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Disciplines

Comparative Methodologies and Theories | History of Religions of Eastern Origins | Other Religion | Religious Thought, Theology and Philosophy of Religion

Relations between Gauḍīya Vaiṣṇava Devotional Practices and Implicit and Explicit Anthropomorphic Reasoning about Kṛṣṇa

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Abstract

Employing a narrative comprehension task procedure, this study tests the hypothesis that engagement in Gauḍīya Vaiṣṇava religious practices, which are aimed at cultivating a personal relationship with the Hindu deity Kṛṣṇa, predict increased implicit attribution of anthropomorphic properties to him. Contrary to our hypothesis, multiple regression analyses of data from 184 native Krishna devotees in West Bengal, India, indicated that increased engagement in these practices loaded as a tertiary predictor after education and age, such that increased practice predicted a *decrease* in implicit anthropomorphic reasoning about Kṛṣṇa ($\beta = .16$, $p < .03$). Based on these and additional analyses of the data, we theorize that these results may be due to the tradition's emphasis on presenting Kṛṣṇa's non-anthropomorphic dimensions to neophyte practitioners and the non-Gauḍīya Vaiṣṇava public. One implication of these results is that religious cultures and engagement in religious practices have the potential to significantly affect a human cognitive tendency to implicitly attribute anthropomorphic properties to divine beings. This may result from developing alternative knowledge from which to reason about a deity by engaging in religious practices and beliefs shaped by particular theological, historical, and cultural factors.

Relations between Gauḍīya Vaiṣṇava Devotional Practices and Implicit and Explicit Anthropomorphic Reasoning about Kṛṣṇa

In a seminal psychological study of anthropomorphism, Barrett and Keil (1996) explored the extent to which people implicitly think about God in anthropomorphic terms in contrast to the non-anthropomorphic qualities that theologies and individuals often explicitly attribute to God. Using a variation of a narrative comprehension paradigm developed by Bransford and McCarrell (1974), subjects were read a series of narratives in which God was an agent, after which participants were asked to recall particular details. Each narrative contained two kinds of recall items: "base" items, or control items, which were concerned with the basic facts of the narrative and "test" items, which were concerned with how God was conceptualized. Test items were constructed in such a way that an inaccurate recall would indicate implicit attribution of anthropomorphic qualities to God that were inferred and not made explicit in the narrative. This indirect method was chosen in order to tap into God concepts that subjects use in everyday life rather than in the context of theologically normative expectations for how God should be conceived. Participants were also asked to fill out an explicit beliefs questionnaire that included ratings of self-religiosity, religious affiliation, and a series of multiple-choice questions concerning the specific properties God might possess.

The procedure was run in two separate studies with two groups each distinguished by variations in the procedure. Two groups were read the narratives first, followed by the explicit beliefs questionnaire, and two groups read them in the reverse order to make explicit beliefs more salient. In all four cases, the groups indicated a strong tendency to implicitly anthropomorphize God in contrast with wide agreement amongst participants

that God is subject to few if any physical and psychological constraints typical of human beings. They interpreted these results as evidence that people intuitively make anthropomorphic assumptions about God.

In order to explore whether such findings might be cross-culturally stable, Barrett (1998) conducted a similar study among North Indian Hindus. Allowing the participants to read the narrative comprehension tasks first and using adapted versions of the materials used previously, the word "God" was substituted with the names of four different Hindu divinities—Brahman, Śiva, Viṣṇu, and Kṛṣṇa—and subjects were randomly assigned one of the four versions. Finding no differences between the four groups, Barrett treated them as one group and again found that participants demonstrated a substantial difference between their explicit stated beliefs, which were strongly non-anthropomorphic, and the extent to which they implicitly attributed anthropomorphic qualities to the respective Hindu deity. These results have helped establish the cross-cultural validity of Barrett and Keil's (1996) earlier findings and interpretations. Subsequent studies have yielded results generally consistent with this (Hornbeck & Barrett, 2013; Huang, Cheng, & Zhu, 2013; Maira, Nyhoff, & Johnson, 2013).

The Present Study

The present study modified the experimental design of Barrett and Keil (1996) in order to explore whether (a) there is an association between frequency of engagement in particular religious practices and the tendency to implicitly or explicitly reason in anthropomorphic terms about divine agents, and (b) such a relationship would change when there is a shift in practice and style that emphasized the anthropomorphic dimensions of a deity as a "higher" conceptualization of the deity than when conceived in

his non-anthropomorphic dimensions. Like Barrett's (1998) study, the present study focuses on indigenous North Indians.

Unlike Barrett's (1998) study, however, the present study focuses on a specific North Indian religious tradition, the Gauḍīya Vaiṣṇavas, for two important reasons. First, to hear of *braman* in anthropomorphic terms in the contexts of the kinds of narratives in which they were embedded would have likely seemed very strange to a common Hindu of any stripe, as *brahman*, which is denoted with a neuter gender, is generally conceived as the transcendent impersonal ground of all being and spoken of in those terms. Moreover, not all Hindus share the same conceptions of specific deities. For example, Gauḍīya Vaiṣṇavas view Kṛṣṇa as an intentional agent who has a transcendent human-like form that is viewed as ontologically superior to and the source of *brahman*, which is understood as the impersonal and transcendent ground of all being. However, many non-Gauḍīya Hindus hold that *brahman* is superior to and the source of Kṛṣṇa (and all other deities), who are viewed as an expression of *brahman*. Focusing on a singular population that identifies with a particular Hindu tradition and deity assures greater theological consistency among participants. Second, a primary purpose of this study was to extend the concern of Barrett's study from looking for global cognitive tendencies to implicitly reason anthropomorphically about divine agents to exploring the extent to which this tendency may be encouraged or inhibited by cultural practices.

Theological Context and Setting

The Gauḍīya Vaiṣṇava tradition was chosen in part for its simultaneous explicit attribution of both non-anthropomorphic and anthropomorphic qualities to Kṛṣṇa. On the one hand, Kṛṣṇa is the ultimate source of all that is, unconstrained by any physical,

psychological, or biological limitations. On the other hand, Kṛṣṇa is understood to have

an eternal anthropomorphic form; he lives in a simple transcendent cowherd village

known as Vṛndāvana, which is actually a celestial realm replete with forests, flowers,

lakes, rivers, breezes, fragrances, and unsurpassable aesthetic arrangements; and he

engages in activities known as *līlā,* or "divine play," wherein Kṛṣṇa and his intimate

companions exchange expressions of intimacy and love. In the context of *līlā*, Kṛṣṇa is

understood to cause his various companions to "forget" that he is the supreme deity in

order to facilitate exchanges of increased intimacy, which would otherwise be inhibited

by awareness of his status as supreme Lord. Cultivating an intimate personal relationship

with Kṛṣṇa and entering into this *līlā* is the goal of Gauḍīya Vaiṣṇava practitioners.

As a means of achieving this goal, Gauḍīya theology advocates two distinct styles

of religious practices, viz. *vaidhī bhakti sādhana* and *rāgānugā bhakti sādhana*. *Vaidhī*

bhakti means "devotion according to the rules of scripture." *Vaidhī* practices can be

thought of as a set of exoteric practices in the sense that they are recommended for all

practitioners, especially those who are in the beginning stages of traversing the path of

bhakti and developing a devotional mood towards Kṛṣṇa. Principal practices typically

include venerating and worshipping the image of Kṛṣṇa (*mūrti*) with prayers, songs, and

various ritual instruments; performing service for a *guru* and/or personal icon (*mūrti*) of

Kṛṣṇa and/or Vaiṣṇava institution; and hearing and singing about Kṛṣṇa's names (*nāma*s),

forms (*rūpa*s), qualities (*guṇa*s), and various forms of divine play (*līlā*s). Engagement in

these practices is intended in part to redirect one's thoughts and thought patterns away

from selfish enjoyment and attachment to the temporary phenomenal world and towards

acting exclusively for the enjoyment of Kṛṣṇa and developing exclusive attachment to

him. While these practices and the theology behind them tend to emphasize Kṛṣṇa's non-anthropomorphic properties, they also serve to familiarize the practitioner with the various *līlā*s of Kṛṣṇa and his intimate companions, who are described in highly anthropomorphic terms that are not only theologically acceptable, but are considered theologically superior to his non-anthropomorphic qualities. The divine is not ultimately a force, the divine is ultimately an intentional agent who acts in very human-like—and often child-like ways, even though not subject to human limitations.

Rāgānugā bhakti, or "devotion that follows a passion," can be thought of as esoteric in the sense that it refers to expressions of devotional behavior and internal meditations that are intended to develop a more intimate and personal relationship with Kṛṣṇa than is possible through the practice of *vaidhī bhakti* alone. Those who practice *rāgānugā bhakti* are encouraged to devote more attention to Kṛṣṇa's anthropomorphic dimensions than those who focus more on the practices of *vaidhī*. A signature practice of *rāgānugā* practitioners is meditation on Kṛṣṇa's *aṣṭakāliya līlā*, which refers to contemplative recollection of Kṛṣṇa's *līlā*s corresponding with eight specific times of the day. In the context of this recollection the practitioner mentally constructs a perfected spiritual body (*siddha-rūpa*) with which to perform mental service (*mānasī sevā*) to Kṛṣṇa in the mood and capacity of one of Kṛṣṇa's intimate companions, usually as Kṛṣṇa's lover but in some cases as a friend or guardian. Formal practice of *rāgānugā-bhakti* is usually reserved for more experienced practitioners and not neophytes or the general public due to its emphasis on relating to Kṛṣṇa in his anthropomorphic dimensions as a friend, parent, or lover rather than as the supreme Lord. As a consequence, *rāgānuga bhakti* practices tend to emphasize meditation on Kṛṣṇa's

anthropomorphic properties while downplaying his non-anthropomorphic dimensions. Ideally the practitioner successfully brackets out these latter properties altogether since an awareness of them is understood to interfere with the various kinds of exchanges of intimate love that are thought possible between Kṛṣṇa and the *jīva*, or *"soul."*

Rationale and Hypotheses

In view of the tradition's strong anthropomorphic conceptions of Kṛṣṇa and the aim of cultivating a dynamic and personal relationship with Kṛṣṇa, we formulated two hypotheses. The first hypothesis was that there is an association between frequencies of engagement in central *vaidhī* practices and the tendency to implicitly attribute anthropomorphic properties to Kṛṣṇa such that an increase in the frequency of engagement in these *vaidhī* practices will predict an increase in the tendency to implicitly reason anthropomorphically about Kṛṣṇa. We inferred that this would be due to the highly anthropomorphic properties Kṛṣṇa is said to possess despite his non-anthropomorphic properties. The second hypothesis was that this tendency to implicitly reason about Kṛṣṇa in anthropomorphic terms will be further increased due to engagement in the practices of *rāgānugā bhakti*. We reasoned that this would occur because of the increased emphasis on meditation on and relating to Kṛṣṇa's anthropomorphic dimensions in intimate, personal, and human-like ways while intentionally bracketing out his non-anthropomorphic dimensions. Therefore, levels of engagement in principal *vaidhī* practices and *rāgānugā* practices were treated as predictor variables and the extent to which participants implicitly reason about Kṛṣṇa in anthropomorphic terms were treated as outcome variables.

Methods

Participants

Of the 206 indigenous participants in this study who identified Kṛṣṇa as the primary deity of the Hindu pantheon they worship on our demographics questionnaire, 24 either did not self-identify or ritually identify themselves as Vaiṣṇavas and were therefore excluded from the study for the sake of increasing theological consistency among the participants considered. Of the 184 remaining participants (Mean age = 44.2), 28 were female (Age range = 18 - 60+) and 156 were male (Age range = 18 - 70+) This discrepancy between the gender of participants was not intended but seems to be largely a consequence of the predominance of male practitioners living in the temples and *aśrama*s from which we primarily recruited, patriarchal norms, and the high illiteracy rates of women in rural India more generally.

Questionnaire and Narrative Comprehension Tasks[1]

Participants completed a questionnaire in their native language that assessed demographic variables, their degree of engaging in principal *vaidhī* practices, and whether they engaged in *līlā-smaraṇa*, a practice typically reserved for *rāgānugā* practitioners. The extent to which each participant explicitly attributed anthropomorphic properties to Kṛṣṇa was assessed by a 15-item explicit beliefs questionnaire in which each item attributed an anthropomorphic property to Kṛṣṇa (e.g., "Krishna has to be near something to see it.") or non-anthropomorphic property to Kṛṣṇa (e.g., "Krishna can hear everything.") of Kṛṣṇa. Participants were then asked to indicate their level of agreement with each statement on a 4-point Likert scale with the answer options of "strongly agree,"

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[1] Available from the authors.

"agree," "disagree," or "strongly disagree." The responses were scored so that 1 indicated strongest attribution of anthropomorphic properties to Kṛṣṇa and 4 indicated strongest attribution of non-anthropomorphic properties to Kṛṣṇa. One item was dropped after all data were collected due to an ambiguous translation error, leaving 14 items from which to calculate the mean score.[2]

Implicit anthropomorphic reasoning was measured by administering four short narrative comprehension tasks, each one paragraph in length, involving Kṛṣṇa, with each narrative followed by a series of statements about the narrative. On the basis of memory recall, participants were asked to indicate whether or not they agreed that the information in the statements was contained in the narrative. There were a combined total of 20 control items and 13 test items. Recall errors on test items were designed to indicate implicit anthropomorphic reasoning about the deity. Accuracy on control items was used as a contrast measure for test items as a safeguard against intrusions of chance and poor memory. All four narratives were translated and administered in Bengali. The content of the narrative comprehension tasks was modified to be more sensitive to the cultural background of rural India than that in the original English version.[3]

Procedure

Participants were recruited primarily by visiting various centers of religious worship and practice (ashramas and temples) and through word of mouth with the aid of indigenous, Bengali-speaking research assistants. In the case of ashramas and temples, a

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[2] Additionally, the Bengali versions had several minor typos in both the questionnaire and narrative comprehension tasks that were not noticed until after the study was complete. These were such that they should have no effect on the understanding of the item.

[3] For example, the sentence "While God was listening to the birds, a large jet landed" was modified to read "While Krishna was listening to the birds, there was a large clap of thunder and lightening."

monetary donation was typically given to the institution on behalf of the resident participants who volunteered. In all other cases either a small monetary or non-monetary gift was given to the participant-volunteer. The demographics questionnaire was administered first, followed by the explicit beliefs questionnaire, then the four narrative comprehension paragraphs, and finally their accompanying recall items. Administering the explicit beliefs questions before the narrative comprehension items served to make salient explicit theological commitments and guard against inappropriate attribution of anthropomorphic qualities. A research assistant instructed the participants in the Bengali language to use their own concepts of Kṛṣṇa when answering the questions both on the explicit beliefs questionnaire and the narrative comprehension tasks. In order to keep participants from looking back to the narratives once they turned the page to answer the recall questions and to keep them vigilant in their attention to the narratives, we instructed them to think of the narrative comprehension task as a memory recall test.

Data Breakdown and Analysis Strategy

The three dependent variables in our study included the: (1) mean of scores derived from a 14-item survey designed to measure the extent to which participants' explicitly attribute various kinds of anthropomorphic and non-anthropomorphic properties to Kṛṣṇa; (2) mean percent of accurately recalled "test items" in narrative comprehension tasks, for which lower accuracy indicated greater implicit anthropomorphic attribution;" (3) and mean of accurately recalling control items.

Participants were then classified as either high frequency or low frequency practitioners. Classification was determined by taking the mean of each participant's combined score of their indicated frequency of engagement in five central *vaidhī*

practices. Frequency of engagement was measured on an ordinal scale with a "0" being the lowest theoretically possible combined score (indicating no engagement), and "28" being the highest theoretically possible combined score (indicating very high engagement). Of the 184 Vaiṣṇava participants, 113 scored above the mean and were classified as high frequency practitioners, 71 scored below the mean and were classified as low frequency practitioners. Moreover, 49 of the 184 participants were classified as esoteric because they indicated they practiced *rāgānugā bhakti* and meditated on Kṛṣṇa's *aṣṭakāliya līlā*; 45 were classified as non-esoteric because they indicated they neither engaged in *rāgānugā-bhakti* nor meditated on Kṛṣṇa's *aṣṭakalīya līlā.* Those participants who either indicated they did not engage in *rāgānugā-bhakti* or did not meditate or did not know if they meditated on *aṣṭakalīya līlā* were therefore excluded from analyses concerned with measuring differences between those classified as "esoteric" and "non-esoteric" practitioners.

Age was estimated as the midpoint of one of six age group categories: Of the 184 participants who were identified as Vaiṣṇavas, 60 were in the first group spanning the ages of 18-29; 25 were in the second group spanning the ages of 30-39; 19 were in the age 40-49 group; 30 were in the age 50-59 group; 31 were in the age 60-69 group; and 19 were in the 70 or older age group. Each of these Vaiṣṇava participants was also classified into one of three educational level groups: 24 were placed in the group that had anywhere from no formal education up through Class 6; 113 were placed in the Class 7-Class 12 group; 46 were placed in the college and above group; and 1 person did not indicate their level of education.

Results

In order to test whether frequency of engagement in *vaidhī* practices had any
influence on the three dependent variables—explicit attribution of anthropomorphic
properties to Kṛṣṇa, implicit anthropomorphic reasoning, and accuracy on control
items—regardless of whether or not practitioners were identified as esoteric practitioners,
three independent samples *t*-tests were run comparing the mean scores for those
Vaiṣṇavas who were classified as high or low frequency practitioners. On the explicit
beliefs survey, low frequency practitioners scored a mean of 3.01 (*SD* = .46) and high
frequency practitioners scored a mean of 3.27 (*SD* = .52). This difference is significant (*t*
= -3.4, *p* < .001), indicating that high frequency practitioners were less likely to explicitly
attribute anthropomorphic properties to Kṛṣṇa than low frequency practitioners. For
accuracy on test items presented in the narrative comprehension tasks, no significant
difference (*t* = -1.56, *p* < .12) between the scores of low frequency practitioners (*M* =
46.9%, *SD* = 19.9%) and the high frequency practitioners (*M* = 52.1%, *SD* = 23.4%) was
found. This suggests that frequency of engagement in *vaidhī* practices does not predict
significantly less or more implicit reasoning about Kṛṣṇa in anthropomorphic terms.
Similarly, no significant difference (*t* = .78, *p* < .43) was found between the scores of low
frequency practitioners (*M* = 79.9%, *SD* = 12.8%) and high frequency practitioners (*M* =
78.3%, *SD* = 14.6%) for accurately recalled control items.

In order to further investigate whether frequency of engagement in *vaidhī*
practices had any influence on the three dependent variables regardless of whether or not
practitioners also engaged in esoteric practices, three separate multiple regressions were
run in order to control for the effects of age and education. In relation to the explicit

beliefs survey, the analysis indicated that frequency of engagement in *vaidhī* practices loaded as the primary predictor such that higher degrees of practice predicted a decreased tendency to explicitly conceptualize Kṛṣṇa in anthropomorphic terms (ß = .293, *p* < .001) and education loaded as a secondary predictor such that an increase in education predicted a decreased tendency to explicitly conceptualize Kṛṣṇa in anthropomorphic terms (ß = .241, *p* < .001). For accuracy on test items, the analysis indicated that education loaded as the primary predictor such that low education predicted greater implicit anthropomorphic reasoning about Kṛṣṇa (ß = -.337, *p*<.001); age loaded as the secondary predictor such that an increase in age also predicts greater implicit anthropomorphic reasoning about Kṛṣṇa (*ß*= .-195, p< .01); and frequency of engagement in *vaidhī* practices loaded as the tertiary predictor such that an increase in frequency of engagement predicted less implicit anthropomorphic reasoning about Kṛṣṇa (*ß*= .16, p< .03). For accuracy on "control items" the analysis indicated that education loaded as the primary predictor such that low education predicted less accuracy on control items (ß = -.321, *p*< .000) and high education predicted more accuracy on control items (ß = .173, *p*< .008); age loaded as the secondary predictor such that an increase in age predicted less accuracy on control items (*ß*= .-306, p< .000). As expected, frequency of engagement in *vaidhī* practices had no significant effect on accuracy for control items.

In order to test whether styles of practice had any influence on the three dependent variables, three independent samples *t*-tests were run comparing the mean scores for those identified as esoteric and non-esoteric Vaiṣṇava practitioners. The results indicated that there was no significant difference between esoteric and non-esoteric practitioners on any of the dependent variables.

Averaging each participant's score for all 14 items of the explicit beliefs questionnaire revealed that 165 of the 184 participants scored greater than the theoretical midpoint of 2.5 on a scale of 1 to 4, indicating a general tendency to explicitly attribute non-anthropomorphic properties to Kṛṣṇa over anthropomorphic properties; 9 participants scored less than 2.5, indicating a general tendency to explicitly attribute anthropomorphic properties to Kṛṣṇa; and 10 participants scored exactly 2.5. A Z-test between the upper and lower proportions (i.e., 89% scored above the midpoint compared to 5% scored below the midpoint) showed $p<.001$.

On the narrative comprehension tasks, participants had a mean accuracy rate of 50% on test items ($SD = .22$) compared with a significantly higher mean accuracy rate of 79% on control items ($SD = .14$) ($t = -18.6$, p<.001). Thus, the data suggests that while participants tend to explicitly think of Kṛṣṇa in non-anthropomorphic terms, there is a much stronger tendency to implicitly reason about Kṛṣṇa in anthropomorphic terms. These different tendencies towards explicit and implicit reasoning are consistent with the previous research of Barrett and Keil (1996).

Discussion

Contrary to our hypothesis, neither an increase in *vaidhī* practices nor engagement in esoteric *rāgānugā* devotional practices predicted an increased tendency to implicitly reason about Kṛṣṇa in anthropomorphic terms. This result is surprising given the highly anthropomorphic properties the theology attributes to Kṛṣṇa, non-anthropomorphic properties notwithstanding, and the research of Barrett and Keil (1996), which has indicated a strong cognitive tendency to implicitly reason about divine agents in anthropomorphic terms despite explicit non-anthropomorphic beliefs. What is even more

surprising is that increased engagement in *vaidhī* practices predicted a significant decrease in the tendency to explicitly attribute anthropomorphic properties to Kṛṣṇa and a decrease in the tendency to implicitly reason about Kṛṣṇa in *anthropomorphic* terms once education and age were accounted for. In light of these findings, two principal questions arise regarding the influence of degrees of engagement in *vaidhī sādhana* practices: (1) why does an increase in degrees of engagement in *vaidhī* devotional practices predict a decrease in explicit attribution of anthropomorphic qualities to Kṛṣṇa, and (2) why does an increase in degrees of engagement in *vaidhī* devotional practices predict a decrease in implicit anthropomorphic reasoning about Kṛṣṇa once education and age have been accounted for?

The answers to these questions may be due in part to the tradition's strong emphasis on promoting Kṛṣṇa's non-anthropomorphic dimensions over Kṛṣṇa's anthropomorphic dimensions to neophyte practitioners and the non-Gauḍīya Vaiṣṇava public. Such an emphasis promotes sectarian interests in a climate of competing claims from other devotional and non-devotional traditions that posit deities other than Kṛṣṇa as the supreme deity or who posit different understandings of Kṛṣṇa's nature. It is also there to protect neophyte devotees and the broader non-Gauḍīya Vaiṣṇava population from confusing Kṛṣṇa with being an ordinary human being or a being who is thought to be limited in some way in light of his anthropomorphic form and activities. Historically, Kṛṣṇa's anthropomorphic dimensions have served as a constant source of confusion and misinterpretation of Kṛṣṇa's divine nature from the Gauḍīya point of view, and the tradition has consistently acted to counter these through emphasis on his non-anthropomorphic dimensions to neo-phyte devotees and the non-Gauḍīya public, even

while promoting Kṛṣṇa's anthropomorphic dimensions. Such an emphasis may result in establishing what Epley, Waytz, and Cacioppo (2007) refer to as "alternate knowledge structures" (p. 866), or may function via a process akin to "sensory overrides" (Luhrmann, 2011) whose effect is to override a hypothesized intuitive default.

Epley et al. (2007) argue that knowledge about humans and the self both likely serve as the basis for induction when reasoning about nonhuman agents because knowledge representation of these is acquired earlier and is more richly detailed than knowledge about nonhuman agents, but as "knowledge about nonhuman agents is acquired, however, knowledge about humans or the self should be less likely to be used as a basis for induction simply because of the coactivation (and perhaps eventual substitute activation) of alternate knowledge structures at the time of judgment" (p. 866). In concert with this hypothesis, it seems reasonable to think that the practices and teachings of the Gauḍīya tradition have the potential to establish such accessible alternative knowledge structures about the nonhuman agent Kṛṣṇa that include knowledge of both his non-anthropomorphic and anthropomorphic dimensions. Depending on the social and environmental context in which a practitioner is reasoning about Kṛṣṇa, one or the other of these dimensions of Kṛṣṇa's nature may be more easily drawn upon or triggered (cf., Barnes & Gibson, 2013). Given the context in which participants were asked to reason about Kṛṣṇa during this study, *viz*. a western scholar systematically administering a set of questionnaires that is concerned in some way with how practitioners think about Kṛṣṇa, may help explain why high frequency practitioners, who have had more time to internalize such structures with which to reason about Kṛṣṇa in different contexts, display a decreased tendency to explicitly attribute anthropomorphic qualities to Kṛṣṇa as well as

a decreased tendency to implicitly reason about Kṛṣṇa in anthropomorphic terms after education and age are taken into account. That such an alternative knowledge structure is likely to be activated in such a context is in step with the tradition's concern over how Kṛṣṇa is understood by neophytes and the non-Gauḍīya Vaiṣṇava public.

This interpretation is potentially bolstered when the results of this study are compared with the results of Barrett's study, which was conducted with the participation of North Indians, regardless of their individual theological affiliations and understandings. Whereas 20% of the participants in Barrett's study indicated a greater tendency to explicitly attribute more anthropomorphic qualities than non-anthropomorphic properties to whichever of the divine agents their questionnaire suggested, in this study only 5% of our participants indicated a greater tendency to do so. Moreover whereas participants in Barrett's study averaged a 38.1% accuracy rate on test items and 81.1% on control items, participants in this study averaged a 50% accuracy rate on test items and a 79% on control items. While both Barrett's results and the results of this study indicate a general tendency towards explicitly attributing non-anthropomorphic properties to Kṛṣṇa and other Hindu deities, Gauḍīya Vaiṣṇavas appear to have cultivated stronger non-anthropomorphic conceptions of Kṛṣṇa than the average North Indian Hindu despite the explicit and highly anthropomorphic dimensions Gauḍīya Vaiṣṇava theology attributes to Kṛṣṇa.

Limitations and Extensions

There are a number of limitations to this study that future studies should consider. First, it would be helpful to develop a more nuanced demographics questionnaire for teasing out degrees of engagement in esoteric Vaiṣṇava practices. A better understanding

of the extent to which a practitioner is engaged in esoteric Gauḍīya practices will facilitate a more controlled analysis of the relationship between degrees of engagement with these practices and the tendency to implicitly anthropomorphize about Kṛṣṇa to a greater or lesser degree.

Second, aspects of the procedure we used may have served to increase the difference in results between the Hindu participants of Barrett's (1998) study and those in our study. One difference between our procedures that may have had an effect is that we asked our participants to think of the narrative comprehension task as a memory recall test in order to prevent them from turning back to the comprehension questions once they started answering them. This was a problem we encountered constantly prior to asking participants to think of the study in this way. Also, unlike Barrett's procedure, we administered the explicit beliefs survey first in order to make explicit the participants' theological beliefs. In an earlier version of this study in which participants heard the narrative comprehension tasks through audio rather than through allowing them to read the narratives at their own pace, Barrett and Keil (1996) found that when the explicit beliefs questionnaire was administered before the narrative comprehension tasks, participants were less likely to implicitly anthropomorphize God than participants who were administered the narrative comprehension tasks first. This was interpreted to be the result of priming the participants' theological concepts (p. 232). In order to see if and to what extent the order of these materials may function as an influential variable, future studies should use a between groups design that reverses the order in which the explicit beliefs questionnaire and the narrative comprehension tasks are given to participants.

Third, in light of the work of Epley et al. (2007) and Epley, Waytz, Akalis, and Cacioppo (2008), one of the most obvious limitations of this study is the possibility that the "outsider" nature of the study and the "outsider" status of researchers may be interfering with the way participants might normally respond due to the activation of alternative knowledge structures from which participants may reason. To control for this possible influence, future studies with a Gauḍīya Vaiṣṇava population would benefit from rethinking the methods for administering the materials or developing a different type of research design that bypasses or minimizes the potential of activating such alternative knowledge structures. The benefits of doing this successfully would not only generate data for better understanding the influence of engagement in exoteric and esoteric Gauḍīya Vaiṣṇava practices on implicit anthropomorphizing of Kṛṣṇa, but it would also provide data for Epley et al.'s (2007) theory of the instantiation of alternative knowledge structures and the notion that Gauḍīya practices help develop such alternative knowledge structures that are catalyzed in certain contexts and not others.

Finally, in order to better evaluate whether there are significant differences in the tendency to implicitly anthropomorphize about deities between different groups of Hindus or different groups of religious Bengalis relative to their theological affiliations, a between groups study could be performed using the same methods and procedure as this study but with very different Bengali populations, e.g. various groups of Bengali Hindus who worship different deities or maintain different theologies about particular deities or Bengali Christians or Muslims.

Conclusion

The evidence of this study suggests that increased engagement in *vaidhī* practices leads to a decreased tendency to explicitly attribute anthropomorphic properties to Kṛṣṇa and a decreased tendency to implicitly reason about Kṛṣṇa in anthropomorphic terms after education and age are accounted for. In light of the procedure, Gauḍīya practices, and historical, theological, and cultural contexts in which the Gauḍīya tradition developed, these results suggest evidence, though more is needed, for the possibility of an established alternative knowledge structure that may be both consciously and non-consciously accessed that is used for thinking and reasoning about Kṛṣṇa as a nonhuman agent In addition to this and consistent with Barrett and Keil's (1996) research,, the current study provides evidence for the role religious cultures can play in increasing or decreasing cognitive tendencies, such as the tendency to implicitly anthorpomorphize divine agents.

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