THE CONTRACT WITH GOD
Patterns of Cultural Consensus across
Two Brazilian Religious Communities

H. J. François Dengah II

University of Alabama, PO Box 870210, Tuscaloosa, AL 35487-0210, USA.
Email: hdengah@crimson.ua.edu

Understanding contested cultural boundaries continues to be a theoretical and empirical issue for anthropologists. For some time, cognitive and other like-minded anthropologists have used cultural consensus analysis (CCA), developed by Romney, Weller, and Batchelder (1986), to quantitatively estimate the level of cultural sharing around a particular domain. This method has limits and, as its critics (fairly or unfairly) have pointed out, can present a static, homogeneous image of culture. Residual agreement analysis (RAA) helps address this lacuna. This extension of CCA can identify subcultural variation and elicit the structural nature of such shared deviation. Utilizing data from Brazilian Pentecostals, CCA demonstrates that this community shares a model of lifestyle success known as A Vida Completa. *Residual agreement analysis, however, shows systematic deviations from the overall cultural consensus across two congregations. This finding suggests that the distinction between how these two churches conceive of A Vida Completa may not be due to unique cultural beliefs but rather to differential emphasis of an underlying shared cultural model. This research demonstrates a novel extension of CCA and provides insights into the characteristics of Brazil's fastest growing religious community.*

A GOAL OF COGNITIVE ANTHROPOLOGY is to understand culture from an emic point of view (Borgatti 1994). Culture, from this perspective, is famously operationalized by Ward Goodenough (1957:167) as "whatever it is one must know in order to behave appropriately in any of the roles assumed by any member of a society." That is, it is the knowledge that allows us to operate in social situations and predict, interpret, and understand the actions, behaviors, thoughts, goals, and values of others and ourselves (Kronenfeld 2011). Cognitive anthropological research, therefore, focuses on the ways in which shared cultural knowledge is constructed, organized, and distributed among members. This has been accomplished in a variety of ways, including through the use of folk taxonomies (Hage 1972), cultural schema theory (Strauss and Quinn 1997), and ethnographic decision models (Young and Garro 1994). One of the more popular methodologies—cultural consensus, developed by Romney, Weller, and Batchelder (1986)—is widely used within cognitive anthropology and has been successfully implemented in other fields, including psychology (Barg et al. 2006), medicine (Schrauf and Iris 2011;

Smith et al. 2004), and business (Keller and Loewenstein 2011).

Cultural consensus analysis (CCA), the focus of this paper, is an analytical tool for measuring the amount of agreement between informants regarding a cultural domain. It supplies a means to test the hypothesis of what is often assumed within ethnographic work: that a set of characteristics called *culture* is meaningfully shared and distributed among members of a group. Critiques of the method, some of which were famously highlighted in a debate between Robert Aunger (1999) and A. Kimball Romney (1999), focus on how cultural consensus portrays an "ideal" or essentialized perspective of culture, which glosses over cultural variation through an emphasis on "shared" cultural knowledge and linguistic signifiers of "answer keys" and "tests" (see also Garro 2000 for a discussion of the language bias of CCA). Although these perspectives remind researchers that cultural knowledge is not necessarily homogeneous, they do not acknowledge that the emphasis on intracultural variation is built into the cultural consensus model and that it has been a focus since its inception (Boster 1986; Garro 1986).

Intracultural variation, as Garro (1986:353) points out, "cannot be considered solely an individual phenomenon." Indeed, the various means by which researchers have used and extended cultural consensus methods have shown that variation of cultural knowledge beyond the shared consensus of the aggregate may be not random but meaningfully patterned. For example, residual agreement has been analyzed by the quadratic assignment procedure (a statistical means of looking for differences between the expected and observed amount of inter-informant agreement) (Hubert and Golledge 1981; Ross and Medin 2005), by comparing informant loadings on the first and second factors (Chavez et al. 1995; Ross 2002), and by looking at differences in the mean responses or answer keys for perceived (sub)groups (de Munck et al. 2002; Keller and Loewenstein 2011). This paper extends these attempts to understand the distribution and structure of variable cultural knowledge through a novel technique, developed by Dressler et al. (2015) and refined here for use with rank-order data. This method of residual agreement analysis simultaneously accounts for both the shared structural knowledge of the aggregate and the unique subcultural knowledge that is nonrandomly distributed.

To demonstrate this method for looking at subcultural residual agreement that is meaningfully patterned beyond the shared model of the aggregate, this research considers how two Brazilian Pentecostal denominations conceive of the cultural model *A Vida Completa* (literally "the complete life," or what acolytes believe to constitute the ideal religiously-led lifestyle). Brazilian Pentecostals offer an ideal case study to test the analytical strength of this method for measuring residual agreement. Ethnographic accounts of this Latin American religious movement have described the faith in terms of a super-cultural group—an aggregate that shares many of the same doctrinal foundations, beliefs, behaviors, and rituals. Indeed, Brazilian Pentecostals identify as belonging to the same religious community and name one another (regardless of denomination) as *crentes* (believers) (e.g., Mariz 1994; Stoll 1990). At the same time, other studies focus on the unique cultural knowledge held by specific denominations or congregations—emphasizing the differences between the various churches described as *evangélica* (e.g., Chesnut 1997; Smilde 2007).

If Brazilian Pentecostals do share a culture that is also variably distributed by denomination, this method of residual agreement will be able to identify significant sharing at both the aggregate and subcultural levels that roughly correspond to how they are described in the literature and in my own ethnographic fieldwork. To do so, I look at two Pentecostal denominations within the city of Ribeirão Preto that are commonly described as occupying two divergent ends of the Pentecostal-belief spectrum: The Assembléia de Deus (Assembly of God; AD) and the Igreja Universal do Reino de Deus (Universal Church of the Kingdom of God; IURD) (Freston 1995). Because of their respective distance from one another regarding Pentecostal doctrine and ritual, I expect that this method will be able to identify aspects of the cultural domain where they have significant sharing or overlap of knowledge, and other areas where there is more subcultural differentiation.

BACKGROUND

The data used to demonstrate the analytical usefulness of residual agreement analysis was collected during 14 months of fieldwork within the city of Ribeirão Preto in the Brazilian state of São Paulo. Originally founded in the late nineteenth century, Ribeirão Preto has developed from an agricultural market center to one of the most affluent cities in Brazil, known for its financial and health care industries. As a result of this economic prosperity and temperate climate, the city is often referred to as the California of Brazil. However, the material landscape of high-rise condominiums which cast long shadows onto the numerous *favelas* (shanty towns) belies the popular narrative of the city's opulence. Home to approximately 600,000 people, the city has a wide range of socioeconomic variation, as evident in the dramatic discrepancies of wealth within and between the various *bairros* (neighborhoods) (IBGE 2010). As a result of socioeconomic inequalities, the Gini index for Ribeirão Preto is 0.45—the same as the megacity of São Paulo, though lower than that of the nation (0.54). This index stands in contrast to the much higher indicators of social inequality within Ribeirão Preto (0.77) and across the nation (0.61) at the turn of the twenty-first century (Bazon 2008). That is, despite continuing inequality, the city's population has greatly improved its economic profile over the past several years.

A brief overview of the Pentecostal faith in Brazil is warranted to fully appreciate the patterns of cultural knowledge identified by cultural consensus and residual agreement analysis. In general, Pentecostalism is well-known for its literal reading of scripture, strict prohibitions against alcohol and tobacco use, and the incorporation of Apostolic spiritual gifts during worship (Robbins 2004). These spiritual gifts of the Holy Spirit, described in Chapter 2 of the Acts of the Apostles, take the form of glossolalia (speaking in tongues), prophecy, interpretation (of tongues or prophecies), spiritual healing, and exorcisms. The public signaling or expression of these gifts marks an acolyte's place within the congregation and solidifies his/her crente identity in relation to others (Sosis 2006). The ideal characteristics and frequencies of these signals vary by denomination. Other than doctrinal emphasis, Brazilian Pentecostals differentiate themselves

from other religious traditions through an essentialized religious identity and a conscious separation from important secular cultural institutions such as Carnaval, the samba (and dancing in general), *futebol* (soccer), and [women's] fashion. In doing so, crentes create cultural boundaries that enforce an essential identity that is positioned at odds with key modes of "Brazilian-ness" (Burdick 1998; Chesnut 1997; Mariz 1994; for Latin America see Brusco 1995; Smilde 2007).

The growth of Pentecostalism in Brazil is chronicled by three general stages or waves that represent unique approaches to the faith (Freston 1995). First-wave congregations were established in Brazil at the beginning of the twentieth century. These churches, including the AD, are noted for their sectarianism, ideological self-distancing from worldly and secular influences, and an emphasis on the Pentecostal gift of tongues or glossolalia. The second wave of Pentecostalism coincided with Brazilian urban development between 1950 and 1970. Second-wave churches, such as the Evangelho Quadrangular (Church of the Four-Square Gospel), are noted for introducing tent revivals to Brazil that focused on divine healing crusades, as well as pioneering the use of mass media for evangelism (Chesnut 1997). Finally, third-wave Pentecostalism, also called neo-Pentecostalism, was developed in the 1980s and was shaped by concurrent modernization and economic processes. Third-wave churches, such as the IURD, are known for their "health and wealth gospel," which emphasizes the acceptance of worldly blessings (e.g., material prosperity and health) in exchange for obedience within the faith. These Pentecostals also stress the spiritual gift of exorcism over demonic forces, which are viewed as the cause of all illness and suffering. In general, the first- and second-wave congregations are considered more traditional and conservative than third-wave denominations, which enforce few behavioral taboos and do not institutionally monitor their members (Birman and Lehmann 2005; Chesnut 1997; Freston 1995; Oro 2004).

In this study, I focus on two churches on the opposite ends of Pentecostalism—the traditional AD and the neo-Pentecostal IURD—to identify and better understand how cultural knowledge is distributed within and between these religious communities. I argue that a cross-cultural comparison of these brands of Brazilian Pentecostalism will highlight the shared views of the ideal Pentecostal lifestyle shaped from common doctrinal foundations and similar experiences of being a minority faith within Catholic-dominated Brazilian society, as well as the discrete cultural emphases of each denomination as they seek to carve out a unique niche within the crowded religious marketplace of Brazil.

ASSEMBLÉIA DE DEUS

In 1984, when David Stoll (1990) was compiling research for his seminal volume *Is Latin America Turning Protestant?*, the Assemblies of God, based in Springfield, Missouri, claimed nearly 13 million members worldwide in its network of affiliated Pentecostal churches. Today, there are that many members in Brazil alone, which makes it both the most Catholic country in the world and the country with the most Assembléia de Deus (AD) members (Assemblies of God 2012; IBGE 2010;

Sites 2012). The AD's success over its 100 years in Brazil is manifested by their omnipresent churches—a prominent feature in nearly every Brazilian neighborhood.

I focused my research efforts within the main Assembléia de Deus congregation in Ribeirão Preto, known to members as Templo Sede (a play on words that means both "headquarters" and "thirst," as in "thirst for the Holy Spirit"). The meeting house is situated not far from the main bus terminal, within the solidly middle-class neighborhood of Vila Tibério. The church stands out among the cobblestone streets, corner stores selling snacks and soft drinks, and modest single-family houses that line the maze of streets. The Assembléia church building is the largest in the area, and its huge golden chalice of stucco on the top two stories of the building can be seen from blocks around, especially when it is illuminated at night with bluish-purple lighting. Despite the neighborhood's proximity to the bus station, and the discount shopping district immediately surrounding it, Vila Tibério remains a safe place to live and raise families, and church members drive, ride, and walk from around the city to attend the thrice-weekly evening meetings.

While each neighborhood in Ribeirão Preto has small Assembléia churches that are capable of holding roughly 100 parishioners, Templo Sede is the main congregation and has a capacity that comfortably exceeds 500. The church pews are often overflowing during important holidays (e.g., Easter and Christmas), monthly Santa Ceias (Lord's supper, similar to communion or sacrament), or quarterly baptisms. Typically, a dozen or so male pastors sit on a stage at the front of the sanctuary and face the congregation. Many of these pastors are in unpaid positions, finding service as a calling rather than as a profession. A 50-person orchestra, composed of a complete brass section; woodwinds, such as flutes and saxophones; and an abundance of stringed instruments, including several guitars, cellos, and a dozen violins, flanks the pews to the left. The orchestra provides nearly all of the music for the numerous and complex hymns despite the young age of many of the musicians (the average age is about 21). To the right of the pews sit members of the choirs. The main choir consists of men and women of all ages. There is additionally a young women's choir made up of members who are younger than 30 years of age, as well as teenage girls' and children's choirs made up of younger crentes.

Members often arrive in families and groups of friends or neighbors, greeting one another with *"O Paz do Senhor!"* (The Lord's Peace). Few arrive on time, as is typical in Brazil, and they trickle in for the first half hour after the official start of the meeting. For this reason, the first 30 minutes of any 90-minute service is almost exclusively hymns and songs performed by the various choir groups. Men dressed in suits and collared shirts, and women in high heels and fashionable dresses but no jewelry (not even earrings), kneel at the pew in personal prayer before taking their seats. Services fully begin when the elderly head pastor leads the congregation in an opening prayer. Typically, a worship service consists of a pastor reading a passage of the Bible while the congregation follows along; a series of hymns sung by the entire congregation, the choir, or individuals; a short period for placing tithes and donations in sacks carried by ushers; a reading of specific prayer requests which is immediately followed by an invocation; a sermon given by one of the pastors; a call to Christ during which members publically accept Jesus as their Savior; and finally

ending with a closing prayer. After any *culto* (church service), members gather around the church entrance, conversing with one another. Pastors can be seen joking with young orchestra members, women catch up on the latest gossip, and people make plans to meet up with one another later in the week.

IGREJA UNIVERSAL DO REINO DE DEUS

No Pentecostal congregation embodies the third-wave more so than the IURD. Doctrinally, the Universal church focuses on Prosperity Theology and the attribution of demonic spiritual forces (often recognized as Candomblé and Umbanda spirits) in illness and malady (Oro 2004). Achieving health and financial prosperity are the central focus of the church, in addition to the liberation (i.e., exorcism) of acolytes from the demonic causes of their illnesses and misfortunes (Kramer 2005).

Founded in 1977 by former state lottery employee Edir Macedo, the IURD was one of the fastest growing churches in Brazil at the close of the twentieth century. Most IURD churches in Brazil are mega-churches insofar as members worship several thousand at a time (Thumma 1996). Meetings take place in large halls and auditoriums, or in multimillion-dollar facilities that include television cameras, internet conference rooms, and helicopter pads. The local leadership consists of paid charismatic professionals, often a head pastor and half a dozen subordinate pastors, within a strict hierarchal relationship headed by Bishop Edir Macedo. Further, the IURD ensures a high level of standardization between its churches. Head pastors are encouraged to adhere to officially mandated sermon topics and are regularly (every 6 months to a year) rotated between IURD churches within cities and between regions to achieve homogeneous discourse. As a result, acolytes' experiences within the IURD congregations in Brazil are largely identical.

On average, the IURD holds four or five meeting per day, seven days a week. Each day has a specific focus; for example, Monday meetings focus on prosperity; Friday meetings focus on liberation from vices; and Saturday congregations are devoted toward addressing problems of the heart. The acolyte thus has a range of worship choices, depending on his/her needs. As a result, there is generally little disciplinary oversight of individual members, and little familiarity between members of the larger church community. The IURD also does not incorporate rigid proscriptions against alcohol consumption or the use of cosmetics and fashionable dress (in contrast to other Pentecostal churches); rather, it defers to the individual to choose for him/herself (Chesnut 1997). In sum, the IURD's use of mass-media, its lax social regulations, and its array of worship times and themes have been attractive to lower- and middle-class acolytes who may have been "turned off by traditional (read *Catholic*) religion," who want to make religion work for them, and who may not want to "retreat from the world" (Thumma 1996).

As with the AD, I focused my research efforts within the primary IURD congregation of Ribeirão Preto, known as Templo Cenáculo (Upper-Room, a name which both describes its constructional layout as well as makes reference to the site of the Last Supper). Located within the city center, the church is accessible

to nearly all of the city's inhabitants through free buses that the church charters to transport members from the peripheral neighborhoods. As a result, the church is truly a cross-section of Brazil. Business men in suits stand next to illiterate street cleaners from the *favela* (slum). The downstairs parking area mirrors this cross-section of the city's inhabitants, showing Mercedes parked next to VW beetles, next to legions of cheap motorcycles. Within the worship hall, one's gaze is immediately drawn toward the large velvet-covered stage and the words "Jesus Cristo é o Senhor" (Jesus Christ is the Lord) that are emblazoned above in three-foot-tall gold letters. Like the oversized lettering, cultos are often "spectacles," focusing on extravagant rituals that incorporate ever changing props or "Holy objects" to commune with the divine (see Kramer 2005). For example, a twelve-foot-tall Star of David, with lights embedded into the sides, large enough for three people to pass through abreast (and which is often replaced with other oversized "gateways," such as staircases or a walkway flanked by ten-foot-tall crooks) is used to confer blessings of financial prosperity onto the faithful.

CULTURAL CONSENSUS ANALYSIS

In this study, I take a cognitive anthropological approach to culture. Following Holland and Quinn (1987), D'Andrade (1995), and Shore (1996), culture is understood as systems of knowledge that are necessary to function within a social setting. Cultural models are structural frameworks of specific cultural domains which organize representations of behaviors, associations, and meanings. Several characteristics are important for understanding the nature and function of cultural knowledge and models. First, no two individuals hold identical models for a given domain. The distribution of cultural knowledge is heterogeneously distributed, and when combined with unique life histories, it becomes "physically impossible for any two people to hold identical cultural configurations" (Handwerker 2002:109). Importantly, sharing is distributed so that no single person cognitively possesses the entire model, though some individuals may have more knowledge of a domain than others. For instance, one would expect Pentecostal pastors and elders to be "cultural experts" on what constitutes a full Pentecostal life, rather than a neophyte who has only begun to attend church. Additionally, cultural models are subject to change because individual cognition is not static. CCA only provides a snapshot in time of a cultural model's composition and distribution (see Dressler et al. 2015 for CCA in a longitudinal study).

By using factor analysis, CCA provides a way of quantifying the extent of sharing around a cultural domain. Through a combination of interviews, observations, and free-listings, the domain of focus is identified and populated with terms and phrases which constitute a more fleshed-out cultural model. The researcher, somewhat artfully, creates a series of statements that reproduce the salient aspects of the model and then elicits informant responses to them. CCA then compares the responses of each individual by creating an informant by informant matrix of response correlations (Weller 2007). Individuals whose responses are more frequently reproduced by other informants are said to have greater "cultural com-

petence." Such competence scores range from 0 to 1 and provide an estimation of the likelihood of a particular informant knowing the correct aggregate response to any of the statements that constitute the cultural model. Through weighting each informant's answers by their cultural competence scores, CCA provides an estimation of the most culturally agreed upon set of responses, or an "answer key," for the tested model. If the eigenvalue of the first-factor answer key explains a significant amount of the variance, then the claim that respondents are drawing from a single, shared cultural model is supported. As a general rule of thumb, an eigenvalue ratio of 3:1, average competency above 0.5, and the absence of negative competency scores indicates an adequate fit of the model with the data (Romney 1999; Weller 2007).

These criteria should serve as benchmarks and guideposts for supporting hypotheses derived from and grounded in ethnographic data (see de Munck et al. 2002). High eigenvalue ratios and competency scores are not proof of shared cultural knowledge (Ross and Medin 2005), and low eigenvalues and competency scores are not definitive of a complete lack of cultural sharing (Caulkins and Hyatt 1999). In the former case, "natural knowledge" can result in high consensus as Medin and Ross (2005) found among novices who similarly grouped species of fish based on their morphological similarities. To the contrary, the existence of variation may indicate the conflation of several subcultures, to a disputed domain, or to some combination of the two as Chavez et al. (1995) identified in their study of the perceived causes of breast and cervical cancer among a diverse sample of Americans. As a result, despite its usefulness in quantifying and identifying patterns of cultural agreement, CCA can only provide a rough estimate of how culture is distributed among a group of respondents (William Dressler, personal communication 2013; see also Kronenfeld 2006). As outlined in this paper, residual agreement aims to refine CCA by looking at shared agreement beyond the first factor. Ultimately, however, these methods must be used in conjunction with other ethnographic methods to triangulate findings and verify the conclusions that each supports.

RESIDUAL AGREEMENT ANALYSIS

The logic behind residual agreement is that the model tested by the ethnographer is only an approximation of a shared cultural framework. There may be sharing, particularly by a subset of the sample, which is not fully accounted for by the first factor. By analyzing patterns in this data, it is possible to understand how members meaningfully deviate from the primary consensus of the aggregate. To put it another way, as principal component analysis, the first factor explains only part of the underlying variation of the respondent correlation matrix (Weller 2007). Patterns of residual agreement may lie beyond the overall cultural consensus explained by a single factor. As mentioned above, the various means by which researchers have used and extended cultural consensus methods have shown that variation of cultural knowledge beyond the shared consensus of the aggregate may not be random but instead may be meaningfully patterned (Chavez et al. 1995; Keller and Loewenstein 2011; Ross and Medin 2005).

There are two primary ways for determining the existence of alternative models or subcultures. The first, introduced by Hubert and Golledge (1981), involves recreating the inter-informant agreement matrix from each individual's first factor cultural competency scores. Theoretically, if the first factor explains all of the variation between informants, the original and recreated matrices should be identical. Patterned deviation between the matrices suggests the existence of shared departure from the consensus model. Subtracting standardized forms of each matrix from each other creates a third, residual matrix. With the quadratic assignment procedure (QAP) in ANTHROPAC, tests of correlation significance can be performed between the original and residual matrices. Significant correlations suggest that the residual matrix has an organized structure that indicates cultural sharing beyond the original first factor (Dressler et al. 2015).

The second means of identifying patterns of agreement beyond the first factor is much simpler, as it only takes into account the additional variation explained by the second factor. However, if a significant amount of residual consensus lies beyond the first factor, then this subpattern of agreement should be evident within the second factor. Introduced by Boster and Johnson (1989), this method involves graphically plotting informants' first and second factor loadings. If there is clustering along the second dimension, the data may indicate shared cultural variation beyond the first factor model (Caulkins and Hyatt 1999). Hypotheses about the nature of this subcultural variation can be assayed through tests of significance on informants' second factor scores.

Variations of these methods have been extensively conducted in a range of studies. For example, previous efforts have looked at the differences between the first and second factors one item at a time (Ross and Medin 2005), and they have constructed separate cultural consensus models for each subgroup (Hruschka et al. 2008; Keller and Lowenstein 2011; de Munck et al. 2002). For some research hypotheses, however, is does not make sense to analyze the distribution of (sub) cultural knowledge of one group in isolation from another. Owing to the close cultural proximity that results from a common cultural source or the continued sharing of knowledge, CCA of subgroups may first need to take into account that significant portion of variation explained by the aggregate consensus. To this end, Dressler et al. (2015:4) explain,

> a portion of the variation in the original answers to questions is due to the existence of an overall cultural consensus. Examining differences in the original answers or re-estimating the cultural answer key for subgroups leaves the part of the answer generated by cultural consensus in the estimate, along with whatever part of the answer is a function of residual agreement. What needs to be done is to estimate the variation in the cultural answer key that goes beyond the cultural consensus.

In other words, in certain hypotheses and research communities, there is reason to view the distribution of knowledge as the function of both the aggregate and the subgroup. Accounting for either separately fails to take into account the

larger patterns of cultural sharing. This can be simplistically conceived of as a Venn diagram of two circles. The area occupied by both circles can be thought of as the sharing that is similar to both subgroups of respondents. This, however, only accounts for some of the cultural patterning—the areas unique to each circle (i.e., subgroup) remain unexplored. Residual agreement analysis provides a means of accounting for the common knowledge of the aggregate as well as the shared subculture "deviation" or residual agreement from the overlapping intersection.

In order to identify how the residual agreement is organized, while still taking into account the overall shared consensus, Dressler et al. (2015) suggest a novel technique for calculating the deviation score of each informant. This method calls for subtracting the item value of the cultural answer key from each respondent's own rating of the same item. A positive value, therefore, indicates that the item was ranked higher by the respondent than by the answer key. Each item's overall deviation can be calculated by averaging the deviation scores across all individuals. This method, in effect, removes the known variation accounted for by the first factor, leaving only the residual agreement. Separate item-deviation scores can be calculated for suspected subcultural groups as identified by Hubert and Golledge's (1981) or Boster and Johnson's (1989) previously described methods.

Dressler et al.'s (2015) technique for identifying the structural specificities of residual agreement has been used successfully to describe temporal differences in Brazilian cultural models of lifestyle, social support, family life, and national identity. Each of these cultural domains relied on answers to a four-point Likert response scale that was analyzed using the formal cultural consensus method. The technique supplied in this paper applies a subtle alteration to Dressler et al.'s method for analyzing residual agreement that is more appropriate to rank-ordered data and the informal consensus method (see Weller 2007).

Rank-order data differs from multiple-choice and Likert responses because each item's response is made in relation to every other item's response. In the data collected here, respondents ranked 39 characteristics indicative of a Pentecostal Vida Completa in order of "most important" to "least important." In Dressler et al.'s method, the researchers rely on the average item-deviation across informants. Although this works well with self-contained items, when applied to rank-order data it has the function of skewing the extremes—items the cultural answer key ranked the most and least important. For instance, *being a God-fearing Christian* was ranked as most important in the Pentecostal cultural consensus answer key with an item score of 6.71 (a low score indicates greater importance). Informant deviations of this score are more likely to underrate the importance of this item. There are only so many places from 1 to 7, and many more between 8 and 39. The same is true for items ranked least important: the average informant deviations of these items tended to regard them as more important because the scale does not permit items to be ranked less important than 39. However, items in the middle of the scale, such as *helping one's family* (17.63), received less skewing since the scale allows informants to over-rank this item just as easily as they can under-rank it. Only one individual can make the appearance of widespread disagreement by ranking a very high or very low item on the opposite extreme. This results in

the artificial appearance of high consensus of centrally located items, and high residual disagreement for items located on either extreme.

Solving the problem of residual agreement distortion only requires the calculation of separate first factor cultural consensus coefficients for each subgroup (in this study, the AD and the IURD) in question. The aggregate answer key is then subtracted from each subgroup cultural answer key—resulting in two sets of itemized residual agreement scores, one for each church. In effect, the cultural answer key is the weighted average of informants' responses based on their cultural competence (or agreement with one another). In this form, item differences are less susceptible to the influence of outliers, and they can then be used to determine the amount and structure of the residually shared agreement of each subgroup. Plotting each group's residual agreement scores along separate dimensions graphically represents areas of high agreement for the two churches (represented by little to no variation from the shared model) and areas of high residual agreement within the subcultural groupings, but high variation between the groups.

SPECIFIC RESEARCH METHODS

The data presented below are a subset of a larger research project that investigated how the cultural model of an "ideal Pentecostal lifestyle" shapes psychological well-being. This research relies on a convenient sampling of members, identified by their "core" and "elite" status within the community (see Williams 1984).[1] Sampling for CCA, according to Handwerker (2001, 2002), need not be random. Data collection of shared cultural knowledge requires a selection of informants who are integrated within the cultural group and knowledgeable about a specific domain. That is, because the purpose of CCA is to elicit shared cultural models, individuals should be carefully chosen for their cultural expertise as it relates to the research hypothesis and the cultural domain of focus (Handwerker 2001).[2] However, efforts were made to recruit equally between men and women who represented a diverse range of ages, and who were integrated within their religious community.

Thirty-two individuals (14 men, 18 women; mean age = 33.8, s.d. = 12.8), split equally between the two congregations, were chosen to free-list "all of the items necessary or indicative of the complete Pentecostal lifestyle." Respondents verbally listed all the items they could think of and then verified the written responses I recorded. On average, this process took a little over 20 minutes. Completed free-listings were then analyzed using ANTHROPAC for the consolidation and frequency of common themes (e.g., "happy," "joyful" were combined into *being happy with one's life*, whereas "thinking about God before acting" and "listening to the Holy Spirit" [for guidance] was combined into *putting God before all things*). AD and IURD respondents supplied 186 and 184 total terms, respectively. The average free list length for both churches was approximately 12 items (~2.4 s.d.). After consolidation, there were no substantive variations in frequency for commonly listed items between denominations, gender, or age, and no items unique to either group. For instance, *having a good personality, treating one's body like a temple, having a relationship with God,* and *having a*

loving family composed the top four free-list items for the AD and were within the top six for the IURD. Twenty-one items represent 91.6% of all responses. That is not to say that the congregations' free-listings were identical. IURD members often referred to *ofertas* for both tithes and sacrifices, and the significance of *baptism in the Spirit* largely (though not exclusively) signified glossolalia for AD respondents whereas for IURD respondents it was a deep emotional upwelling brought forth by being "filled" by the Holy Ghost (but not necessarily accompanied by speaking in tongues). Such distinctions are reflective of the congregations' respective first- and third-wave orientations and are more fully discussed below. As a result of these terminological and semantic differences, the list was expanded to 39 items to take advantage of subtle variations (e.g., *prosperity* vs. *blessings of prosperity;* the latter is emphasized more in IURD sermons and requires an appeal to God) and items gleaned from participant observation (e.g., the importance of *tithe* within the AD community, where the tithing history is recorded for each member). These 39 items were selected as potential salient items to generate the Vida Completa model.

These terms were written down on index cards for use in ranking exercises. The ranking task of the 39 domain items constitutes the test of cultural consensus. Thirty-eight separate respondents (19 from each community; 18–66 years of age, mean = 29, s.d.= 12.2) were asked to rank-order these 39 terms in order of most to least important for achieving A Vida Completa. Borgatti (1994:267) cautions that ranking large sets of items can be a "cognitively difficult task." Indeed, for 39 items, there are 39! (2.0397882×10^{46}) possible combinations.[3] To minimize the cognitive strain, I followed Borgatti's (1994) advice to have informants first create smaller groups of terms. I had informants create three roughly equal groups (~13) of increasing importance.[4] One group comprised items deemed "most important" to achieve A Vida Completa, another held items deemed "important," and the final held items identified as "least important" (respondents would regularly remind me, however, that all 39 items were "necessary" for completely achieving A Vida Completa). Afterward, respondents were asked to rank-order, from 1 to 13, each item *within* each group. A combination of these rankings results in a rank ordering of importance for all 39 items, 1–39.

RESULTS

Before discussing the results, further mention of the constraints associated with rating tasks in cultural consensus analysis is necessary. The domain in question can require a nuanced consideration of the standard mathematical measures for determining levels of cultural consensus. In this study, the domain of focus is the characteristics necessary for a successful Pentecostal lifestyle. Through free-listing, interviews, and participant observation, I compiled a list of 39 behaviors, characteristics, and demeanors deemed essential for the "full life." All the items, to some degree, were emically important. As a result, many informants had trouble ranking items because they felt *all* were fundamental imperatives of the Pentecostal lifestyle. As one informant lamented, "How can you ask me to put these in order? They are all necessary to be with God; none is more important or

less essential than the others." Furthermore, items of A Vida Completa may be superficially observed to belong to various domains, thereby breaking one of the underlying assumptions of CCA (see Romney et al. 1986). Items that compose the complete Pentecostal lifestyle are explicitly religious (e.g., *baptism in the Spirit*) as well as interpersonal (e.g., *loving family*) and behavioral (e.g., *abstinence from alcohol, tobacco, and drugs*). To distinguish between these items, however, ignores the emic perception of the domain: informants identified these various terms as important to the Pentecostal lifestyle; they make no differentiation between items that are "religious" and those that are more "secularly oriented." Indeed, to be a Pentecostal in Brazil demands that one's entire world view be framed from religiously tinted lenses (see Smilde 2007). One benefit of CCA and other structured methods, such as free-listings, are that they are as free from researcher bias as any other approach—informants populate the domain and create the model with little interference from the researcher (Romney 1999). As a result, such methods draw a direct line from the shared knowledge of the informant to that shared by the aggregate.

Cultural consensus analysis supports the hypothesis that respondents from the two congregations share a common model of A Vida Completa. The similarities between individuals' rank-ordering of the 39 items resulted in the first factor explaining 3.81 times the variation as the second factor, with an average competency of 0.49 (and three negative scores) (Table 1).[5] Although this measure of competency is somewhat low, it is not unexpected given the makeup of the domain (i.e., all items being deemed "essential") and the heterogeneity of the sample (i.e., composed of two different Pentecostal denominations). Similarly, the small amount of variance explained by the first factor (34%) is attributable to the large number of possible orderings of 39 items and the low probability that any two individuals would rank all the terms in exactly the same manner, especially for a domain composed of entirely "necessary" items (see Table 2 for the aggregate answer key).

In order to test my second hypothesis—the two church communities have significant residual agreement divergent from one another—I first plotted each respondent by their first factor and residual second factor scores (Figure 1). If cultural agreement exists beyond the shared answer key, then respondents should be meaningfully patterned along the second factor. If there is no meaningfully distributed residual pattern, the plotting of informants should resemble a "fried egg" pattern—a clumping of informants along the first factor and a random radia-

Table 1. Aggregate cultural consensus of A Vida Completa

	Pentecostals combined
Respondents	38
Male	17
Female	21
Average Age (range, s.d.)	29.0 (18–66, ±12.2)
Number of Negative Competency Scores	3
Avg. Competency (range, s.d.)	0.49 (−0.35 to 0.82, ±0.29)
Eigenvalue ratio	3.81

Table 2. Aggregate Pentecostal first-factor answer key

| A Vida Completa items	Weighted average rank
God-fearing	6.71
Putting God before all things	7.52
Relationship with God	7.97
Baptized in the Holy Spirit	8.36
Baptized in water	10.33
Faithfulness/fidelity	10.77
Treating the body like God's temple	11.56
Reading and studying the Bible	11.58
Give tithes	12.04
Doing the works of God	13.29
Humility/humbleness	15.10
Evangelizing to others	15.34
To be saved	15.49
Loving thy neighbor	15.92
Giving sacrifices	16.80
Faith that God will resolve all problems	17.02
Helping others	17.63
Having a loving family	20.00
Feeling peace in one's life	20.66
Having one's family in the church	21.29
Liberated from demons	21.72
Avoiding worldly things	22.24
Never having sex outside of marriage	22.73
Being active in the church community	23.25
Happy with one's life	23.67
Receiving blessings of health and healing	23.81
Having a strong testimony	24.88
Never using drugs	27.11
Working hard	27.13
Education	27.27
Receiving blessings of prosperity	27.52
Material and economic prosperity	27.59
Fighting against persecution	27.89
Never smoking	28.00
Never drinking	28.58
Having a good job	29.99
Good friends	30.55
Content with a simple, but comfortable lifestyle	30.67
Conquering/achieving the material life	30.70
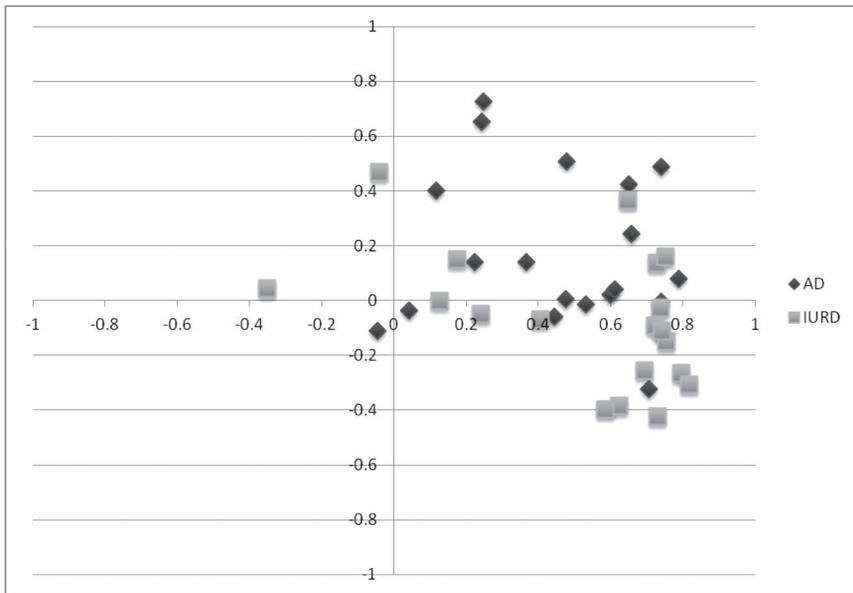
Figure 1. Respondent loadings on the first and second factors.

tion of informants out from that core (Caulkins and Hyatt 1999; Garro 1986). The distribution of Pentecostals along the second factor (vertical) axis does show that there is a clumping of IURD members below the plane of the *y* axis and of AD members above the plane, though AD respondents are more dispersed. To investigate the distribution of church members along the second factor more formally, a test of significance was performed for age, gender, and church membership. Pearson's correlation shows that only church denomination was highly correlated with the second factor ($r = -0.417$, $p = 0.009$, $n = 38$), indicating that the residual agreement of A Vida Completa is in fact due to the existence of two subgroups organized by denomination.

After determining the existence of residual agreement between the two denominations, the next step was to ascertain the structure of the residual sharing that each community holds. This requires the formulation of cultural consensus measures for each group. Again, a test of residual agreement requires the identification of further cultural sharing that is not accounted for by the first factor of the larger Pentecostal sample. The AD's cultural consensus is similar to that of the overall Pentecostal population, with an eigenvalue ratio of 3.54 and an average competency of 0.48. The IURD show much higher levels of cultural sharing, with the first factor answer key explaining nearly seven times the amount of variation as the second. The average competency for this community was also slightly higher at 0.529 (Table 3).

Subtracting the aggregate Pentecostal answer key from each denomination's answer key provides a measure of residual agreement of each item for each church. These item's deviation scores (converted to the additive inverse [−*x*] for

Table 3. Cultural consensus of A Vida Completa

	AD	IURD	Pentecostals combined
Respondents	19	19	38
Male	8	9	17
Female	11	10	21
Average age (range, s.d.)	27.84 (18–66, ±12.1)	30.05 (18–58, ±12.6)	28.95 (18–66, ±12.2)
Number of Negative Competency Score(s)	1	2	3
Avg. Competency	0.48	0.53	0.49
Eigenvalue ratio	3.54	6.95	3.81

ease of interpretation) can then be plotted to show divergence from the overall Pentecostal model between churches. Figure 2 shows the residual rankings as deviations from the original Vida Completa model. Items ranked more important by the subgroup received a *higher* deviation score (e.g., 1, 2, 3) and as such have positive values. Conversely, items ranked less important were given *lower* deviation scores (e.g., −1, −2, −3) and have residuals with negative coordinates. If there was no deviation between the groups' ranking and the overall model, the item would lie at the origin (0,0). Thus, items along the *x* axis increase in value for the AD with larger positive integers, whereas items most important for the IURD are located higher along the *y* axis.

As shown in Figure 2, numerous items exhibit little divergence from the overall shared model. The dotted lines on the graph outline those items that deviate by +1 or −1 from the aggregate Pentecostal answer key. Items such as *having a good job*, *having humility,* and *having an education* show little deviation. *Having no extramarital sex* sits at 0,0, showing complete consensus between the churches. Quadrant IV (lower right) shows items that are viewed as more important by the AD than the IURD, such as *avoiding worldly things, being content with the simple life,* and *having a strong testimony*. Conversely, items deemed most important by the IURD are simultaneously undervalued by the AD. These items in Quadrant II include *conquest of the material life, sacrifices and tithes,* and *Baptism in the Holy Spirit.*

DISCUSSION

Cultural consensus and residual agreement analysis provide a way to identify shared cultural aspects of a domain, its distribution in social space, and areas of shared convergence or shared disagreement. The data presented above provide support for a model of A Vida Completa held in common by Brazilian Pentecostals.
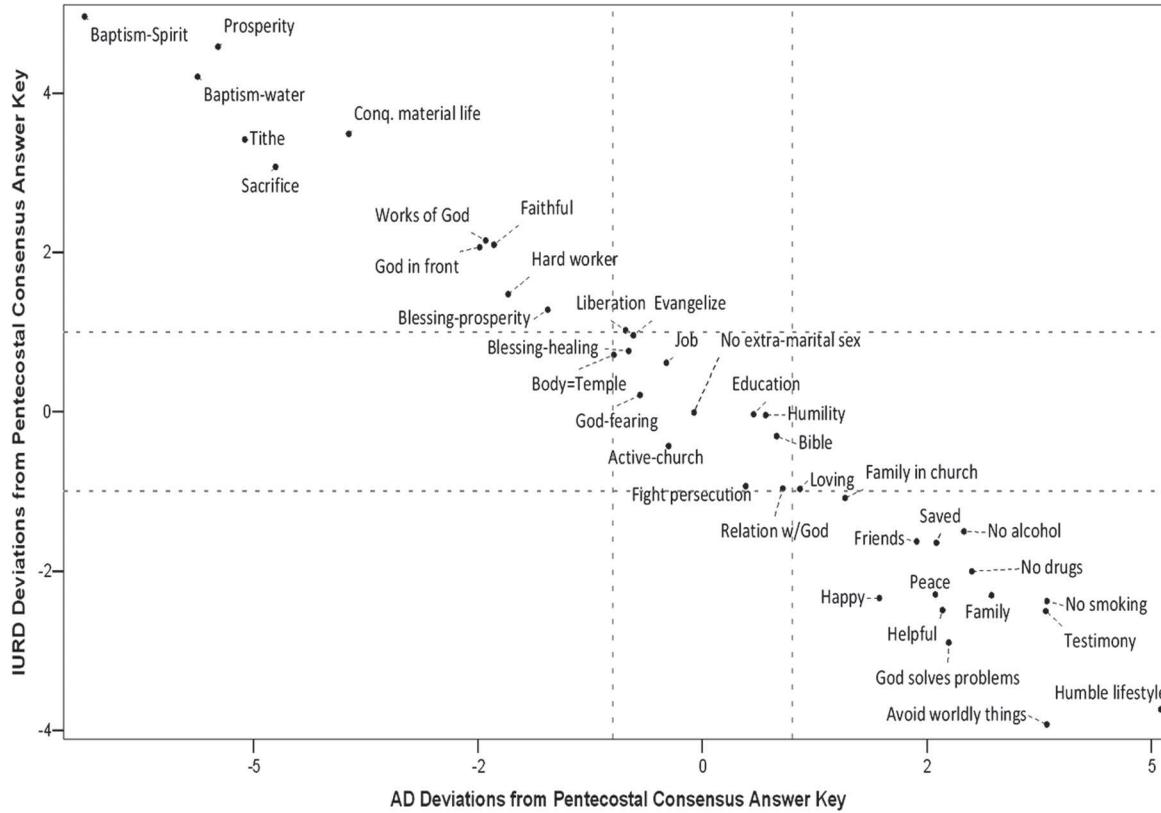
Figure 2. Structural representation of residual agreement

The ideal crente lifestyle extends far beyond the pews and altars of their church; the faithful Pentecostal not only develop a relationship with God, but use their faith to carve out an identity apart from dominant society, and to improve their personal and material well-being. Shared historical and doctrinal roots, as well as common experiences associated with living in a Catholicized Brazilian society, have led to a common perception about the "complete life."

   The existence of a shared model shows that despite variation in theology, ritual, and member composition, AD and IURD respondents draw from joint cultural understandings. These commonalities are apparent in the results from the free-listing and the cultural consensus portions of this project. Many of these items are things that any Brazilian and probably most humans would find necessary for their own vida completa. For instance, *having a good personality*, *a loving family*, and *friends* are important to many people regardless of religious persuasion or nationality. Importantly, however, Pentecostals explicitly view their lives and their world through a particularly religious lens, thereby imbuing their faith onto other cultural domains (Burdick 1993; Dengah 2013; Smilde 2007). For example, informants from both congregations mention the importance of a *loving family* "who have accepted Christ into their hearts"; *friends* are also important, but especially those "who have been saved and serve as righteous role models." The significance of religion is similarly supported by the consensus ordering of the Vida Completa model. Items in the upper third of the answer key—those listed as the "most important" for achieving the ideal Pentecostal lifestyle—are all explicitly religious in nature. Items deemed "important" (ranked in the middle third) tend to focus on one's emotional development and relationships with others. Items that are most similar to secular models of status, such as SES measures of education, job status, and wealth, are generally ranked as "least important" ("but still necessary," as respondents would remind me) and constitute the bottom third of the model. It is important to note that these are generalized trends, rather than absolute categories. Indeed, "religious" items (e.g., *faith that God resolves problems; having a strong testimony*) are found in the middle and lower third of the answer key, respectively, thereby lending support to the claim that the rank orderings are due to a shared perception of A Vida Completa, rather than to a semantic separation of "religious" and "secular" items. In fact, A Vida Completa, as a widely encompassing domain, is not dissimilar to David Smilde's (2007) findings for Latin American Pentecostals. Smilde found that crentes view improved interpersonal relations and resource security as explicitly religious projects that fuel both conversion and continued participation. That is, Pentecostals are expected to use their faith to change their material and interpersonal conditions. This is also comparable to the results of John Burdick's (1998) study of women and race in Brazil, which showed how racial and gender identities are subsumed by religious identities. In many ways, the crente identity transcends other social characteristics and creates a similar model of personhood regardless of economic status, race, age, or gender (see also Brusco 1995). The similarities of respondents' free-listings, as well as the construction of the Vida Completa domain, support the notion that they are, first and foremost, crentes. Other indicators of identity and

status are then reinterpreted through the religious lens.

Since their religion colors all other aspects of their life, members of both churches repeatedly told me that "the measure of a true Pentecostal is one who puts his/her faith in the forefront of their life." Religious identity is as much about daily behaviors as it is about theological beliefs. Expanding this view, a deacon in the AD church told me:

> Brazil isn't a Catholic nation. Sure, you have many people who call themselves Catholic, but they don't act like it. They drink and smoke and cheat, and then they go to church, take communion, and everything is all right. . . . They are not true Catholics, they are not true Christians.

Church members view the majority culture as sinful and try to distance themselves from its vices. To do so, they instill behavioral barriers that are designed to curb temptation and to define themselves in holy opposition to what one IURD pastor referred to as "Sodom and Gomorra." Unsurprisingly, a great many items that compose A Vida Completa serve to create a boundary between the righteous self and the sinful world of the other. IURD sermons regularly warn against drinking, smoking, and *prostituição* (visiting prostitutes). For example, one IURD meeting invited members to crush and throw their cigarettes and bags of drugs at the base of a 10-ft-tall wooden cross. In doing so, they publically acknowledged their transgression, symbolically showed repentance, and promised in front of others to make a structural shift in their private lives.

Both churches similarly invoke public signaling to demonstrate compliance with particular rules and how they embody crente identity (see Bulbulia and Sosis 2011). For instance, the AD is known in Brazil for its behavioral restrictions. Men and women must comply with a strict dress code, as well as refrain from playing soccer and dancing, which are two national pastimes. The reason for these rules, or "customs," is not because jewelry, soccer, or the samba are sinful, but rather these activities often manifest in conjunction with sinful behaviors (e.g., drinking, gambling) that distance one from the Spirit. As a result, these costly signals constitute bans (i.e., taboos) and badges (i.e., public displays) that restrict membership and create a "chosen" identity for Assembléia members (Sosis 2006).

While not as strict as the AD about enforcing behavioral taboos, the IURD still seeks to distance itself from Brazilian culture by other means. They cast themselves as warriors in a spiritual war: IURD pastors often preach while wearing army fatigues and the city's flag draped around their shoulders like a cape (see Kramer 2005). They encourage skepticism of wider society and government by telling members that the world and its people are literally possessed by the Devil and his demons (thus requiring "liberation" from malevolent forces), and that constant vigilance is the only way of ensuring one's own salvation and earthly success (e.g., "fighting against persecution"). The "chosen" crente identity is not attained through passive separation; rather, the IURD pastors maintain that one can only be saved by forcefully confronting sin (and the source of sin) in active antagonism. The ideal IURD member is defined by putting God before everything,

and by sacrificing time and money to do His works. This message is given every day by pastors and embodied by faithful congregants.

Such differences are further highlighted in the residual agreement analysis. The items *most* valued by the IURD are also the *least* valued by the AD, and they tend to cluster around the domain of ritualized obligations (*tithe, sacrifice, baptism*) and the rewards of such piety (*prosperity* and *the conquest of the material lifestyle*). AD congregants differentiate themselves by highly valuing items associated with a separation from "worldly behaviors" (*drinking* and *smoking*), while focusing on the more emotional aspects of A Vida Completa (*being happy, helpful,* and *having a loving relationship with others*). That is, following the characteristics of first- and third-wave Brazilian Pentecostalism, AD respondents place a higher value (as compared with the aggregate and the IURD) on a conscious separation from the world, a humble lifestyle, developing emotionally healthy relationships, and an overall intrinsic religious orientation. In contrast, the IURD follows its health and wealth gospel and places greater importance on the more extrinsic aspects of its faith: performing rituals that instill favor with God and the physical manifestations of such grace.

The results of the residual agreement analysis of the IURD can best be understood as an alteration of the "traditional" Protestant relationship between supplicant and God, from a familial union to one that is contractual. Prosperity theology creates a unilineal direction of exchange (Smilde 2007). It reduces the relationship between acolytes and deity to a market transaction of determinate obligation: to receive God's blessings, one must first perform ritual sacrifices and tithes; the faithful will be prosperous and cannot be poor. Likewise, those who do not give to God will not receive His favor. In short, the compulsory nature of the relationship removes divine agency and constrains the human-supernatural relationship to an immediate reciprocal exchange. In fact, IURD discourse, which borrows heavily from neoliberal capitalism, frames the human-God relationship as an economic transaction. Pastors regularly speak of "investing" in God through tithes and sacrifices and "having returns of double or triple [in value]." They view blessings as the natural and guaranteed result of a faithful relationship with God. This view carries into their rituals, in which members literally sign a contract with God, binding crente and God to a legal relationship (Figure 3). The contract with God, prosperity gateways, and other material culture of the faith allow IURD members to concretely interact with the divine in the same way in which they expect God to interact with them—through tangible changes to their life.

Following a more "traditional" Pentecostal approach, AD members are more concerned with the intrinsic motivations of religious participation and the resulting positive emotional dispositions and improvements to interpersonal relationships. These crentes maintain that the benefit of being among the faithful is the promise of salvation and earthly joy. *Material*, *economic*, and *professional prosperity* may be a part of this, but they are not guaranteed and rather are conditioned by His greater plan (and hence are less valued as markers of A Vida Completa). The pursuit of such things, AD crentes maintain, are often vices that push people away from God's light; therefore quests for secular success must be tempered.
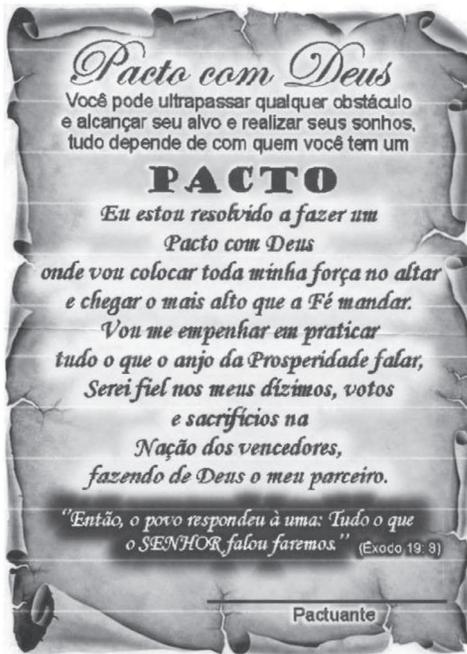
Figure 3. The Contract
with God

An IURD contract with God: "I promise to make a covenant with God, where I will put all my strength on the altar and do all that my faith demands. I will pledge to do all that the Angel of Prosperity asks. I will be faithful in my tithes, vows, and sacrifices to the Nation of Winners (IURD), thereby making God my partner."

Accordingly, many AD members advocate a separation, if only symbolically, from the world (e.g., *avoid worldly things*). This strict behavioral code valued by AD members is not necessarily about Biblical authority: "Jesus never said you can't play soccer," one informant explained. Rather, it is more about avoiding contexts that can potentially lead to sinful experiences: "It's what happens after the soccer game [drinking, visiting prostitutes] that is sinful." The separation from majority culture conventions serves to create a "chosen" identity and helps to redirect monetary and personal investments from the *ruas* (streets) back to the *casas* (homes), thereby allowing positive kin and kith relationships to develop.

For AD members, *contentment with a humble lifestyle* keeps their priorities in line and prevents them from coveting the prosperity of others. Vivianne, a homemaker in her mid-forties and the mother of three grown children, explains:

> I am renting the house we live in. It is small, but it has suited us for the last 10 years we have lived here. We could (buy and) move into another house— but it would be outside the city—and Carla (her deaf daughter) still lives at home, it is close to her university, and it is close to the church. I see the way other people work and work—for cars, big homes—but that's not what makes a home. It is being able to spend time, relaxing with your family.

For her and many other Pentecostal women, the integrity of the *family* is a primary concern. The material blessings that Vivianne seeks from God do not have to manifest in opulence (though she and most others would not be averse to such windfalls);

rather, blessings should engender stability so that Vivianne and her family can divert their energies toward cultivating self-growth and positive relationships.

CONCLUSIONS

This study shows how the combined application of cultural consensus and residual agreement analysis can capture the ways in which cultural knowledge is distributed among a population, and the ways in which aspects of a common model may be differentially emphasized in one group as compared to another (Garro 2000). The data analyzed here demonstrate that two Pentecostal congregations in Ribeirão Preto, Brazil, share a common model of what constitutes the ideal Pentecostal lifestyle. Congregants value being God-fearing Christians who put their faith ahead of all other things. They believe that, in return, God will provide a better earthly life. There are also variations between the two congregations: as documented in the ethnographic descriptions of first- and third-wave Brazilian Pentecostals, the AD is more sectarian, valuing a greater separation from the world. The rewards they seek are similarly more "traditional," valuing salvation, peace, and positive emotional relations. On the other hand, true to its health and wealth gospel, the neo-Pentecostal IURD places greater importance on the works and rituals one needs to do to please God, and the material benefits that are bestowed on the faithful.

As shown here, residual agreement analysis depicts what neither existing CCA nor ethnographic insights alone can show; it quantitatively and visually shows precisely how certain aspects of Pentecostal culture are differentially emphasized within these two churches. Here, residual agreement analysis shows that what may differentiate these two churches are not unique cultural beliefs, but differential points of emphasis in an underlying, shared model of "Pentecostalism."

The research discussed here is not necessarily applicable to all Pentecostals within Brazil or even Ribeirão Preto. Smaller congregations, those in other locales, and those whose members are bound together in smaller geographic units (rather than the entire city) will likely have altered models of A Vida Completa, as well as unique patterns of distribution and competence. Further, this research focused on the "dominant" models of religious culture as held and perpetuated by elite and core members. These views do not constitute the entire constellation of available Vida Completa models. Neophytes may hold inchoate forms of the model, and perpetual backsliders (those who fluctuate in their attendance and devotion) and "Sunday Christians" may draw from multiple models sequentially or in combination (see Strauss 1990). The inclusion of such groups, while beyond the focus of this current study, is needed in future research of religious communities. Importantly, however, residual agreement analysis can contribute to future studies of Pentecostal groups. For example, residual agreement analysis can identify differences between Sunday Christians, who may have greater "secular" valorization toward aspects of A Vida Completa model, and more-invested crentes. Similarly, a longitudinal comparison of neophytes as they progress through the conversion process can provide insight into the aspects of the model that remain

constant as well as those that change as a result of religious enculturation.

The first assumption of the cultural consensus method is that all the respondents are from a single cultural group. In reality, this is rarely the case. Culture is varied, it is disputed, and nearly every bounded unit named a "cultural group" can be parsed into smaller subcultural affiliations. Residual agreement analysis may offer a means of understanding the structure of shared knowledge beyond the first factor answer key. Importantly, however, cognitive anthropologists, such as Romney (1999), Garro (1986), and de Munck et al. (2002), remind us that cultural consensus and similar methods are tools in the ethnographer's kit. The approach is not a complete suite of methods to be used in isolation; cultural consensus data must be triangulated with other lines of data, including structured and unstructured ethnographic methods. However, CCA and residual agreement analysis do offer a robust way to describe the distribution of cultural knowledge, and they can provide signposts that direct analysis and future research. Residual agreement, as presented here, is a methodological extension of cultural consensus that allows researchers to examine the structure of subcultural knowledge away from the aggregate. Fundamentally, cultural consensus combined with residual agreement provides a novel means for testing hypotheses of cultural variation.

NOTES

1. Melvin Williams (1984) defines the two most active segments of a church community as "elite" and "core" members. Elites are those whose "policies, attitudes, and decisions directly influence the pastor's behavior (Williams 1984:33). In general, the pastor's family as well as other church elders and officials are included in this category. "Core" members are defined as those who hold various church positions (e.g., Sunday School teacher) or regularly and substantially invest personal time and finances to the well-being of the religious community (e.g., participating in multiple church committees or groups).

2. The sampling methodology is dependent on the study's hypothesis and unit of analysis (Ember and Ember 2000). To elicit a dominant cultural model, a random sampling would include individuals who are peripheral (i.e., marginal members) to the cultural group, with minimal knowledge of shared cultural domains (Handwerker 2001). As a result, CCA may fail to identify any shared agreement between informants. However, if the purpose of the study is to elicit all the possible variations of a cultural model around a single domain (and without a priori subgroupings of informants), a random sampling of informants may be warranted. For this study, however, the goal was to identify the most widely held dominant cultural model of A Vida Completa, as understood by IURD and AD congregations.

3. There is a limit to the number of simultaneous units of information cognitively held at any one time. As a general rule, it is seen that "working memory" is only capable of 2^7 (128) simultaneous discriminations that are used to divide and categorize the cultural environment (D'Andrade 1995). Thus, when rank-ordering items, each possible pair is con-

sidered as an informant evaluates whether an item is valued less or more than every other term. The possible number of pairs for 13 items (156) is closer to the theoretical cognitive capacity for working memory than the amount required for 39 items (1,482 possible pairs).

    4. Informants were encouraged, though not forced, to create three equal groups of 13 to control for the number of terms that had to be cognitively held at any one time.

    5. The three negative scores can be evaluated by how their individual responses deviate from the aggregate answer key. In general, these individuals provided an inverse ranking of items as compared with those of the other respondents (see Caulkins and Hyatt 1999). In the discussion that accompanied the task, these informants relayed that they viewed members of their religious community more concerned with "what God can do for me than what I can do for God" (in the words of one respondent). As a result, these informants felt that the majority of their fellow crentes have reversed priorities as compared with the "true believers." In this light, negative scores may not simply be dissonance with the model but instead may point toward other ethnographic insights.

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