

Representing God

Marjaana Lindeman¹

Department of Psychology
University of Helsinki
P.O. Box 13
00014 Finland
Email: Marjaana.Lindeman@helsinki.fi

Ilkka Pyysiäinen

Helsinki Collegium for Advanced Studies
University of Helsinki

Perti Saariluoma

Department of Computer Science and Information Systems
University of Jyväskylä

The study explores representations of God. Specifically, we focus on how attributes assigned to God are interrelated, what attributes people accept as being or not being descriptive of God, and how the representation is related to religiousness and religious participation. Three hundred fifty-seven participants rated 78 attributes. A factor analysis yielded five attribute sets, i.e., omnipotence, nature, incorporeality, curious metaphors and other gods. The results show, for example, that in the whole sample, God is most often associated with incorporeality. Among highly religious people, representing God by nature, other gods or curious metaphors is inversely related to active religious participation, whereas associating God with omnipotency is linearly related to religious participation. The results indicate, among other things, that it may be possible to predict from a set of attributes the nature of an individual's religiousness and religious participation and what other attributes he/she ascribes to God.

¹ This is an equal authorship paper, in which Marjaana Lindeman has been mainly responsible of the method, Ilkka Pyysiäinen of the scientific study of religion and Perti Saariluoma of theoretical parts. Names are in alphabetic order.

Introduction

Some variant of the concept of “God”² plays an important role in all cultures. In the name of gods people have done not only cruel deeds but also profound science and art. Examples range from the visual arts of various cultures to scholastic philosophy of Medieval Europe. Even modern physicists often feel compelled to comment on God beliefs in the light of their scientific work (see Davies, 1992; Pyysiäinen, 1999). Therefore, an interesting scientific question emerges: how it is possible that one and the same concept is involved in such different thought contents and can have justified deeds whose morality is so controversial? There are, after all, not too many concepts with similar versatility in human culture.

Even in scientific literature, the concept of “God” appears in a variety of historical, anthropological, and psychological studies of religion as a basic concept, the nature of which is not considered to be in need of any explication (Pyysiäinen & Ketola, 1999). Scholars feel quite free to talk about African gods, the gods of Hinduism, a Christian God, etc. without any theory of the contents of the concept of God. Thus we have books such as *The Gods of Northern Buddhism* (Getty, 1962), *The Goddesses and Gods of Old Europe* (Gimbutas, 1982) or *The Gods of the Celts* (Green, 1986). Therefore, it seems necessary that, in explaining various kinds of mental representations and actions, researchers should have a good understanding of what kinds of things god may mean to people, i.e., how various elements in the mental representation of God are interrelated and what kinds of constellations of mental contents are possible.

By mental representations we mean here information, which stands for something, i.e., they are active records of the external (physical or social) or internal world in the brain. Concept, in turn, is an elementary representation, which represents individual objects, entities, actions or states. They are used to construct complex mental representations. The idea of representations appeared into modern psychology as early as in the late fifties and has been actively used ever since both in psychology and in cognitive science (Miller, Galanter & Pribram, 1960; Newell & Simon, 1972). During the 90’s, the concept of mental representation has also made its way into the study of religion (e.g., Andresen, 2001; Barrett & Keil, 1996; Barrett, 1998; Boyer 1994a, 1994b, 1996; 1998; 2001; Lawson & McCauley, 1990; Pyysiäinen, 2001a; 2001b).

Likewise, many aspects of mental representations have received much research attention in social psychology (reviews: Breakwell & Canter, 1993; Doise & Moscovici, 1987; Flick, 1998) where social, rather than private and individual, representations have been analyzed. Social representations can be defined as mental representations that are shared by groups of people and whose main functions are facilitation of everyday communication and thinking, and transforming strange and complex issues into something more familiar (Bergmann, 1999; Doise, Spini & Clemence, 1999; Moscovici, 1988). God is an example par excellence of widespread concepts whose relation to the perceived reality is mysterious, and which therefore should be seen as a social representation calling for a conceptual analysis (see Boyer, 1994b; Sperber, 1996; Pyysiäinen, 2001b; Saariluoma, in press b).

It has been argued that mental representations include two types of information. Part of the information can be characterized as ‘knowing that,’ while the other part refers to the skills to apply that knowledge, i.e. to ‘knowing how’ (see Ryle, 1949/1990, pp. 28-32). The former is usually called declarative knowledge, whereas the ability to use the knowledge is called procedural knowledge. Declarative knowledge covers the whole of an individual’s conscious conceptual repertoire. It is hence available to introspection, and the methods that are used when subjects verbally report their conceptions about God, for example, focus on declarative knowledge. Characteristic to declarative knowledge is precisely its accessibility: it is available in

² For the sake of simplicity we always write ‘God’ with a capital G, except when it is in the plural.

any context (Anderson, 1983; Smith, 1984). In time, conscious, declaratively represented information may merge into unconscious procedural knowledge, which is represented differently from propositionally encoded declarative knowledge. Application of knowledge becomes more efficient and automatic, and it is manifested in all the rules, skills and strategies inherent in encoding, organizing, manipulating, and retrieving social information and putting it to work. For example, Guthrie's (1993, 1996) explanation of God beliefs in terms of interpretation of ambiguous information, cognitive errors and heuristics address procedural knowledge Barrett's studies on the representation of God (Barrett, 1998; Barrett & Keil, 1996), in turn, effectively illustrate the distinction between declarative and procedural knowledge. For example, in Barrett and Keil's (1996) study, the subjects used anthropomorphic attributes of God to process and remember the stimulus stories they had heard although, when explicitly asked, the subjects had denied that God has anthropomorphic attributes. Based on these results, Barrett (1998) suggests that direct-report measures of God concepts cannot tap peoples' tacit and causally efficient knowledge of God, the answers will rather represent a list of rehearsed, nonintegrated attributes people never actually use in their religious reasoning.

We, however, think that concepts have different uses (Wittgenstein, 1958), and that in different tasks different representations of concepts may be activated. Consequently, we may think that declarative and procedural knowledge are equally justified uses of concepts and that their activation depends on the task. Complementing Barrett's studies, we target here the declarative uses of the concept of God.

Saariluoma (1997) has suggested that, in cognitive psychology, one can establish two basically different approaches to concepts. The first of these research approaches can be called classificatory and the other is here termed constructive. In the classificatory approach, the function of concepts is mainly taken to be related to such theoretical concepts as extension, intension, categorization and prototypes, all which serve to divide objects into classes or types (Bruner, Goodnow & Austin, 1956; Estes, 1994; Lakoff, 1987; Rosch, 1975, 1978; Rosch & Mervis, 1975). In short, the classificatory approach would thus work to discriminate God-like from non-God-like beings, and various gods from each other.

The classificatory approach has been criticized in that that it tells relatively little about the internal content structure of the concept in question. For example, Boyer (1994b) has argued that the theory only explains how people recognize something as being religious but it does not explain what holds the category of 'religion' together. Therefore, in this study, we follow the constructive approach, in which attention is focused on the role of concepts as basic composite elements of mental representations, not on their classificatory role. Though the constructive view of concepts is presently a much less known approach than the classificatory one in psychology, it has been known since antiquity. It is possible that Plato's analyses of meaning in his *Parmenides* lie at the very roots of constructive ideas about concepts. Implicit forms of constructive thinking can also be found even today in such paradigms as semantic networks, imagery semantics, conceptual role semantics, procedural semantics, or compositional semantics and theories of scientific thinking. (E.g., Anderson, 1976, 1983; Cann, 1993; Carey, 1991, Johnson-Laird, 1983; Murphy & Medin, 1985; Paivio, 1971, 1986; Rips, 1995.)

However, the main purpose of working with the constructive approach to concepts is in learning to understand the contents of social and other mental representations. When we use concepts to make representations of religious concepts and these representations control our behavior, it is evident that the understanding the contents of concepts in representations is essential for understanding human behavior (Saariluoma, 1995; 1997, in press a,b). Thus, one important way to understand group and individual differences and behaviors is to have an exact idea of the contents of concepts in representations. In order to analyze such problems, we have to have the means to investigate the contents of concepts and the way they are integrated in the

minds of people. Another equally important problem is to investigate group differences in representing concepts that may have socially shared definitions. The notion of God is naturally very challenging in this respect. For this kind of investigation, it is necessary to present some preliminary theoretical considerations and notions concerning the contents of concepts.

To investigate the contents of concepts, we make the simple assumption that conceptual contents have a structure made up of attributes which denote the accepted state of affairs concerning the concept in question. This means that the contents of a concept are defined by its attributes. An engine, for example, causes a vehicle to move; thus the attribute causing movement belongs to the concept of engine as well as that of producing power. Naturally, any concept has a very large set of attributes defining its contents, which is why it is possible to speak of the total contents of a concept (Saariluoma, 1997).

By total contents, we mean all the attributes that people are ready to assign to a concept. Thus, the total contents of a concept can be seen as a large, but not arbitrary, set of attributes (Saariluoma, 1997; see also Bergman, 1999; Moscovici 1984). The concept of an 'engine,' for example, may have such attributes as being made of metal, being heavy, etc., but not the attribute of being a living being. The total content of God, in turn, is the set of attributes that people are willing to give to it. Naturally, the total content of such a concept as 'God' is huge. In practice, it is impossible to investigate all the attributes belonging to a concept's total contents. But it is possible to get an idea of it by using a sufficiently large set of attributes. Therefore, our constructive approach to the contents of the concept of God begins with the idea that researchers should explicate as a large set of attributes as possible and to determine how the attributes are related to each other

An exploration of the contents of the concept of 'God' opens a large number of interesting questions, which will be addressed in this study. First, we ask how the numerous attributes ascribed to a Christian God are connected with each other. In other words, what attributes tend to co-occur and what attributes, or attribute combinations, are independent of each other? We think this question is important because information about attribute combinations might enable us to predict from one or two attributes a set of other attributes a given group or individual is willing to assign to God. Second, we wished to find out what attributes people most readily accept as being or not being descriptive of God? Third, how do people who differ in their religiousness see the total contents of the concept of God? What are the attributes of God that unreligious and religious people agree or disagree on? Moreover, given that mental representations are important determinants of people's interaction with the environment, it is plausible to assume that the adoption of some attributes predicts religious behavior, like participation in religious services, better than other attributes do. Thus, the fourth question addressed in this study was the relationship between religious participation and the mental representation of the Christian god.

Method

Participants

Three hundred fifty-nine students from different fields of study originally participated in the study. Two students were excluded because they did not completely fill out the questionnaire, thus leaving 357 subjects. Students majoring in education, were recruited from an elementary course in education at the University of Helsinki, Finland. Other students were majoring in comparative religion, philosophy, art history, cultural history or literature, and they were recruited from an elementary course in comparative religion at the University of Turku, Finland. The age of the participants ranged from 19 to 48 years ($M = 26$) and 27.7% of them were male. 316 were

Lutheran, 29 were in the civil registry, 4 were members of the Eastern Orthodox Church, 7 reported some other religion, and for one subject the information was missing.

Procedure

The subjects were tested in groups during their lecture time. They were told that they were participating in a study that examined people's conceptions of God. Each subject received a booklet containing instructions, a set of standard demographic items, following by five questionnaire pages.

Measures

Religiousness. To measure religiousness, King and Hunt's Religiosity-Salience-Cognition scale, modified by Blaine and Crocker (1995), was used. The questionnaire consists of five items (e.g., "Being a religious persons is important to me") rated on a 5-point scale with end points 'strongly disagree' (1) and 'strongly agree' (5). Cronbach's alpha for the scale in this study was .92, which is approximately the same as in earlier studies (Blaine & Crocker, 1995). Next, the items were averaged. Because preliminary analyses showed some curvilinear relationships between religiousness and descriptions of God, religiousness was not used as a continuous but as a discrete variable. Three categories of religiousness were determined by quartiles, such that participants in the lower quartile (religiousness < 2) were labeled as unreligious, the participants in the higher quartile (religiousness > 4.2) as highly religious, and others as averagely religious.

Religious participation. The participants were asked to indicate how often they attend religious services. The alternatives were never (scored as 1), once a year or less, a few times in a year, 1-3 times in a month, and at least once a week (scored as 5).

Attributes of God. The participants were asked to indicate their opinion (1 = strongly disagree, 5 = strongly agree) of 78 attributes in terms of how well they describe God. The selected attributes fell roughly in four categories, *viz.* classical theological characteristics, characteristics common with ordinary Lutheran Christians, vague poetic descriptions often related to natural phenomena such as wind, etc, and what we have termed 'curious metaphors.' Classical theological descriptions of God ultimately derive from folk beliefs (Malley, 1995), and they also affect folk beliefs when they become widely known. The first two categories are thus partly overlapping. The third category contained descriptions which we expected to appeal people who do not want to reject Christianity but who, nevertheless, do not believe in the traditional God of official Lutheran instruction. As a whole, the attributes were derived from theological treatises, devotional literature, sermons, mass media and private conversations, and some were concocted purely ad hoc to see how people respond to such assertions as "God is a frying pan," for example. In other words, we wanted to see whether some people are ready to say that God can be just about anything. All attributes can be seen in Table 1.

Results

There were three possibilities to examine interrelationships between attributes of God, *viz.* factor analysis, multidimensional scaling and, via clustering the attributes with a cluster analysis. We ended up with factor analysis because it offers the best possibility to consolidate exact variables with which differences between various religiousness groups can be further analyzed.

The factor analysis for these attributes was conducted using maximum likelihood extraction and varimax rotation. The eigenvalue criterion (> 1) for the number of factors indicated fourteen factors, which is not a reasonable number of factors for the data. Therefore, Cattell's scree test as well as the homogeneity and interpretability of the factor content were used as the criteria. Five

Table 1 continued

God is the creator	.74
God is merciful	.74
God guides the passage of history	.73
God is good	.71
We live in the palm of God	.71
God is love	.70
God is big	.70
God is a living God	.70
God is fair	.69
God exists	.69
God is infinite light	.69
God is safe	.66
God's will shall always be done	.61
God is everlasting	.61
God is in heaven	.60
God is present in the world	.58
God is eternal	.54
God is impetuous	.54
God is timeless	.54
God can be found in the suffering fellowman	.48
God is limitless	.48
God is at the cross	.44
A human being decides, God prescribes	.44
God avenges evil deeds	.41
God is unity	.40
God is severe	.38
God is a hidden God	.36
God is supernatural	.35
God is dead	-.31
God is transcendent	.30

A multivariate analysis of variance (MANOVA) was conducted with religiousness (unreligious vs. averagely religious vs. highly religious) as between-subjects variable and attribute sets (omnipotence, incorporeality, nature, curious metaphors, and other gods) as within-

subjects variables. The results showed a main effect for religiousness, $F(2,349) = 19.822$, $p < .001$, and for attribute sets, $F(4,349) = 627.54$, $p < .001$, and an interaction between religiousness and attribute sets, $F(8,698) = 39.76$, $p < .001$. The means are presented in Table 2.

Table 2
Means and deviations (in parentheses) for the five attribute sets (scale 1-5) representing God

	All	Unreligious	Averagely religious	Highly religious
Omnipotence	3.55 (0.85)	2.70 (0.86)	3.64 (0.55)	4.28 (0.43)
Nature	3.50 (0.87)	3.00 (0.96)	3.74 (0.69)	3.60 (0.85)
Incorporeality	3.70 (0.70)	3.48 (0.87)	3.78 (0.67)	3.80 (0.51)
Curious metaphors	1.56 (0.61)	1.58 (0.70)	1.60 (0.58)	1.47 (0.56)
Other gods	1.89 (1.10)	2.19 (1.21)	2.00 (1.12)	1.42 (0.73)

Because no hypotheses had been made, all subsequent comparisons were conducted using Bonferroni's method by controlling the error rate by setting the alpha level at .01. First, the main effect of attribute sets showed that the participants described God more with incorporeality than with omnipotence and nature (pooled averages), $t(356) = 4.83$, $p < .001$, more with omnipotence and nature than with other gods, $t(356) = 23.70$, $p < .001$, and with other gods more than with curious metaphors, $t(356) = 6.15$, $p < .001$.

Moreover, the specific comparisons showed that the highly religious individuals described God more often with omnipotence attributes than the averagely religious individuals, $t(254) = -9.98$, $p < .001$, who, in turn, used these attributes more often than the unreligious individuals, $t(255) = 9.38$, $p < .001$. The nature attributes were used equally by highly and averagely religious people, $t(254) = 0.16$, *ns*, both of whom used it more than the unreligious people, $t(355) = 7.06$, $p < .001$. Similarly, incorporeality attributes were used equally by the highly and averagely religious individuals, $t(254) = 0.22$, *ns*, but they both differed from unreligious individuals, who used the incorporeality attributes least, $t(354) = 3.80$, $p < .001$. Compared with the highly religious people, averagely religious and unreligious people described God more often as similar to other gods, $t(354) = 5.08$, $p < .001$.

Table 3
Correlations between the representation of God (five attribute sets) and religious participation (1 = never, 5 = at least once a week) among the three religiousness groups

Attribute set	Unreligious	Averagely religious	Highly religious
Omnipotence	.35***	.51***	.34***
Nature	.11	-.08	-.37***
Incorporeality	.10	.01	.02
Curious metaphors	-.02	-.10	-.29**
Other gods	.03	.22**	.30**

** $p < .01$, *** $p < .001$

The within-group comparisons indicated that the highly religious people described God more with omnipotence than with incorporeality, $t(99) = 9.18$, $p < .001$, more with incorporeality than with nature, $t(99) = 4.19$, $p < .001$, and more with nature than with curious metaphors or other gods, $t(99) = 11.69$, $p < .001$. The averagely religious people, in turn, described God equally with incorporeality, nature and omnipotence, which were used more than other gods, $t(155) = 15.30$, $p < .001$. Other gods were used more than curious metaphors, $t(155) = 4.74$, $p < .001$. Finally, the unreligious people used incorporeality more than nature, $t(97) = 3.45$, $p < .001$, nature more than

omnipotence, $t(97) = 2.94, p < .005$, omnipotence more than other gods, $t(97) = 4.22, p < .001$, and other gods more than curious metaphors, $t(97) = 5.47, p < .001$.

Next, the relationships between the representation of God and the degree of religious participation were examined by correlational analyses. The results are set forth in Table 3.

Discussion

Our empirical results provide firm support for our assumptions. It is indeed possible to show that there are several different representations of God with sets of attributes being associated in a very sensible way. The attribute set that had the highest variance and which thus most powerfully differentiated the representation of God among unreligious, averagely religious and highly religious individuals was omnipotence. In this study, the idea that God is omnipotent was related to the tendency to see God also, for example, as triune, almighty, everlasting and as a loving father and maintainer of the world who forgives sins. The representation of God as omnipotent was linearly related to religiousness in that highly religious people used these attributes most and the unreligious individuals used them least. Most of the attributes related to omnipotence are familiar from the traditional religious language of Lutheran Christianity and it is thus plausible that these attributes were favored in direct proportion to the subject had internalized the Lutheran tradition.

The second factor, which we labeled as nature, consisted of such attributes as life itself, nature, living wind, pure existence, God is inside of a human being and present everywhere. According to atheists and averagely religious people, the nature attributes described God best. However, also highly religious people described God with these attributes, albeit less than with omnipotence attributes. It thus seems that although most of the nature-related attributes were clearly non-orthodox from the Christian point of view, they nevertheless could also be seen as religious in a wider perspective. This would explain why the highly religious individuals, usually identifying themselves with some specific tradition (e.g., the Lutheran Church), may not favor these unorthodox attributes highly but may nevertheless accept them as descriptive of God. The averagely and unreligious subjects, in contrast, are apparently liable to think that there is some kind of a religious dimension in nature, best described by these non-denominational and vague metaphors.

The third factor, incorporeality, comprised in addition to incorporeality itself, such attributes as present in the faith of a human being, different and undivided. Like nature, incorporeality concepts were, at least moderately, accepted by all participants. In fact, incorporeality was the attribute set which was most readily accepted as best describing God in the whole sample. It is to be noted that the majority of these attributes come from classical Catholic and Lutheran theology (e.g. Caramello, 1962-63; Mannermaa, 1981) and share the property of being highly abstract and evocative, if not outright incomprehensible. If Sperber (1975/1995, 1996) is right, such highly evocative and mysterious representations tend to be culturally successful because they can never be given a final interpretation and can easily be related to a subject's other mental representations. In other words, they are such that they allow for multiple interpretations and yet can be firmly connected to a subject's other beliefs. It is for this reason that such evocative representations easily become widely spread in a culture. The incorporeality attributes and the nature attributes used in this study seem to have potential for such cultural success.

Not surprisingly, most participants strongly disagreed that God can be described with such curious metaphors as God is a table, bread, a computer, a car or a pot. Nevertheless, two interesting details can be found. Clergy and church were linked to these attributes, which means that these two attributes were seen opposite to God. Though this may appear somewhat unintuitive, it is logical, when we see that church and clergy must normally be in opposition of

God in religious representation: if somebody is a servant or messenger of God, she, he or it cannot be God.

The fifth factor consisted of other gods, for example Buddha, Allah and Zeus. For moderately religious and unreligious subjects, these religious concepts represented God, but for highly religious people non-Christian gods were not representative as gods. Obviously, this demarcation line is important, when religious representations are concerned. Christianity very clearly presupposes that one does not believe in other gods, and therefore highly religious people should logically not accept Zeus etc. as gods. On the other hand, more liberal attitudes are possible for deistic or atheistic people.

Our results also pointed out some important relations between representation of God and religious participation. Previous studies have focused mainly on the role that various demographic variables (e.g., Stark, 1997; Taylor, Chatters, Jayakody & Levin, 1996) and specific life events (e.g., Stolzenberg, Blair-Loy & Waite, 1995; McIntosh, Silver & Wortman, 1993) play in church attendance and in other forms of religious activity. Our results extend these findings by showing, first of all, that the more the omnipotency attributes were accepted as descriptive of God, the more the individual attended religious services. Second, especially among the highly religious people, representing God by nature, other gods or curious metaphors seems to be inversely related to religious participation: the more the religious people described God with these attributes, the less they attended religious services.

One rather salient explanation for this would be that attending religious services is in large part motivated by a belief that the "culturally postulated superhuman agent" (Lawson & McCauley, 1990) in question really can affect people's lives. In other words, if God is believed to forgive sins, to protect the Finnish people, or to have foreknowledge of everything, it is only reasonable to participate in rituals that are meant to establish a good relationship with him/her. And, conversely, if people are prone to represent God using such theologically unconventional ideas as God being the Buddha, a living wind, a pot or a table, etc., it is understandable that they do not much participate in religious rituals which, in Finland, are mostly arranged by the Lutheran Church. Although the subjects were free to understand 'religious services' in the questionnaire in any way they wanted to, it is probable that most understood it to mean Lutheran services. Moreover, representing God using the nature, other gods, and curious metaphors representations means that God is understood in a vague way as something abstract, extraordinary, and counter-intuitive, not restricted by any denominational theology. And, as rituals are arranged by institutions, denominations, and sects, participating in them is easily felt as too restrictive by those who represent God as being beyond such boundaries, even though they would think of themselves as being highly religious.

The present study is a preliminary attempt to tap some essential parts of the representation of a Christian God. Within the limits imposed by the present sample (predominately Lutheran university students) the results suggest that the attributes people consciously assign to God do not represent a nonintegrated mass of descriptions with no causal efficacy, but instead, they form independent classes of interrelated attributes, whose use is systematically related to religiousness and religious behavior (cf. Barrett, 1998). However, given that the attributes selected for this study were partly based on our own understanding, it may be that our own social representations of God have guided the findings concerning the participants' representations. Therefore, future studies, with more diverse samples of participants and attributes, might provide additional insight into the constructive nature of the representation of various gods.

With respect to abstract and non-perceivable phenomena such as the Christian God, our data suggest that their contents can be expressed by means of a very large set of interrelated attributes. Obviously, these attributes are not randomly associated, but the content of individual concepts is coherent. An omnipotent and almighty God for example is not part of nature. Indeed,

some of the attributes belong more naturally together than others. The outcome of this research indicates thus that the concept of a Christian God has several variants. These variants differ from each other not only by the set of attributes important for them, but also by the manner in which the attributes are associated with each other.

Ultimately, it is advisable to go back to the problems of representation construction. One may ask what is the use of being able to predict some attributes of God on the basis of some other attributes. What is the use of asking such questions? The answer is that we can know on the ground of some presented propositions about God that a group or a person may with a high probability present some other God-related propositions instead of others. Thus, people thinking God omnipotent may easily find God triune or omnipotent while those who think of God as nature may easily assume that God is a living wind but is less likely to take God as incorporeal, etc. Accordingly, the present results illustrate clearly the very nature of social representations' operation (e.g., Moscovici, 1984; 1988), namely the ways in which different stocks of concepts may give coherence to various representations of God, how they may provide people with codes for classification of complex information and the ways these representations may be enacted in communicative situations.

Perhaps the most intriguing theoretical point here concerns the mode of explanation. What we work is that we could predict some representational contents on the ground of some other. If we know that some representational contents associated with God are favored in a group, we can make sensible questions and predictions about other possible contents. Thus, we can firstly predict some aspects of behavior on the basis of contents, but we can also predict some representational contents on the basis of composite conceptual contents. This kind of explanatory approach can be called explaining by contents, or representational explaining (Saariluoma, 1995; 1997; in press a,b). Indeed, we believe that much of human behavior can and should be explained by representational contents, and this is why it is very important to pay much more attention to these problems.

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