CURRENT RESEARCH IN SOCIAL PSYCHOLOGY
http://www.uiowa.edu/~grpproc/crisp/crisp.html

Submitted: September 30, 2010
First Revision: February 9, 2011
Second Revision: May 16, 2011
Accepted: May 20, 2011
Published: July 26, 2011

Religious Attributions in Cross-Cultural Comparison

Andreas Schneider, Texas Tech University
and
Herman W Smith, UM-St. Louis

ABSTRACT

In our comparative perspective we use six nation cultures to test if supernatural attributions differentiate religious and secular authority. Using semantic dimensions derived from Osgood, we empirically match the affective meaning of identities to the Christian concept of God with secular alter identities. The same mechanism is used to identify behaviors, emotions, and traits that are attributed to God and his alter identity. Using the symbolic-integrationist perspective of Affect Control Theory, we extend this analysis by setting identities, behaviors, and emotions into the context of an event. We find that the concept of God represents religious authority that in secular societies is perfectly replaced by other authority concepts in legal, political, professional, medical, or family institutions. While data of the US, Canada, and Ireland establish a cluster of religious attributions to authority, Germany, Japan, and China cluster on the secular side.

Religious Attributions in Cross-Cultural Comparison

Classic psychological attribution literature like Kelley (1972) invites questions like this: Does the degree of religiosity lead to different attributions through a greater propensity to elicit supernatural explanations? In investigating this question, results have been mixed (Lupfer, Hopkinson et al. 1988; Lupfer, Brock et al. 1992; Lupfer, DePaola et al. 1994). Some attributional studies used research designs in which American subjects are partitioned by degree of religiosity and type of attribution toward God. For example, Dufton and Perlman (1986) state that their more conservatively religious respondents were more apt to attribute their feelings of loneliness to supernatural causes. Likewise, Smith and Gorsuch (1989) state that their American respondents with a religious orientation attributed greater responsibility to God in general, as a causal and as a sanctioning agent.

We investigate the degree of religious or secular denotation of attributions to the supernatural concept of the Christian God for six cultures. Here we differentiate between affective and cognitive components in the attribution. Osgood (1962) identified affect and cognition as flip

sides of the same coin, the sentiment. Affective reactions will trigger cognitive interpretations. In this recursive relation of affective responses and cognitive reflections, we replicate cultural norms in two ways: the normative affective reaction that we experience towards symbolically-represented sentiments and the reactions to the context of these sentiments when they establish an event through cognitive reflections. With Affect Control Theory (ACT) we employ a cybernetic symbolic interactionist framework that not only matches the affective with the cognitive components, but also allows us to put these components into the context of events (Heise 1987, 2007). ACT is formulated as an algorithm by Schneider and Heise (1995) that uses both the general affective representation of sentiments that follows quantitative principles and a qualitative descriptive level where sentiments receive language representation.

This theoretical framework provides us with three methods of cross-cultural analysis of six cultures and two religious sub-cultures that we apply in the investigation of religious attribution. First, we compare the affective representation of the supernatural identity of the Christian God. Second, we match identities, behaviors, traits, and emotions to this supernatural identity according to their affective representation and hereby investigate their degree of religious or secular denotation. Third, we investigate the dynamics that occur when supernatural identities are put into the context of events.

THE AFFECTIVE BASES OF RELIGIOUS ATTRIBUTIONS

Like the Kelly-inspired (1972) attribution papers, this paper assumes that all attributions are rooted in salient characteristics of attributers and in the embeddedness of attributors in specific situations and events. This paper, however, traces back to the trait-attribution tradition originating in classic work of Asch (1948) on central organizing traits. Essentially, the Asch tradition suggests that specific role-identities traits and emotions are psychologically or semantically equivalent. Asch's ideas found fruition in psychological mapping of traits and identities in the work of Rosenberg (1972).

Smith, Matsuno, and Ike (2001) have explicated the principles underlying both the Western and Japanese attribution processes. The key mechanism in any case is the psychological proximity or equivalence between a person's identities and traits. For example, a *minister* (all identities, behaviors traits, and emotions that refer to empirical examples are italicized) is rated in the USA affective meaning database as somewhat good, somewhat potent, and neutral in liveliness. The control part of ACT derives from the simple principle that humans have a need for psychological consistency. So a person for whom being a minister is central to self-image is constrained to act like a *minister* – make promises, appeal to, serve, address, or give instructions to. Similarly, the role-identity of *minister* constrains his or her displays of emotions and personality traits. MacKinnon (1994) terms these "characteristic emotions" because they confirm and maintain one's salient self-presentations and definitions of the situation. Similarly, acting as if he is a *father* who is possessed by the trait of self-consciousness would perfectly confirm a father's self-image.

MacKinnon argues that life is more complicated than presupposed by characteristic emotions. While a characteristic emotion perfectly confirms one's salient identities, in real life the salient identities and emotions of those one interacts with also pull the person to confirm their

counterpart's emotions. MacKinnon uses the term "structural emotion" for capturing the perfect confirmation of one's self through particular situations. Extending our example of a *minister* who carries the salient role of *father* to his *son*, the salient role of *father* is perfectly confirmed if he tries to accommodate his *son*, which leads to structural emotions like *pleased father* and *moved son*. The same scenario perfectly confirms the father as possessing the trait of *cheerfulness* and his son as *obedient*.

The multiple necessary schema literature cited above emanates from the "availability hypothesis." That is, the assumption is that individuals utilize either religious or secular hypotheses, whichever is most accessible. This raises the question of why certain causal explanations are more or less available. The affect control tradition toggles this problem by focusing on general mechanics used in the explanation process. These general mechanics are captured empirically in impression-formation equations. Perceptions of psychological consistency reinforce, and inconsistency penalizes, the elicitation of specific causal attributions. A minister appears psychologically consistent if he expresses awe and reverence in that role, but it stretches the imagination to think the same person winning the Powerball prize is due to God being on his side rather than luck or chance.

We investigate the impact of evoking attributions toward the different cross-cultural conceptions of the Christian God versus other causal agents. Matching the meaning of God with alter identities according to the attribution of affective meaning, and placing God and his alter identities in the context of events investigating the attribution of emotions, traits, and appropriate behaviors, we cross-culturally test if supernatural attributions differentiate religious and secular authority.

DATA

Cultural norms about sentiments are defined on three dimensions of affective response: evaluation (E), potency (P), and activity (A), the EPA profiles (Osgood 1962). Osgood (Osgood et al. 1975) identified three central dimensions of affective response to be culturally universal in the processing of meaning. Semantic differential scales measure the evaluation (good or bad and bad or awful), potency (big or little and powerful or powerless), and activity (fast or slow and young or old). Semantic differential scales reaching from -4.33 to 4.33 measure these three dimensions of affective meaning and empirically establish a culture-specific EPA profile for any sentiment.

Evaluation:	good, nice - bad, awful
Potency:	big, powerful - little, powerless
Activity:	fast, young, noisy - slow, old, quiet

Using the example of *God*, he/she is rated as extremely good (2.6), very potent, and slightly active (.9) by North American males. Following the standard in the ACT literature, the EPA profile is indicated as (2.6,2.9,.9). This paper employs affective meaning data from several publicly available data sets that rate the goodness, powerfulness, and liveliness of various stimuli (Heise 2001a). These lexicons improve the semantic differential measurement theory (Osgood, May et al. 1975). The affective meaning improvements to measurement now produce reliability

coefficients of .9 and above for these three universal dimensions for the publicly available data sets (Heise 2010). Affect control theorists term these lexical entries fundamental cultural sentiments because they show stability over generations (MacKinnon and Luke 2003).

SAMPLE

We use affective meaning lexicons for Americans (Francis and Heise 2006; Smith-Lovin and Heise 2006) ,Canadians (MacKinnon 2006), and Germans (Schneider 2006); Japanese (Smith, Matsuno et al. 2006); Irish (Willigan and Heise 2003); and Mainland Chinese Mandarin speakers (Smith and Yi 2006) to operationalize fundamental cultural sentiments. The cross-cultural data sets were all produced with standard translation and back-translation methodology.

The American, Canadian, Irish, German, Chinese, and Japanese samples used student populations that have been identified as largely representative for the middle class (Heise 2010). Unlike traditional opinion survey studies that describe a population of individuals and their variability in relation to the topic of investigation, our subjects served as cultural informants reporting the common culture that is reproduced among the general population. It is the quality of the informant of a culture, which is his or her understanding of the common culture, not his or her representativeness that is important for our cultural comparison. In their empirical investigation of this general methodological assumption, Romney, Weller, and Batchelder (1986) found that about five to fifteen respondents provide an accurate picture of the norms shared in a culture. Heise (2010) found empirical support for these findings specifically for EPA measures of affective meaning. Since all our samples have at least 30 male and 30 female respondents in each culture, we are certainly on the "safe side" in our cultural comparison.

Stimuli are presented gender-neutral and the gender of the identity to be rated is attributed by the male or female subject. *Father*, for example, is clearly a male identity, while the *blessed virgin* is female. However, whether the *healer* or *authority* is seen male or female is up to the subject who is doing the rating. The strength of this approach lies in the fact that gender attribution is included in the rating of the identity. A female versus a male authority might be seen as substantially different; males and females, however, tend to be quite similar in their affective reaction towards male or female authorities. This explains why we found minimal gender differences in the ratings of fundamental sentiments in each culture. These results replicated findings of prior studies that found that compared to cultural and subcultural differences, male-female differences in affective meanings have been minimal (Schneider 2002a). Since these relatively small differences led to trivial differences in ACT-based simulations (Schneider 2002b), we can simplify our further investigation by focusing on data of males or females. Since the concept of God carries male attributes in the Judeo-Christian culture, we favored to choose the data of males since it eliminates a cross-gender effect.

METHODS

First, we demonstrate systematic cultural differences or similarities in the affective interpretation of the supernatural concept of God. In our static, or out-of-context, analysis we identify and

compare the fundamental affective meanings of Christian God across the six cultures – the USA, Canada, Ireland, Japan, Germany, and China.

Second, we address the question of whether cultures can be differentiated by the degree of attributing supernatural or worldly authority. Here we identify alter identities of the supernatural concept of God matching by matching affective meaning operatinalized on Osgood's (1962) semantic dimensions of evaluation, potency, and activity. This identification of concepts allows us to turn to the cognitive contextual interpretations of identities (MacKinnon & Heise 2010). In these institutional contexts cultures are expected to assign different degrees of secular or religious interpretations. Here we are extending our investigation beyond identities; we identify matching behaviors, emotions, and traits of God and his alter identities to see if they also fall into secular and religious categories. As in the case of matching alter identities to God, we identify behaviors, emotions and traits that share the semantic space of identities. These matching procedures are operationalized by selecting identities, behaviors, traits, and emotions with EPA values that create the smallest Euclidian distance to the EPA values of God in the respective culture. This selection allows us to identify identities associated with the Christian God in each culture, behaviors that such an identity is likely to emit, characteristic emotions this identity should feel, and traits that males might attribute to themselves and God.

Third, we are engaging in a dynamic analysis where God and his alter identities are put into the context of events. This is done with computer simulations using JavaIntract (Heise 2001b) where classic ideas of attribution and Osgood's measurement model are implemented in the cybernetic symbolic integrationist approach of ACT. Cybernetic symbolic interactionism (Robinson 2007, Schneider 2010) integrates the conceptual qualitative input and output with the quantitative world of empirical operationalization and mathematical processing (Heise 1987, Smith-Lovin 1987). The application and test of the simulation methodology is described by Schneider (2002b) and its validity tested with experimental studies by Schröder and Scholl (2009).

FINDINGS

We start with the investigation of the affective meanings underlying the concept of God. Figures 1, 2, and 3 visualize the peculiarity the affective meaning of the Christian *God* among Americans, Canadians, Irish, Germans, Japanese, and Mainland Chinese.

Figure 1: Cross-Cultural Variations in Evaluation and Potency Means and Standard Deviations toward the Christian concept of "God"

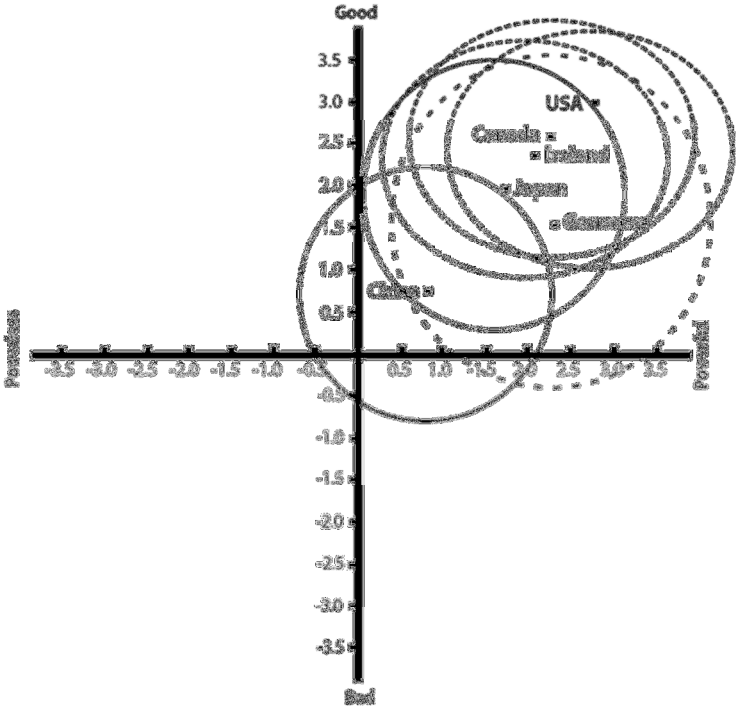


Figure 2: Cross-Cultural Variations in Evaluation and Activity Means and Standard Deviations toward the Christian concept of "God"

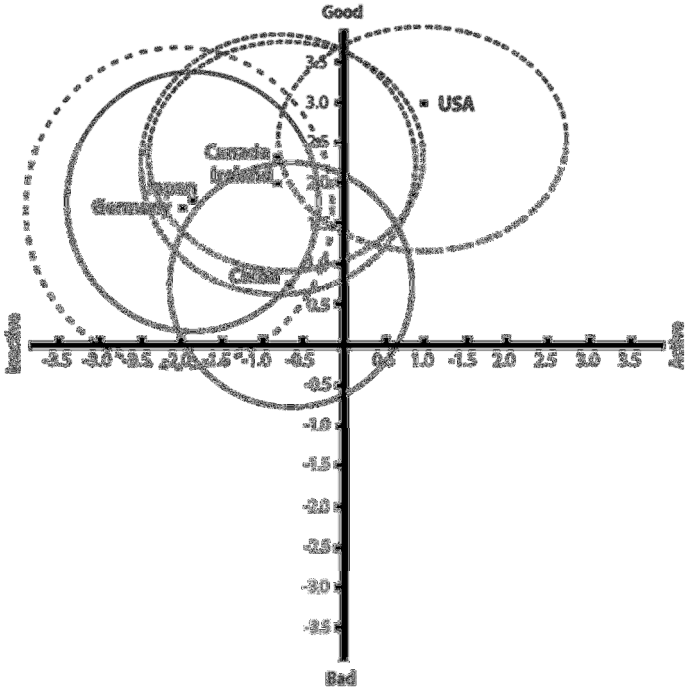
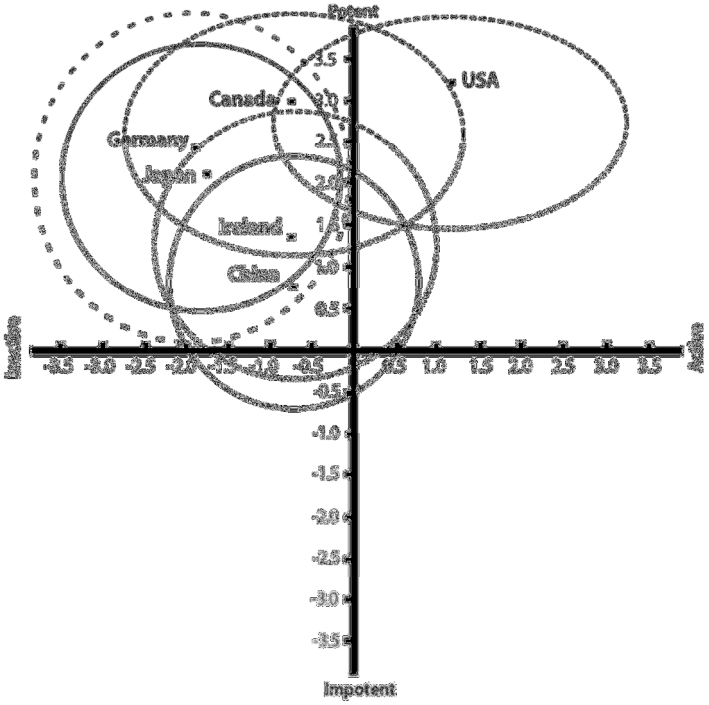


Figure 3: Cross-Cultural Variations in Potency and Activity Means and Standard Deviations toward the Christian concept of "God"



There are dramatic cross-cultural differences in the affective response to the Christian concept of *God* on all three dimensions of affective meaning. These differences do not just reflect East-West differences that we would expect. While the USA represents an outlier on all three dimensions, Canada and Ireland are psychologically closest to, and intersubjective with, Americans. Germany, Japan, and China are most different from most notably the USA, but also from Ireland and Canada. First, note that evaluation ranges from a high of over 3.5 on a ±4.3 scale for Americans to -.5 from Chinese. The one-standard deviation ellipses show clear ordering from most to least intersubjectivity on the evaluation and potency dimensions of Americans, Canadians, Irish, Japanese, Germans, Japanese, and Chinese (as a true outlier) in Figure 1. Figures 2 and 3 portray a somewhat different picture of intersubjectivity. Americans are shown to be the clear outlier in viewing *God* as extremely active and omnipotent. Again, the range is from over 3.5 for Americans to below zero in potency from the average Chinese. Similarly, the average American has an extremely active view of God (up to 3.5) while Germans and Japanese are at the other extreme (close to -3.5).

Alter Identities of God in Six Cultures

In our next step in the comparison of the six nation cultures, we use the Euclidean distance for *God* to list cultures from most intersubjective, with Americans at the top, to the least intersubjective at the bottom (Table 1). We used the JavaInteract lexical databases to determine the most characteristic identities, behaviors, traits, and emotions.

Table 1. Closest Psychologically Available Stimuli for "Christian God" by Sub-culture, Culture, and Type of Stimuli

Culture*	Identities**	Behaviors	Characteristic Traits	Characteristic Emotions
Americans (2.6,2.9,.9)	**father**, surgeon, healer	lead, teach, protect (2.1, 1.5, .3)	competent, intelligent, open-minded	self-satisfied, satisfied, compassionate
American UCC (1.8,1.8,-.8)	**priest**, scientist, tutor	pray with, counsel, baptize (2.2, 1.3, .2)	patient, sensitive	touched, at-ease
American MCC (3.1,3.6,.1)	**healer**	heal, aid (2.5, 1.7, -.4)	wise, honest, sincere	touched, relieve, at-ease
Canadian (2.5,2.9,-.3)	**parent**, doctor	heal, educate, teach (2.3, 1.5, .6)	Wise	satisfied, glad, joyful
Irish (2.7,2.8,.3)	**holy spirit**, Christ, blessed virgin	None in range (2.2, 1.1, -.5)	Wise	self-satisfied
Germans (1.6,2.6,-2.7)	**counselor**, judge, authority	uplift, rehab-ilitate, forgive (1.6, 2.6, -2.7)	None in range (1.6,2.6,-2.7)	satisfied, content
Japanese (1.9,2.2,-1.4)	**juror**, craftsman, benefactor	relax, under-stand, care for (1.8, .9, -1.14)	Mature	serene, relieved, peaceful
Chinese (.6,1.1,-.8)	**juror**, philosopher, psychiatrist	ravish, medi-cate, examine (.7, .1, .6)	cautious, forbearing, compassionate	homesick, awe-struck compassionate

* Cultures are arranged from most to least intersubjective with Americans. (Fundamental EPA profiles for God given in parentheses in Column 1).
** Identities in bold are used as alter identities in simulations (table 3).

Table 1 shows how cultural variations in EPA profiles for *God* systematically determine the connotation and denotation of identities, behaviors, traits, and emotions most salient in the association with the religious concept of God. Characteristic identities for the three American and Canadian cases revolve around primarily familial and medical concepts. The Irish appear to be an exception, but this is partly due to a large corpus of Roman Catholic identities. The Irish EPA profile for *God* is intersubjective with American familial and medical identities listed above. By contrast, the Germans, Japanese, and Chinese appear to form a cluster around very inactive interactional partners closer to a legal or philosophical worldview.

Behaviors help further differentiate conceptions of *God*. The North American conception requires actions centered on leading, teaching, counseling, healing, educating, etc. Even the Irish

conception of *God* is not foreign to this view – the behavioral EPA profile for Irish is intersubjective with the American MCC profile of healing and aiding. The problem is that Irish behaviors are closer in conceptualizing an inactive relationship with *God*, like Germans and Japanese in particular. Note the greater EPA neutrality of verbs elicited in the German, Japanese, and Chinese cases. Behaviors empirically confirming the Christian God are not just purely spiritual behaviors, like *pray with* and *baptize* that are listed as closest for the American UCC. Overwhelmingly, behavioral stimuli closest to the Christian *God* are behaviors that can be seen as appropriate in the spiritual context of religious worship and the secular context of acting as an authority figure. Since the concept of the Christian God is affectively reflected in authority and the appropriate behavior does not have to be in a spiritual context, a North American does not need to believe in a Christian God to behave in a culturally appropriate manner.

Traits help to further differentiate cultures. North Americans and the Irish have a view of *God* as wise and intelligent. JavaInteract incorporates no German traits with the required EPA profile because there is no trait that is highly potent (2.6) but strongly inactive (-2.7). Note how Japanese and Chinese conceptions appear closer to their roots in the Dao, Confucius, and the Buddha. Indeed, the same could be said for characteristic behaviors and emotions for Easterners.

Emotions characteristic of *God* listed in Table 1 cannot be seen as being exclusively religious. Characteristic emotions like compassionate, content, or satisfied can be seen as appropriate for any authority. The same can be said for trait characteristic for God. All of the cultures emphasize authoritative identities, but the further down the table toward the Chinese one travels, the more secular the conception.

God in Context

In table 1, we identified the alter identity of God and we investigated the religious and secular quality of these alters. However, the characteristic features identified in table 1 are taken out of the context of events. In our last step of analysis, we seek to address this shortcoming by putting God and his alter into the context of an event. This is done by simulating events with empirically generated impression formation equations. We simulated three Actor-Behavior-Object Person (ABO) events for each culture (table 2). This allows investigating the response of the object of the action. In the first event, *God* acts towards his alter identity. In the second event, the alter identity responds to *God*, and in the third event *God* responds to his alter identity.

Table 2. Simulated Most-Confirming Events and Structural Emotions for Christian God and his alter identity (identified in table 2) for Six Cultures.

Culture God EPA	Emotion	Actor	Behavior	Emotion	Object
American	satisfied	God	consoles	awestruck	father
2.6,2.9,.9	self-satisfied	father	smiles at	moved	God
	Pleased	God	Protects	moved	father
Canadian	happy	God	encourages	reverent	parent
2.5,2.9,-.3	amused	parent	embraces	reverent	God
	amused	God	helps	reverent	parent

Irish	self-satisfied	God	prays with	moved	holy spirit
2.7,2.8,.3	charmed	holy spirit	assists	moved	God
	charmed	God	assists	self-conscious	holy spirit
German		God			counselor
1.6,2.6,-2.7	touched	counselor	listens to	moved	God
		God			counselor
Japanese	--	God	smiles at	--	juror
1.9,2.2,-1.4	--	juror	thanks	--	God
	--	God	smiles on	--	juror
Chinese	--	God	questions	--	juror
.6,1.1,-.8	--	juror	oversees	--	God
	--	God	serves	--	juror

Implementing God as an actor acting towards his alter identity, JavaInteract calculates the most confirming attributions. For example, we found that a *father* is a highly confirming alter to *God* for Americans (table 1), and JavaInteract predicts that the event "*God* consoles the *father*" is a nearly perfectly confirming event (table 2). JavaInteract also searches for the emotions and trait attributes that confirm this event, coming up with "A *satisfied God consoled* an *awestruck* American *father*."
We can identify different clusters of cultures where North Americans and Irish are highly intersubjective. Although the various emotions listed seem to differ, they are all reasonable choices dealing with satisfaction for God, and awe for a father. God actively intervenes in the lives of humans in this Irish-American view: consoling, protecting, soothing, helping, and assisting.

Germans provide a clearly exceptional Western case, and align themselves with a cluster including the Japanese and Chinese. This cluster revolves around legal meanings (*counselors*, *judges*, and *jurors*). Confirming behaviors require low potency and low arousal, which leads to nearly emotionless actors and alters. The Christian God is almost a deux ex machina, isolated from humans, and without power over them. He may be present and acknowledged, but he is not an essential intervener in human affairs.

What is important for testing our hypothesis is the finding that in all Western cultures the simulations reveal that the attributions of emotions to God are in no way different than the emotions attributed to the secular alter identity. If one is acted upon, one looses potency. This can be exemplified in the first three rows of table 3 that list the emotions of God and the alter-ego in all three events. Emotions are influenced by the actor-object constellation where actors tend to display more potent and positive emotions. Actors are attributed the emotions of being *satisfied* (2.51, 2.45, 1.05), *self-satisfied* (2.47, 2.15, 0.008), and *released* (2.63, 1.71, 1.12). Being in the object constellation *God* and his alter-ego are seen as *awestruck* (1.10, 0.91, 0.42) and *moved* (1.70, 1.03, 0.43).

As reflected in the impression formation equations, the fact that people are in an object or actor position within the interaction changes their affective representation. This in turn influences the

attribution of traits and emotions calculated by the amalgamation equations. Differences in emotions caused by the actor-object constellation are more pronounced than the difference caused by the employment of *God* versus his alter-ego. In other words, the fact that someone is in the object versus actor position has a stronger impact than his sacredness. The finding of these relatively small differences between sacred and secular identities in trait and emotion attribution add to the evidence that there are no differences between the sacred and the secular.

DISCUSSION

The concept of God represents an authority that in secular societies might be perfectly replaced by other authority concepts in legal, political, professional, medical, or family institutions. This interpretation is strongly supported by a previous analysis of authority identities (Schneider 2004). Schneider cluster-analyzed the EPA measures of affective meaning of all 420 identities available in the US and German data to indicate higher-order structural meaning in measures of affective meaning. One of the central clusters found in the explorative K-means cluster analysis of both cultures was a cluster of authorities. All the non-religious identities listed in table 1 that were included in Schneider's sample were identified as authorities in the US data. All identities, except *juror*, were also identified as authorities using the German ratings. Schneider's cluster analysis also reports the extremity in the US conception of God as a "hyper-authority." The concept of God was so extreme for American raters that it did not merge with other authorities into one cluster. While in Germany *God* was located within the authority cluster, *God* formed its own single-item cluster in the US explorative cluster solution.

Our simulations show strong support for the idea that Christian religious identities – here the extreme central concept of the God -- can behave appropriately even without special mechanism allowing one to consider the religious nature of one's actions. The same principles of psychological consistency apply to supernatural beings as to secular identities. What we conceive as religion because of its structural association with religious institutions or rituals is not sacred, but follows the mechanics of believing in authority. Nothing but the structural linguistic classification can differentiate concepts of religion from concepts of authority. In our cross-cultural analysis, we clearly reject the idea that there is something specific in the attributions involved with the Christian concept of God that carries beyond its linguistic connotation.

All of our samples agree on God-as-authority, but the German, Japanese, and Chinese cases are decidedly secular in conception by contrast to the more traditional religious conceptions of North Americans and the Irish. Throughout our analyses, we find that there is a very distinctive cluster for North Americans and Canadians where God is viewed as an active and benevolent participant with his worshippers. North Americans and Irish share common roots in an understanding of a benevolent, hyper-authoritative, active God in our analyses. This conception seems to be foreign to Germans, Japanese, and Mainland Chinese.

The concept of a beatific, omni-potent, highly interventionist Christian God implied by the classic psychology of religion literature appears unique to more conservative North Americans. This is already reflected in Inglehart's (1997) analysis of the World Value Survey of 43 societies.

Inglehart identifies two factors. One differentiates the preference for authority to be based on secular-rational and opposed to traditional-religious believes. The other factor indicates subjective well-being by differentiating societies according to scarcity and postmaterialist values. It was striking that Ireland, Canada, and the US were outliers in the sense that they were wealthy nations that still cherished traditional authority. China was the most secular, followed by Japan and Germany. Later, in their cultural map of 80 societies, Inglehart and Welzel (2005) again indicate North America and Ireland as an outlier embracing traditional values while being committed to self expression.

We took reference to several comparative studies of the German and US authority concepts that demonstrate the love for authority by US Americans. US Americans also attributed more power to their authorities. We do not love others who are powerful in respect to us unless we have a strong cultural basis of legitimizing the other's power and hereby turn them into authorities. Despite the significantly higher levels of power that US Americans attributed to their authorities, they loved them more than the Germans. To some readers, this might sound counterintuitive: Germans have a stereotypical reputation of being authority-lovers. Our study, however, is in line with Schneider (1994, 2002b), Inglehart (1997), and Inglehart and Welzel (2005) to demonstrate the reversal to historic cross-cultural differences between Germans and Americans.

The strong legitimation of secular authority found in these other studies might be grounded in the appreciation of an omni-potent religious authority in the US that we indicated in this study. Our data, however, does not allow testing the causality that underlies this correlation. This causality can be paraphrased as a chicken-and-egg problem: is it the love for authority that makes US Americans embrace the omni-potent concept of God, or is it the religious priming of US Americans that led them to legitimize powerful identities as authorities? While we were not able to address this question, we laid the basis for future studies by presenting evidence that religious and secular concepts are rather interchangeable in their affective representation. Religiosity can be seen as a specific linguistic connotation that is applied to general attributions of authority. In this sense, we found that there is nothing specific in the attributions involved with the Christian concept of God that carries beyond its linguistic connotation. Secular and religious leaders can exercise the same power over their followers as long as their power is legitimized and codified in either a scripture or a constitution. It is the specific connotation, not the affective meaning of God that separates the legitimation of power into secular and religious.

REFERENCES

Asch, Solomon, E. 1948. "Forming Impressions in Personality." *Journal of Abnormal and Social Psychology* 41: 258-29.

Dufton, Brian. D. and Daniel Perlman. 1986. "Loneliness and religiosity: In the world but not of it." *Journal of Psychology & Theology* 14: 135-145.

Francis, Claire. A. and David. R. Heise. 2006. Mean Affective Ratings of 1,500 Concepts by Indiana University Undergraduates in 2002-3 [Computer file]. , Distributed at Affect Control Theory Website, Program Interact. Retrieved May 13, 2011 (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

Heider, Fritz. 1958. *The Psychology of Interpersonal Relations.* New York: John Wiley & Sons.

Heise, David. 1987. "Affect Control Theory: concepts and model." *Journal of Mathematical Sociology* 13: 1-33.

Heise, David. R. 2001a. "Project Magellan: Collecting Cross-Cultural Meanings Via the Internet." *Electronic Journal of Sociology* 5(3). Retrieved May 14, 2010 (http://www.sociology.org/content/vol005.003/mag.html).

Heise, David R. 2001b. Java Interact. Retrieved July 4, 2010 (http://www.indiana.edu/~socpsy/ACT/interact.htm).

Heise, David. R. 2007. *Expressive Order: Confirming Sentiments in Social Action*. New York, Springer.

Heise, David R. 2010. *Surveying Cultures: Methodological Issues in Ethnographic Canvassing*. Hoboken, New York: Wiley

Inglehart, Roland. 1997. *Modernization and Postmodernization.* Princeton: Princeton University Press.

Inglehart, Roland, and Christian Welzel. 2005. *Modernization, Cultural Change and Democracy.* New York: Cambridge University Press.

Kelly, Howard. H. (1972). *Causal schemata and the attribution process.* Morristown, NJ: , General Learning Press.

Lupfer, Michael. B., Karla. F. Brock, and Stephen J. DePaola. 1992. "The Use of Secular and Religious Attributions to Explain Everyday Behavior." *Journal for the Scientific Study of Religion* **31**: 486-503.

Lupfer, Michael. B., Stephen J. DePaola, Karla F. Brock, and Lu Clement. 1994. "Making Secular and Religious Attributions: The Availability Hypothesis Revisited." *Journal for the Scientific Study of Religion*: 162-171.

Lupfer, M. B., Patricia L. Hopkinson, and Patricia Kelley. 1988. "An exploration of attributional styles of Christian fundamentalists and authoritarians." *Journal for the Scientific Study of Religion* **27**: 389-398.

MacKinnon, Neil. J. 1994. *Affect Control as Symbolic Interactionism*. Buffalo, SUNY Press.

MacKinnon, Neil. J. 2006. Mean Affective Ratings of 1,931 Concepts by Guelph University Undergraduates, Ontario, Canada, in 1980-6 [Computer file]. Distributed at Affect Control Theory Website, Program Interact. Retrieved May 13, 2011 (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

MacKinnon, Neil. J. 2006. Mean Affective Ratings of 2,294 Concepts by Guelph University Undergraduates, Ontario, Canada, in 2001-3 [Computer file]. Distributed at Affect Control Theory Website, Program Interact. Retrieved May 13, 2011 (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

MacKinnon, Neil. J. and Alison. Luke. 2003. "Changes in Identity Attitudes as Reflections of Social and Cultural Change." *Canadian Journal of Sociology* **27**(3): 299-338.

MacKinnon, Neil J. and David R. Heise. 2010. *Self, Identity, and Social Institutions*. New York: Palgrave Macmillan.

Osgood, Charles. E. 1962. "Studies of the Generality of Affective Meaning Systems." *American Psychologist* 17: 10-28.

Osgood, Charles. E., William. H. May, and Murray.S. Miron. 1975. *Cross-Cultural Universals in Affective Meaning*. Urbana, University of Illinois Press.

Robinson, Dawn. 2007. "Control Theories in Sociology." *Annual Review of Sociology* 33: 157-174.

Romney, A. Kimball, S. C Weller, and William H. Batchelder. 1986. "Culture as consensus: A theory of culture and informant accuracy." *American Anthropologist* 88:313-338.

Rosenberg, Seymour. and Russel Jones. 1972. "A Method for Investigating and Representing a Person's Implicit Theory of Personality: Theodore Dreiser's View of People." *Journal of Personality and Social Psychology* **22**: 372-86.

Schneider, Andreas. 2002a. "Probing Unknown Cultures." *Electronic Journal of Sociology* 6, 3.

Schneider, Andreas. 2002b. "Computer Simulation of Behavior Prescriptions in Multi-cultural Corporations." *Organization Studies* 23: 105-131.

Schneider, Andreas. 2004. "The Ideal Type of Authority in the United States and Germany." *Sociological Perspectives* 47(3): 313-327.

Schneider, Andreas. 2006. Mean Affective Ratings of 804 Concepts by West German Students in 1989 [Computer file]. Distributed at Affect Control Theory Website, Program Interact. Retrieved May 13, 2011. (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

Schneider, Andreas. 2010. "Symbolic Interactionism." In: *Theories in Social Psychology*. Derek Chadee. Oxford:Wiley-Blackwell.

Schneider, Andreas, and David R. Heise. 1995. "Simulating Symbolic Interaction." *Journal of Mathematical Sociology* 20: 271-287.

Schröder, Tobias, and Wolfgang Scholl. 2009. "Affective Dynamics of Leadership." *Social Psychology Quarterly* Vol 72, pp. 180-197.

Smith, Craig. S. and Richard. L. Gorsuch. 1989. "Sanctioning and causal attributions to God: A function of theological position and actors' characteristics." Pp. 133-152 in *Research in the social scientific study of religion: A research annual*, edited by M. L. Lynn and D. O. Moberg. Stamford, CT: Elsevier Science/JAI Press.

Smith, Herman W. and Yi Cai. 2006. Mean Affective Ratings of 1,146 Concepts by Shanghai Undergraduates, 1991 [Computer file]. Distributed at Affect Control Theory Website, Program Interact. Retrieved May 13, 2011 (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

Smith, Herman W., and Andreas Schneider. 2009. "Critiquing Models of Emotions." *Sociological Methods & Research* 37: 560-589.

Smith, Herman W., and Takanori. Matsuno, Shuuichirou Ike, and Michio Umino. 2006. Mean Affective Ratings of 1,894 Concepts by Japanese Undergraduates, 1989-2002 [Computer file]. , Distributed at Affect Control Theory Website, Program Interact. Retrieved May 13, 2011 (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

Smith, Herman W., and Takanori. Matsuno, Shuuichirou Ike, and Michio Umino. 2001. "The Affective Basis of Attributional Processes among Japanese and Americans." *Social Psychology Quarterly* 64: 180-194.

Smith-Lovin, Lynn. 1987. "Impressions from Events." *Journal of Mathematical Sociology* 13: 35-70.

Smith-Lovin, Lynn and David. R. Heise. 1988. Analyzing Social Interaction: Advances in Affect Control Theory. New York: Gordon and Breach Science Publishers. (Reprint of a special issue of the Journal of Mathematical Sociology, Vol. 13.)

Smith-Lovin, Lynn and David. R. Heise. 2006. Mean Affective Ratings of 2,106 Concepts by University of North Carolina Undergraduates in 1978 [Computer file]. , Distributed at Affect Control Theory Website, Program Interact. Retrieved May 13, 2011 (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

Willigan, Dennis., and David. R. Heise (2003). Mean Affective Ratings of 1,026 Concepts by Catholic High School Students in Belfast, Northern Ireland in 1997 [Computer file]. Distributed at Affect Control Theory Website, Program Interact. Retrieved May 12, 2011 (http://www.indiana.edu/~socpsy/ACT/interact/JavaInteract.html).

ACKNOWLEDGEMENTS

With his untimely death in 2008, Herman W. Smith left several collaborative research projects unfinished. This work stems from a research project of both authors in the sociology of religion presented at the annual meetings of the American Sociological Association and the Sothern Sociological Society. Using the original data and parts of the data analysis, the first author turned this work into an investigation of authority that compares secular and religious legitimation of authority in different nation cultures.

AUTHORS BIOGRAPHIES

Andreas Schneider, Ph.D. Indiana University (Bloomington), Dipl. Soz. Mannheim University (Germany) is associate professor at Texas Tech University. His research focuses on cross-cultural comparison in the fields of authoritarianism, sexuality, and business organizations. As a methodologist and Affect Control Theorist he merges quantitative and qualitative methods of investigation. andreas.schneider@ttu.edu

Herman W. Smith, Professor emeritus, University of St. Louis, Missouri. One of the members of the Affect Control Theory research group he was engaged in extensive international collaborations. Herm conducted data collections in the US, China, and Japan.