land than the king.
5. On the faraway mountains, there were rocks that grew in size every second year.
6. The boy heard a voice from the sky saying: “Don’t be afraid!”
7. The Ramura believe that invisible beings can eat you up if you walk in the dark.
8. The Ratu never bring their spears into the village.
9. The man had been struck by lightning because of something he had done in is youth.
10. The Diggi believe in the existence of beings that act like normal humans but do not have any thoughts or memory.
11. In the forest, there were trees that grew fruit made of finest gold.
12. A previously unheard of tribe believes that their Great Humman can be easily cheated because he cannot know people’s thoughts.

1. Counterintuitiveness with no specified agent
2. Counterintuitive agents
3. Faith/belief
4. Anything can be religious
5. Other than mere superstition or custom
6. Resembles some familiar religion
7. Intuitive decision
8. Ethics
9. Superstition and superstitious customs
10. Rituals
11. Miscellaneous

The first category is characterised by references to something ‘supernatural’, not explicitly involving an agent—for example, “Because some of the sentences involved the supernatural.” The second category contains answers in which ‘spiritual’, ‘higher’ or ‘supernatural’ beings are mentioned—for example, “[A]nything that had to do with a higher being or spiritual forces.” The answers in the third category emphasise faith or belief as the hallmark of religion—for example, “Religion is based on faith rather than experience.” In the fourth category, the answers indicate that anything can be religious, depending on circumstances. In the fifth category we find answers according to which religion is something other than mere superstition or custom. Answers in the sixth category are based on the prototype effect of familiar religions—for example, “I think I rated some as more religious than others bec[ause] I related each sentence to my own religion.” The seventh category consists of those answers in which the choice is said to have been purely intuitive. Eighth category answers emphasise ethics—for example, “Question 8, I find to be very religious because out of respect for the best of the village, no weapons are brought in so that there is no violence.” In the ninth category we have answers claiming that religion is mere superstition

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13. The wooden statue of Dawi wept when grandmother died.
 14. It was rumored that the people of Ganea could fly away every time their life was in danger.
 15. The Lommo think that their ancestors live forever but do not know anything about what goes on in the world of the living.
 16. The Vezzi believe that the king’s scepter is made of finest gold.
 17. The Bono believe that Boming is present everywhere at once.
 18. In the land of the Hanu, you should always carry a sword when going to the woods.
 19. The Wathu consider silver to be more precious than gold.
 20. The Kekwa have great respect for blue-eyed people.
 21. Among the Susu, theft is punished by death.
 22. The Meso believe that the wild boar’s meat must always be cut with a special knife.
 23. The followers of John Smith believe that the world has been created by a personal force not in the least interested in the affairs of humans.
 24. The Hopo believe that stones will disappear if you touch them.
 25. The old man Cluang was rumored to be very wise.

and old customs. In the tenth category the emphasis is on rituals. Finally, one answer can only be classified under the heading ‘miscellaneous’.

Results

In this study, too, counterintuitive representations were judged to be more likely to be religious ($M=3.14$) than were intuitive ones ($M=2.52$), $t(70)=-5.00$, $P<.001$. Moreover, counterintuitive statements involving some kind of agent ($M=3.39$) were evaluated as more likely religious than statements involving no agent ($M=2.47$), $t(70)=10.63$, $P<.001$. Finally, counterintuitive statements with a conscious agent interested in the affairs of humans ($M=3.57$) were evaluated as more likely to be religious than statements in which the agent was not knowledgeable or concerned about human affairs ($M=3.12$), $t(70)=5.62$, $P<.001$. Here one sex difference was found: men rated sentences about ignorant agents as less probably religious ($M=2.83$) than women ($M=3.38$), $t(66)=-2.73$, $P<.01$. This finding suggests that women’s category of religion may be larger and less specific than men’s in the sense that the folk theory of religion in which the counterintuitive agent’s knowledge about humans is important is a specifically male creation. But as the reliability of these ratings was very low, this is only speculation. The distribution of the ratings can be seen in Fig. 3.

The answers to the open question of why some sentences were assessed as more likely than others to be religious revealed that the criteria most often applied were counterintuitiveness in general (ten answers) and counterintuitive agents (16 answers) in particular. Eleven answers were classified as belonging to the category characterised by the importance of faith/belief. Other categories consisted of seven or fewer answers.

General discussion

The results supported the hypothesis that when persons evaluate different kinds of unfamiliar beliefs in terms of their possible religiousness, they, *ceteris paribus*, consider situations that include a counterintuitive element, especially a counterintuitive agent knowledgeable in the affairs of humans, more likely to be religious than others.

In the tasks, the subjects were asked explicitly to compare the given beliefs, without knowing what to look for. In not knowing what to look for, they had to go by their intuitions, and they made choices on the basis of violations of intuitive assumptions. Thus violations of intuitive expectations, especially of socially important intuitions (see Boyer, 2001), came to be a crucial factor determining their decisions. Also, the direct questions in study 3 yielded the same result: things that we have conceptualised as counterintuitiveness and as agency were the most common explanations of what makes a belief religious. It thus seems that in Western culture religion is understood as a cultural domain that deals with entities, especially with agents that violate our intuitive ontological expectations.

Benson Saler (2000) has suggested that we recognise religion on the basis of acquired prototypes. Those who have been raised in Judaism or Christianity, for example, recognise other religions as religions to the extent that they resemble their own. Our studies, however, suggest that we may not recognise religion solely on the basis of the actual content of beliefs. It is, rather, the

general nature of beliefs that is crucial—that is, whether or not they violate intuitive ontological expectations. All that is needed to activate a religious interpretation is ontological violations. This finding in turn suggests that there may be a common core to all religiosity, just as Barrett and Boyer have speculated. We are able to recognise religion in an alien cultural milieu not because these religions resemble our own in some outward manner but because all religions have their own versions of a general theme that is intuitively recognised.

What is needed to test this hypothesis of the universality of religion as a cultural domain are, first of all, further experiments in other cultures. This requirement, however, raises the problem of finding exact equivalents for the word ‘religion’, even if persons in other cultures have the mental concept of religion—that is, a system of ideas and practices dealing with entities violating intuitive expectations (see Anttonen, 1996). Second, the importance of agency in counterintuitiveness should be more carefully studied. Third, what needs to be studied is whether counterintuitiveness has a different effect than mere oddity. In this way we can come to a better understanding of religion as a panhuman cultural domain.

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