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Inter-religious relations in Yorubaland, Nigeria: corpus methods and anthropological survey data

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Abstract

This paper uses corpus methods to support the analysis of data collected as part of a large-scale ethnographic project that focusses on inter-religious relations in south-west Nigeria. Our corpus consists of answers to the open questions asked in a survey. The paper explores how people in the Yoruba-speaking south-west region of Nigeria, particularly Muslims and Christians, manage their religious differences. Through this analysis of inter-religious relations, we demonstrate how corpus linguistics can assist analyses of text-based data gathered in anthropological research. Meanwhile, our study also highlights the necessity of using anthropological methods and knowledge to interpret corpus outputs adequately.

We carry out three types of analyses: keyness analysis, collocation analysis and concordance analysis. These analyses allow us to determine the 'aboutness' of our corpus. Four themes emerge from our analyses: (*1*) religion; (*2*) co-operation, tolerance and shared communal values such as 'Yoruba-ness'; (*3*) social identities and hierarchies; and (*4*) the expression of boundaries and personal dislike of other religious practices.

Keywords: anthropology, Christians, corpus-assisted discourse analysis, inter-religious, Muslims, Nigeria, Yoruba.

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1. Introduction

This paper uses corpus methods to support the analysis of data collected during a large-scale anthropological project that focusses on inter-religious relations in south-west Nigeria, the primarily Yoruba-speaking region of Nigeria which is also referred to as Yorubaland. Our corpus consists of answers to the open-ended questions asked in a survey (discussed below). The main aim of this paper is to address how people in south-west Nigeria, particularly Muslims and Christians who form the majority of the population, characterise their relations with one another. This enables us to explore a field of research that has received little attention: the negotiation and maintenance of inter-religious relations in this multi-religious context.

The research presented is inherently interdisciplinary, in that the findings are based on an extended process through which the authors became familiar with one another's disciplines; the paper draws on the anthropological literature on community and seniority in Yorubaland, but also on corpus linguistic research, particularly that focussed on the interpretation of meaning in discourse (rather than linguistic description).[3] This paper thus demonstrates how corpus techniques can contribute to research in the humanities – here, anthropology – in analysing text-based data: a seldom-explored combination (with the exception of Jaworska [2016: 4] who identifies that corpus-assisted discourse studies can 'verify or refine socio-cultural claims proposed in social sciences, specifically in tourism studies and anthropology'). The paper contributes to the scarce literature that explores elicited data using corpus linguistic methods of analysis (e.g., interviews in Gabrielatos *et al*., 2010; Torgersen *et al*., 2011; and oral history interviews in Sealey, 2009, 2012a) and addresses an absence of studies that explore survey data. It addresses key questions raised by Sealey (2012b) who uses corpus linguistic software to analyse interview data (taken from the Millennibrum Corpus) and archival anthropological data (taken from the Mass Observation Project). Simultaneously, our paper emphasises the relevance of ethnographic approaches for corpus linguistic studies, especially for data produced outside the European and North American contexts that are the focus of most corpus linguistic research. We supplement our analyses of corpus outputs with the quantitative and qualitative results of our survey, our knowledge of Nigerian English idioms, and the anthropological literature on social relations in south-west Nigeria.

We follow McEnery *et al*. (2006: 7) and others who contend that corpus linguistics is a methodology rather than an independent branch of linguistics. There are many ways to analyse corpora. For example, Lee (2008: 89) suggests that 'corpus-informed', 'corpus-supported' and 'corpus-induced' are hyponyms along a continuum for which 'corpus-based' is

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[3] Since we anticipate some of our readers will have no prior knowledge of corpus linguistics, we provide in Appendix A some key definitions to aid understanding of the corpus-assisted work presented here.

the superordinate. Our research lies in the tradition of corpus-assisted discourse studies (CADS) as used by, for example, Baker *et al*. (2008, 2013), Mautner (2009), O'Halloran (2010) and Partington (2009). We understand CADS to be exploratory rather than hypothesis-driven, and to use the tools and concepts of corpus linguistics to explore discourses. In employing methodologies associated with CADS, we focus on the significantly occurring lexis and phraseology of the texts in our corpus. Therefore, in our corpus-assisted investigation into the inter-religious discourse captured by our survey data, we explore ideas about inter-religious encounters (conveyed through language), rather than language use itself.

This paper explores how south-west Nigerians manage their different religious backgrounds in everyday life. We are interested in the beliefs, values, societal norms and traditions our survey respondents draw on to inform their engagement with religious difference, both at a micro level (i.e., in terms of their personal experiences), and a macro level (i.e., within the broader social and religious context of Yorubaland). After discussing the background to the survey and our corpus-assisted research (Section 2), we carry out three types of analyses (Sections 3 to 7): keyness analysis (see Bondi and Scott, 2010; and Scott, 1997), collocation analysis and concordance analysis. Three types of corpus outputs (devised using Sketch Engine) are analysed: frequency lists (for key lemmas and multi-word expressions), and concordance and collocation lists for specific words (including expanded concordances). With these analyses, we explore the 'aboutness' (Hutchins, 1977) of our corpus. Four main themes emerge: religion; co-operation, tolerance and shared communal values in the context of inter-religious encounters; social identities and hierarchies and how these inflect respondents' perceptions and experiences of inter-religious encounters; and the framing of religious disagreement and criticism as personal preference rather than general disapproval. By allowing us to handle large amounts of text systematically, these analyses provide insights into how Yoruba-speakers manage religious difference that ethnographic approaches reliant on participant observation on a smaller scale would not have revealed.

2. Background

2.1 The KEO project and corpus

The survey data discussed in this paper was collected during a five-year research project entitled 'Knowing each other: everyday religious encounters, social identities and tolerance in southwest Nigeria' (henceforth, KEO). This project focusses on the co-existence of Islam, Christianity and traditional practice in the Yoruba-speaking parts of south-west Nigeria. In addition to methods including interviews, archival research and participant observation, the KEO project includes a large-scale survey, carried out in 2012–3 with 2,819 respondents. Alongside asking about demographic information,

including respondents' religious identification over their lifetime, the survey included fifty-nine open-ended questions about respondents' experiences of, and attitudes towards, inter-religious encounters in family life and everyday social life.

The survey is ethnographic in the sense that it contributes to the exploration of the lived reality and the shared debates and understandings of a particular group of people. In addition to fieldwork, ethnographers employ multiple methodologies to understand trajectories beyond the historical present and the geographical limits of a particular field site. In the ethnography of Africa, surveys took on particular importance in the context of structural–functionalist and colonial anthropology. The production of surveys suffered a general decline in the 1970s and 1980s, but older surveys continue to provide rich ethnographic material for historians and anthropologists of Africa (cf. McCaskie, 2000; Schumaker, 2001; and Tilley, 2011). Inspired by renewed interest in political and health-related surveys of Africa since the late 1990s, our project reaffirms the usefulness of survey work for ethnographic inquiry.

Yorubaland has not experienced sustained religious conflict, unlike other multi-religious societies elsewhere in Nigeria and beyond. Members of different religions interact with one another frequently, often on an everyday basis. The KEO project's focus is, therefore, not so much on how religious identities are formed, but rather on how social identities are inflected by encounters with religious others.

Before colonisation, religious practice in Yorubaland was diverse, including *Ifá* divination (Bascom, 1969) and the worship of deities (*òrìsà*) and ancestors (Barber, 1981; and Fadiṛe, 1970: 261–87); these practices are now understood as 'traditional' Yoruba religion and their practitioners are generally called 'traditionalists'. Today, however, the Yoruba people have converted to both Islam and Christianity in significant numbers. The last census that recorded religious identification in south-west Nigeria was carried out in 1963. For the area of the present-day states of Ekiti, Kwara, Lagos, Ogun, Ondo, Osun and Oyo, covered by the KEO survey, the census data reported roughly similar numbers of Muslims (46.3 percent) and Christians (45.5 percent), with smaller numbers of religious others (8.2 percent) (see Ostien, 2012). KEO survey numbers for contemporary south-west Nigeria suggest a higher number of Christians (66.7 percent of our survey respondents), and lower numbers of Muslims (31.7 percent) and traditionalists (1.3 percent). Seventy-seven denominations are represented amongst our Christian respondents, including traditional mission churches[4] (40.6 percent of Christian respondents), Pentecostal churches[5] (35.3 percent),

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[4] For example, Catholic, Anglican, Baptist and Methodist.
[5] For example, Redeemed Christian Church of God, Mountains of Fire and Miracles Ministries, Winners' Chapel.

Aladura churches[6] (15.4 percent) and other denominations[7] (3.4 percent). Our Muslim respondents, meanwhile, belong to fifty-four different Muslim groupings, of which the largest is Nasfat[8] (47.3 percent of Muslim respondents), followed by those Muslims who did not belong to any particular grouping or who attended their town's central mosque (17.4 percent), Ansarudeen[9] (7.9 percent), and a large range of other smaller groupings (27.4 percent in total).

Our survey is biased towards certain geographical locations, and in the absence of an undisputed statistical frame – such as an up-to-date population register, which would enable us to run a quantitative (probability) sampling strategy – we cannot confirm that our data is statistically representative of south-west Nigeria (see Teddlie and Yu, 2007). However, statistical adjustment to our survey data with reference to the 2006 Census in Nigeria, the World Bank and the CIA World Factbook indicates a range of 63.9 percent to 67.8 percent Christians and 31.6 percent to 35.5 percent Muslims, suggesting that KEO survey results are indicative of the region's religious composition. Reasons for the shift from Islam towards Christianity over recent decades are discussed elsewhere (Nolte *et al.*, 2016).

The answers to the survey's fifty-nine open questions form the KEO corpus discussed in this paper, so our corpus consists of 169,140 individual answers, ranging from one word to over thirty-five words. Rather than divide the corpus into sub-corpora based on the answers to each question, we compiled one corpus consisting of answers to all open questions. This is because we were interested not in responses to individual questions, but in how respondents spoke about religion and inter-religious encounters across the variety of topics encompassed in the survey questions.

Unlike some corpora, the KEO corpus is not designed to represent a particular language variety or register and, strictly speaking, it consists of elicited rather than naturally occurring data. However, we consider that our corpus broadly complies with Kilgarriff's suggestion that corpora are large amounts of data whose gist can be accessed with the help of corpus tools:

> Corpora are not easy to get a handle on. The usual way of engaging with text is to read it, but corpora are mostly too big to read (and are not designed to be read). So, to get to grips with a corpus, we need some other strategy: perhaps a summary.
>
> (Kilgarriff, 2012: 3)

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[6] African-instituted 'praying churches' predating Pentecostal churches (e.g., Christ Apostolic Church, Celestial Church of Christ).

[7] For example, Seventh Day Adventists and Jehovah's Witnesses.

[8] A group with both Reformist and Sufi features that emphasises the importance of tolerance among Muslims and between Muslims and non-Muslims (see Soares, 2009).

[9] A group that has been instrumental in Yoruba Muslims' embrace of Western education (see Reichmuth, 1996).

In addition to accessing the gist of our corpus, the other reason for our recourse to corpus tools is 'to investigate cultural attitudes expressed through language' (see Hunston, 2002: 13–14).

Insofar as the reasons for the creation of the survey were clear from the outset and the data collection was rigorous, we argue that the KEO corpus is homogeneous. It is bilingual in that two versions of the survey were produced, one in English and one in Yoruba, and respondents chose which language to provide their answers in. The corpus containing answers to the English-language survey contains 454,523 words, and the corpus of answers to the Yoruba-language survey 437,907 words. The corpus we use in this paper is the English component of the KEO corpus. However, Yoruba words were occasionally used by respondents to these questionnaires, particularly Yoruba words that have been 'anglicised' into Nigerian English (e.g., *oba* for a ruler of a town), or where there is no English equivalent. The 599 Yoruba words thus identified in the KEO English corpus are used 2,216 times (i.e., they represent approximately 0.5 percent of the 454,523 words in the English corpus). A further sixty-nine words in Arabic were used 185 times (chiefly in relation to Islam).[10] Corpora of (south-west) Nigerian English and Yoruba are rare and, thus, the KEO corpus constitutes an unprecedented contribution to corpus linguistic research. While we do not plan to make the KEO corpus more widely available to researchers, the methodology we adopt in this paper suggests ways that researchers may work with survey data in general.

Standard Yoruba uses diacritics (i.e., tone marks above vowels and sub-dots below certain letters). We did not use diacritics during data entry. This was to avoid the errors commonly encountered when using diacritics across multiple pieces of software. Furthermore, many of our survey respondents did not use diacritics or used them irregularly. *Oro* was the only Yoruba word used in the KEO English corpus for which the absence of tone marks led to ambiguity: when not tone-marked, *oro* could refer to both *oròo ilé* ('lineage rites') and the ancestral masquerade of *Orò*.[11] In order to distinguish between these two meanings, we replaced manually all occurrences of *oro* as *oròo ilé* with *oroo* (judging the intended meaning by the context of the sentence), whereas we left references to *Orò* as *oro*.

As spelling variation can affect corpus outputs (e.g., Baron *et al*., 2009), we reduced spelling variation to a minimum while simultaneously avoiding altering the meaning of respondents' answers. Since literacy levels are relatively low across Nigeria (National Population Commission, 2014: 37–8), many responses featured non-standard or idiosyncratic spelling and grammar. We used word frequency lists to identify misspelt words and to create a version of the dataset with standardised spelling. For instance, there

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[10] Similarly, English and Arabic words are present in the Yoruba component of the KEO corpus, and these are not dealt with in this paper.

[11] The un-tonemarked word *oro* could also have other meanings, such as 'word', but the context of its use in our KEO English corpus suggests that none of these other meanings were deployed by our respondents.

were twenty-one variations of the spelling of *Christian* (e.g., *Chrisitan*, *Chirtian*, *Christien*, *Chritian*, *Cristian* and *Xtian*). These were standardised to *Christian*. Some phrases were also corrected (e.g., *in other to* was standardised to *in order to*) where the context made it clear that this was the phrase intended. Quotations from the survey answers in this article adopt these 'tidied' answers. However, ambiguous cases were left unchanged, as were colloquial expressions and grammatical features of Nigerian English.

Respondents represented in the KEO English corpus are 23.9 percent Muslim and 73.9 percent Christian, compared to 31.7 percent Muslims and 66.7 percent Christians in the overall survey. This over-representation of Christians in the KEO English corpus may result in bias in this paper towards Christian approaches to inter-religious encounters. However, since the focus of this article is not on the difference between Muslim and Christian answers but on the overall corpus, we discuss this over-representation only where it has significance for our analysis – for instance, in the discussion of the term 'submissive' (Section 8) as used by both Muslim and Christian respondents.

2.2 Statistics

Like many researchers (e.g., Kilgarriff, 2009; Scott, 2006; and Tabbert, 2015: 60–1), we gave the choice of reference corpus due consideration. We conducted pilot queries to compare our outputs with a range of general reference corpora (as opposed to 'genred' reference corpora, as defined by Scott, 2006: 9), focussing on the BNC (the British National Corpus, 2007) and ICE-Nigeria corpus (International Corpus of English–Nigeria, 2009). The quality of the results was best when we used the ICE Nigeria corpus as reference corpus. This is because the BNC showed that the keywords/features identified as departing significantly from 'the reference corpus norm' (Scott, 2006: 2) were mostly features of Nigerian English. In comparison, when we used the ICE Nigeria corpus, the keyword list did not focus on the differences between British English and Nigerian English, and it was therefore better able to highlight other distinctive features of our corpus. We therefore considered it to be more representative of the kind of English contained in our corpus (an issue alluded to by Baker, 2006: 30).

Insofar as we are examining collocations and keyness in this paper, issues concerning the statistical metrics used to calculate these were duly considered, as different metrics generate different collocation lists (Gabrielatos and Baker, 2008), key lemmas (Kilgarriff, 2009) and multi-word expressions (Kilgarriff *et al*., 2012).

For collocations (see Baker, 2006; and Bartsch and Evert, 2014, on various techniques that can be used to calculate collocations), it is now well-known among corpus linguists that the Mutual Information (MI) score can include rare collocates and sometimes exclude frequent collocates; that is to say, it is skewed to favour low-frequency words (e.g., Xiao and McEnery, 2006) but that a cut-off point of five can be used to counter this problem. This is the position we adopt in this paper. Following the principle that combining

measures to assess the strength of collocations enhances collocation analyses (Lindquist, 2009), we use the MI association measure and log-likelihood (LL) scores. The MI association measure tests the exclusivity/strength of the relationship between two words: the higher the score, the more likely it is that two words are collocates. The LL shows the statistical significance of a possible collocation. The results are deemed to be statistically significant if they have an MI score of at least 5.0 and a LL score of at least 6.67 (Allen and Blinder, 2013; for more detailed mathematical information on these tests see Pollach, 2012). The span used for the collocation analysis includes any words located within five words to the left or right of the word or phrase that is under scrutiny (i.e., a ten-word window), which we consider to be balanced (Baker *et al*., 2013: 36).

LL, for keyness, focusses on statistical significance but not on how large or small a difference is (Gabrielatos and Duguid, 2014). Kilgarriff (2005, 2009) argues that the mathematical sophistication of MI, Log Likelihood and Fisher's Exact Test is of no value in generating keyword lists. He, therefore, put forward the simple maths calculation (see Kilgarriff *et al*., 2014), and that is the calculation that we use in this paper. This calculation allows the identification of more or less common or rare words. To devise our key lemma list, we decided to focus on both common and rare words which are particularly salient or unusual in our data, and only words with a minimum frequency of five are included in the list.

Although statistical calculations are used to identify the three-word multi-word expressions (trigrams) we analyse, none are used to determine their relative salience. They are presented in order of raw frequency.

3. The KEO corpus: general focus

In this section, we provide a preliminary insight into the overall 'aboutness' of the KEO corpus (i.e., we identify its main themes) inspired by Rayson and Garside's (2000) approach to frequency profiling. We follow the premise (recalled by Pollach, 2012: 269) that keywords can give quantitative insights into observations that are directly relevant to the study of the aboutness of a text, but we also argue that researchers need to use keyword analysis in combination with KWIC searches to be able to fully interpret their data (Baker, 2004: xx). This is precisely what we do in this paper. We use the key lemma list devised for the KEO corpus, with the ICE Nigeria corpus as our reference corpus. We originally explored the keyword list for the KEO corpus but, on reviewing it, we decided that it was more compelling to focus on the key lemma list, since we are primarily interested in how respondents draw on ideas and concepts to talk about inter-religious encounters, rather than the different grammatical forms of lexemes. Also, the key lemma list allowed us to explore the concordances for the different forms of all lemmas listed. This is also why we focus on lemmatised lists of collocates in subsequent sections of the article.

Our premise is that lexical words in the KEO key lemma list reflect the subject matter of the KEO corpus. Due to the relatively small size of the KEO corpus and for the purpose of generalisability, our discussion focusses on relatively high-frequency words (i.e., those with more than twenty occurrences). This follows the logic recalled by Ringbom (1998: 192, cited in Rayson, 2008: 522) that 'if there are fewer than twenty actual occurrences of a word or phrase in such small corpora, not much can be generalised about the writer's use of this aspect of language'. Furthermore, for ease of reference, we focus on the top sixty key lemmas in our corpus (see Appendix B). When necessary, the ranking of words is indicated in parentheses – for example, '*oro* (19)' means that *oro* appeared in nineteenth position in the key lemma list.

However, we also acknowledge that cut-off points are often arbitrary (Gabrielatos and Marchi, 2012) and can lead to 'blinkered findings'; that less frequent or strong types can collectively lead to interesting findings (Baker, 2004) and, moreover, since analysts carry out keyword analysis with some degree of expectation, that it is possible to comment on what is absent (Partington, 2014; and Taylor, 2012). Thus, in addition to the top sixty key lemmas, we also carefully examined the entirety of our corpus outputs and, where relevant, we discuss words that appear further down the list (e.g., *co-operative* [180] and *respectful* [74]).

3.1 Managing religious difference in south-west Nigeria

It is to be expected that keyword analysis will reveal words that are topic-specific and that indicate salient contextual elements (e.g., Gabrielatos, 2007). Many of the key lemmas in the KEO corpus are particular to the Yoruba context, the features of Nigerian English and the focus of the survey on religion, social relations and everyday life in Yorubaland. Our list of the top sixty key lemmas for the KEO corpus (presented in Appendix B) reveals a concentration of words centred on the following four areas (with some words appearing in more than one area).

Firstly, *religion* (the focus of Section 4) is the most salient key lemma. This is not surprising given the survey's focus on inter-religious encounters. Words related to the three main religions in Yorubaland also pervade the key lemma list. Secondly, certain words in the key lemma list do not relate specifically to religion but, rather, reflect ideas about interaction across religious boundaries, such as: *tolerant* (2), *tolerance* (5), *co-operate* (24), *preach* (14), *preaching* (53), *convert* (13) and *behave* (6). We discuss selected examples of these terms in Sections 5 and 8.

A third subset of key lemmas relates to social identities and relations, within the family, among religious leaders and more broadly in Yoruba society. These include terms such as *husband* (7), *alfa* (18), *chieftaincy* (25), *marriage* (39), *oba* (46), *submissive* (52), *imam* (58) and *family* (59). We discuss selected examples of these terms in Section 8.

A fourth subset of the key lemmas suggests that, while some respondents are concerned with the crossing of religious boundaries, they also emphasise those boundaries. This is illustrated by words such as *disagreement*, *doctrine* and *discriminate*. *Discriminate* is discussed in Section 8, and this subsequently leads us to focus on the trigram *DO not like* (Section 7), which further illustrates this maintenance of boundaries between religions.

4. Religion

Distinctly Islam-related words amongst the key lemmas of the KEO corpus include *Muslim* (10), *alfa* (*18*), *Islam* (28) and *imam* (58), while Christianity-related words include *Christianity* (4), *Christian* (19), *Caesar* (38) *Biblical* (44) and *Christ* (48). *Caesar* appears in reference to the biblical injunction 'Render therefore unto Caesar the things that are Caesar's',[12] usually to justify respondents' views on carrying out traditional practices despite practising monotheist religions.

Other religion-related words include several words relating to 'traditional' religion: *rite* (8), *traditionalist* (9), *custom* (12), *idol* (16), *tradition* (33), *traditional* (34), *oro* (40), *fetish* (42) and *babalawo* (51). While in some cases the presence of these terms is a consequence of our survey's focus on religion and of the Yoruba context, these were also terms that respondents themselves chose to mention in describing their everyday lives, reflecting the continued importance of traditional religious practices in Yoruba society. The quantitative results of the KEO survey similarly suggest that while the vast majority of Yoruba people today practise Islam or Christianity, they may still resort to traditional practices in the pursuit of their own or their family's wellbeing. For instance, 56.1 percent of KEO survey respondents said that they had a family tradition or custom (even if it was not one they practised themselves), while 19.3 percent contribute money to family deities and 48.2 percent use traditional medicine.

5. Co-operation, tolerance, shared values and norms of behaviour

The words examined in this section are: *co-operate* (24) and its related forms (*co-operative* [180], *co-operation* [219] and *co-operatively* [838]); *tolerate* (15) and its related forms (*tolerant* [2] and *tolerance* [5]); and also *behave* (6), *respectful* (74) and *respect* (84) (there were no other related forms of these words in the key lemma list). The concordances and collocations (including expanded concordance lines) for these key lemmas are used as the basis for the discussion below.

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[12] Matthew 22: 21 (King James Bible).

The key lemmas offer insights into respondents' understandings of norms of behaviour relating to inter-religious encounters. We did not use the word *co-operate* (or any of its related forms) in our survey questions, and while *tolerance* was mentioned in the title and in one section heading of the questionnaire ('religious tolerance and mutual understanding'), it was not used in the survey questions. We therefore consider both of these words to reflect respondents' conceptualisations of relations with religious others, rather than being generated simply by our survey's focus on religion. Thus, they represent a contrast between the KEO corpus and reference corpus (Sealey, 2009: 218).

The collocation list for *co-oper**[13] reveals that co-operation is closely associated with words such as *should* (sixty-two occurrences) and *comply* (four occurrences) which suggest shared expectations of social behaviour. *Co-oper** was used chiefly to respond to questions about how people should behave at social or religious events organised by people of other religions (38.6 percent of occurrences of *co-oper** were in response to this set of questions), about how husband, wife or child should relate to other family members' religions (23.2 percent), and how religious and political leaders should relate to other religions (19.8 percent).

These shared expectations of social behaviour are also perceptible in the collocates of *toler** (e.g., *watchword* [8] and *key* [9]). *Toler** was used chiefly in response to questions about how respondents would advise religious and political leaders to relate to others' religions (62.2 percent of occurrences of *toler** were in response to this set of questions), about how family members should behave with regard to other religions within the family (15.6 percent), or about what respondents admired about other religions (12.9 percent).

Further investigation of the collocation lists for *toler** and *co-oper** reveals an emphasis on tolerance as a feature of harmonious interactions with others. The collocates of *toler** include words such as *accommodative* (8), *accommodating* (9), *accommodate* (27), *understanding* (36), *mutual* (29) and *respect* (64).

The presence of action- and instruction-focussed verbs in the collocation lists for *toler** and *co-oper** indicates the active work involved in establishing and maintaining tolerance and co-operation. For *toler**, instruction-focussed verbs include *learn* (21), *preach* (57) and *foster* (49); and for *co-oper**, *encourage* (20) and *preach* (39). Other active verbs in the collocations for *co-oper** include *behave* (14) and *perform* (30), and in the collocations of *toler**, *show* (63), *adopt* (15), *endure* (17), *display* (18) and *foster* (49).

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[13] * is a wildcard.

		Freq.	MI	Log likelihood			Freq.	MI	Log likelihood
1	cordially	3	8.365	29.256	19	without	4	5.515	22.903
2	ensure	3	7.531	25.618	20	encourage	3	5.437	16.841
3	comply	4	7.445	33.687	21	husband	32	5.29	177.753
4	discrimination	4	7.036	31.364	22	member	5	5.272	26.99
5	manner	4	6.535	28.546	23	wife	20	5.232	108.301
6	normally	10	6.46	70.611	24	among	3	5.223	15.966
7	its	5	6.133	32.91	25	well	15	5.184	79.876
8	with	102	6.13	728.501	26	each	7	5.122	36.423
9	normal	21	6.027	136.766	27	respect	14	5.09	72.695
10	service	3	6.006	19.187	28	tolerant	5	5.01	25.215
11	occasion	3	5.969	19.037	29	themselves	3	5.006	15.081
12	unity	6	5.952	38.011	30	perform	4	4.995	20.069
13	able	3	5.769	18.209	31	should	62	4.956	326.265
14	behave	23	5.762	141.613	32	peace	12	4.95	59.927
15	mutual	3	5.679	17.835	33	order	3	4.744	14.022
16	programme	3	5.669	17.795	34	would	3	4.631	13.569
17	tolerate	10	5.645	59.32	35	understanding	4	4.613	18.016
18	behaviour	3	5.612	17.561	36	love	18	4.573	81.266

Figure 1: (*continued on following page*): Collocation list for *co-oper**.

		Freq.	MI	Log likelihood			Freq.	MI	Log likelihood
37	*tolerance*	4	4.461	17.203	55	*bring*	3	4.055	11.283
38	*other*	24	4.457	105.323	56	*he*	19	4.047	72.597
39	*preach*	5	4.448	21.438	57	*way*	10	4.007	37.279
40	*so*	12	4.424	51.448	58	*follow*	4	3.981	14.674
41	*between*	3	4.404	12.663	59	*by*	8	3.901	28.652
42	*expect*	3	4.373	12.536	60	*as*	17	3.88	61.087
43	*and*	87	4.329	396.984	61	*together*	3	3.88	10.596
44	*show*	3	4.315	12.306	62	*me*	11	3.847	38.761
45	*his*	16	4.276	65.754	63	*parent*	6	3.836	20.926
46	*her*	17	4.253	69.425	64	*like*	10	3.804	34.641
47	*them*	29	4.232	119.263	65	*To*	98	3.764	379.791
48	*man*	3	4.223	11.943	66	*will*	16	3.744	54.605
49	*another*	3	4.223	11.943	67	*religious*	5	3.709	16.602
50	*they*	60	4.204	254.077	68	*need*	3	3.689	9.856
51	*him*	5	4.199	19.791	69	*also*	3	3.674	9.799
52	*must*	7	4.164	27.444	70	*on*	8	3.551	25.039
53	*she*	13	4.08	49.89	71	*advise*	4	3.522	12.306
54	*work*	3	4.074	11.358	72	*different*	3	3.498	9.127

Figure 1: (*continued from previous page*): Collocation list for *co-oper**.

		Freq.	MI	Log likelihood				Freq.	MI	Log likelihood
73	*attend*	3	3.464	8.997		91	*we*	7	2.479	12.736
74	*religion*	41	3.387	125.693		92	*be*	48	2.305	84.856
75	*child*	5	3.341	14.26		93	*have*	10	2.277	16.016
76	*the*	61	3.322	187.912		94	*all*	4	2.246	6.194
77	*same*	5	3.116	12.863		95	*that*	8	2.233	12.374
78	*'s*	4	3.077	10.081		96	*or*	3	2.044	3.985
79	*there*	6	2.993	14.554		97	*if*	4	1.755	4.143
80	*their*	12	2.988	29.313		98	*can*	4	1.666	3.799
81	*you*	3	2.971	7.161		99	*god*	6	1.499	4.79
82	*family*	6	2.93	14.09		100	*because*	9	1.493	7.19
83	*only*	3	2.88	6.831		101	*my*	7	1.482	5.494
84	*a*	21	2.868	48.957		102	*it*	11	1.448	8.392
85	*in*	20	2.735	43.328		103	*do*	8	1.367	5.487
86	*one*	6	2.628	11.934		104	*I*	13	1.19	7.112
87	*of*	23	2.627	47.145		105	*not*	7	0.636	1.211
88	*relate*	3	2.522	5.567						
89	*for*	9	2.518	16.84						
90	*good*	3	2.501	5.496						

Figure 1: (*continued from previous page*): Collocation list for *co-oper**.

your helper and encourage her. He *should*	co-operate	and embrace his wife religion. She should
all control over her. A husband *should*	co-operate	with his wife and tolerate her and her
with his wife religion. The husband *should*	co-operate	with the wife by trying to understand the
will follow the husbands. There *should* be	co-operation	with themselves as regard their religion
relate to his wife religion . He *should*	co-operate	with his wife. Same religion with the wife
must have the same religion. He *should*	co-operate	with his wife to have peace and happy home
that needs God 's guidance. Husband *should*	co-operate	with the religious. To relate well with
his wife on issue of religion. He *should*	co-operate	with her and love her as Christ love the
brought him to this world. He or she *should*	co-operate	and follow but if they are on the right
as that of the husband. By practice and	co-operative	. He *should* do his parents religion . A
religion of the parents. A child *should*	co-operate	with its parent's religion. To show interest
child is still under the parent he *should*	co-operate	with the parent so that their family will

Figure 2: Concordance list for *co-oper** and *should*.

The presence of these verbs suggests that while tolerance is framed as a normative expectation, it is also perceived as the result of personal effort and forbearance, rather than something that can be taken for granted.

The emphasis on normative behaviour is also apparent in the key lemma BEHAVE (ranking sixth in the key lemma list). The collocations and concordances for this key lemma reveal a close relationship between *behave* and *normal*. However, the concordances and collocates of *normal* (when used in conjunction with *behave*) include twenty occurrences in total of either *human* or *human being*, and seventeen occurrences of *person*. This suggests that respondents have a pre-existing understanding of universal norms of behaviour shared by all human beings, regardless of their religion.

The notion of respect, however, refers to norms of behaviour represented by respondents as distinctive of the Yoruba context, rather than of all human beings. The collocates for *respect** (e.g., *respect* and *respectful*) reveal that it is closely associated with terms such as *elder* (2), *elderly* (5), *Yorubas* (13), *Yoruba* (55), *custom* (70) and *culture* (76). These emphasise the particular importance of respect for others, especially elders, often idealised in Yoruba society as a behavioural norm. These behavioural norms include obedience and respect for elders within extended family and parent–child relationships, as well as in society more widely (Fadipẹ, 1970: 128–34). Indeed, one respondent's answer explicitly frames *respect* as a distinctly Yoruba quality:

Yoruba are very very respectful.

This sense of 'respect' as a distinctive Yoruba value can be understood in the light of the ongoing scholarly debate about the development of Yoruba identity, which is now widely understood as a modern phenomenon that is consciously produced or 'made' through 'cultural work' (Adéẹ̀kọ́, 2011; Apter, 2011; Barber, 2011; Matory, 2011; and Peel, 1989, 2011). Prior to the colonial era, the region that is now recognised as Yorubaland consisted of towns and city-states with shared histories and culture, but with

		Freq.	MI	Log likelihood			Freq.	MI	Log likelihood
1	watchword	8	8.406	88.881	23	equal	10	6.143	67.437
2	diplomacy	4	8.254	42.567	24	sentiment	4	6.116	26.798
3	criticism	4	7.768	38.021	25	impossible	4	6.052	26.411
4	ie	4	7.576	36.496	26	view	10	6.04	65.883
5	toward	7	7.476	62.569	27	accommodate	24	5.991	156.602
6	perseverance	4	7.254	34.137	28	supportive	4	5.991	26.043
7	acceptance	12	6.951	96.271	29	mutual	24	5.951	155.186
8	accommodative	4	6.875	31.564	30	loving	5	5.898	31.864
9	accommodating	7	6.86	55.071	31	honesty	4	5.821	25.034
10	key	9	6.839	70.513	32	truthful	4	5.821	25.034
11	visitation	3	6.701	22.823	33	hard	4	5.821	25.034
12	absolute	4	6.669	30.226	34	co-operation	5	5.81	31.217
13	ability	3	6.576	22.223	35	violence	5	5.81	31.217
14	compulsion	3	6.576	22.223	36	understanding	60	5.793	375.419
15	adopt	4	6.576	29.634	37	bias	13	5.753	80.137
16	enlightenment	3	6.46	21.679	38	co-operative	4	5.718	24.427
17	endure	5	6.438	35.967	39	room	9	5.701	54.776
18	display	4	6.254	27.633	40	tolerant	53	5.689	323.281
19	domain	4	6.254	27.633	41	lay	5	5.688	30.322
20	prayerful	15	6.216	102.873	42	tolerate	68	5.683	414.929
21	learn	23	6.18	156.633	43	public	4	5.669	24.141
22	equality	3	6.161	20.298	44	each	67	5.653	405.848

Figure 3: (*continued on following page*): Collocation list for *toler**.

		Freq.	MI	Log likelihood
45	*religiously*	3	5.637	17.965
46	*peacefully*	12	5.606	71.394
47	*patient*	7	5.602	41.577
48	*subject*	3	5.576	17.697
49	*foster*	3	5.576	17.697
50	*submission*	3	5.517	17.441
51	*wise*	4	5.488	23.092
52	*opinion*	6	5.488	34.647
53	*other*	320	5.467	1914.65
54	*positively*	10	5.455	57.289
55	*religious*	105	5.374	596.519
56	*politely*	3	5.353	16.735
57	*preach*	61	5.329	340.657
58	*unto*	4	5.328	22.17
59	*judge*	6	5.328	33.263
60	*norm*	4	5.328	22.17

Figure 3: (*continued from previous page*): Collocation list for *toler**.

Figure 4: Concordance list for *toler** and *watchword*.

Figure 5: Concordance list for *toler** and *key*.

Figure 6: Concordance list for *toler** and *mutual*.

Figure 7: Concordance list for *co-oper** and *behave*.

considerable linguistic, political and historical variation. From the colonial era, the production of a shared Yoruba identity, closely associated with seminal written texts such as Samuel Johnson's *The History of the Yorubas* (1921), began to be recognised among both scholars and the Yoruba people in general. Similarly, we see survey respondents 'making' Yoruba identity in their assertions about key Yoruba values such as 'respect'. The appearance of *respect* in the key lemma list therefore partly illustrates this perception of a shared 'Yoruba-ness'.

Respondents also appear to use this sense of shared Yoruba-ness to transcend religious difference:

The Yoruba culture tolerate customs and tradition irrespective whether you a Muslim/Christian. Their belief is that individual are converted either Muslim/Christian.

Unity is what we need. Either Muslim or Christian or traditional Yoruba religion we come from Olodumare.[14]

Figure 8: Concordance list for *behave*, *normal* and *human*.

This notion that religious differences are less important than a shared Yoruba identity is similarly visible in south-west Nigerian popular culture and associational and political life (Peel, 2000; Nolte, 2009; and Waterman, 1990). Even so, Yoruba identity cannot be regarded as a completed 'project'. The notion of 'the Yoruba' continues to be debated amongst the Yoruba people, and the assertion of Yoruba identity remains subject to religious, political and sub-regional divisions (Peel, 1989, 2011). Guyer (1996) has argued that many Yoruba people consider diversity to be an important social value; our corpus analyses confirm that in appealing to Yoruba-ness, respondents are both affirming it as a shared identity, and recognising that it is constituted by religious diversity.

Overall, the key lemmas scrutinised in this section indicate that as well as emphasising personal traits such as the ability to maintain and foster tolerance and co-operation, respondents describe religious difference as potentially overcome by shared humanity or Yoruba-ness, and by values they see as distinctly Yoruba (e.g., 'respect').

6. Religious difference and social status

The key lemmas discussed so far have provided insights into respondents' views on the broad social and religious context of Yorubaland. However, they also allow us to unravel micro level, personal experiences – the

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[14] *Olódùmarè* is the creator God.

lived experience of inter-religious encounters in families and other close relationships – while identifying how these experiences relate to the broader social context discussed above.

This section delves deeper into the notion of 'co-operation' in our corpus. Given that *with* is, as might be expected, one of the highest ranking collocates of *co-oper**, we begin by examining the concordances for *co-oper* with*. This allows us to comment on norms operating at the level of the family and other close relationships. While *co-operate with* occasionally refers to abstract concepts such as *my religion*, *others' religion*, *the rules* or *every activity*, it mainly refers to co-operation with other people: *me*, *each other*, *others*, *leaders of other religions*, *them*, *all*, *wife*, *husband* and *parents*. The recurrent use of kinship terms by respondents may reflect the fact that many of our respondents have family members of different religions with whom they describe the need to co-operate. Thus, for instance, this reflects the relatively high level of inter-religious marriage in Yorubaland; 9 percent of our respondents were currently married to someone of a different religion.[15]

However, two other words in the key lemma list, SUBMISSIVE (52) and DISCRIMINATE (36), suggest that respondents do not necessarily understand co-operation as an encounter of equals, as might be inferred from their emphasis on shared Yoruba-ness and humanity (see Section 5). The collocates for the key lemma SUBMISSIVE (88 occurrences) include *husband* (ranked fifth in the collocation list for 'submissive') and *wife* (6), along with *woman* (4), *she* (9) and *her* (10). Concordances for *submissive* indicate that the onus is overwhelmingly on women to be submissive to their husbands; sixty-nine of the eighty-eight occurrences of *submissive* refer to the need for women to be submissive to their husbands, while only five apply to men being submissive to their wives, ten to children being submissive to their parents, and two to religious and political leaders being submissive to those they serve (a further two answers were ambiguous).

It is beyond the scope of this paper to look in detail at differences between Muslim and Christian or male and female respondents in this regard, since our focus is on the corpus overall (although differences of discourse between demographic groups within south-west Nigeria are an important avenue for further research). However, we should note briefly that *submissive* is used in similar proportions by both Christian and Muslim respondents to

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[15] This figure rises to 24.9 percent if we include those respondents who were married to someone who had been of a different religion to them before they or their spouse changed religion. By comparison, in other West African countries, such as Senegal, only 138 inter-religious marriages were registered in Greater Dakar between 1974 and 2001 (Bop, 2005: 190, cited in Jolly, 2012: 8). Inter-marriage is also less common in Western countries such as the United Kingdom, where less than 1 percent of the UK Christian population has a spouse from 'other religious groups' (Voas, 2009: 1501, cited in Jolly, 2012: 7), or the United States, where between 2010 and 2014, 6 percent of the population were married to someone of another religion (not including Christians married to Christians of different denominations or to people with no religious affiliation; Pew Research Center, 2015: 45).

total commitment. my advice for a wife to be **submissive** to her *husband* 's religions. To make him
differences in the family. Well the wife should be **submissive** by following the *husband* religion. To co-operate
to make home Happy. Every woman should be **submissive** totally to their *husband* in order to help
Just as God commanded us To obey and be **submissive** to our *husband* . So far I am agree to marry
at home and understand their self. To be **submissive** to her *husband* 's religious belief. I will
if they are of different and of wife must **submissive** to her *husband* instruction. To worship
According to my religion, a woman is said to be **submissive** to the *husband* . Hence before you marry
comply with her *husband* religion. To be **submissive** . I will advise a wife to go with her husband
respect the religion of her *husband* . To be **submissive** . Wife must learn how to relate to her husband
doctrine in their family. The wife should be **submissive** to *husband* 's religion. She should click
practise her husband's religion. Must be **submissive** and obey her *husband* and just follow her
everything in common and in love. Wife should be **submissive** to her *husband* in all ramifications of

Figure 9: Concordance list for *submissive* and *husband*.

refer to wifely submission (i.e., it is not especially associated with either religion).[16]

While *wife* (6) was a stronger collocate of *submissive* than *parent* (12) and *child* (26), nonetheless these terms linked to age-related family hierarchies were more frequently associated with submission than religion-related words were (e.g., *religion* [24] and *God* [42]). This suggests that being submissive is more closely associated with hierarchies within the family than with religious practice or religious communities.

This overlapping of *submissive* with hierarchies of both gender and age can be understood within the wider context of the way that gender and age can structure relations in inter-religious marriages and families among the Yoruba (Fadiẹ, 1970: 114–16, 128–34; and Olábòdé, 2015: 30–4; and Nolte and Akinjobi, 2017). While women and children do not always follow their parents' or husbands' religion, they are expected to subordinate their religious practices to those of their social seniors. Thus, although extended families are often religiously mixed, relationships within these reflect hierarchies of gender and age rather than religion. This social hierarchy that structures interpersonal relationships between individuals of different religions illustrates another aspect of the behavioural norms discussed in Section 5. Thus the emphasis on submissive behaviour by women and young people suggests that the previously mentioned *respectful* and *normal* behaviour of individuals is not primarily shaped by their religious identities but by social hierarchies associated with age and gender.

These hierarchies of age and gender are also reflected in the collocations and concordances of the key lemma *discriminate* (ranking thirty-sixth in the key lemma list). This is not a word we used in our survey questions. Out of 121 concordances for *discriminate*, 119 describe either how respondents themselves do not discriminate or their advice that others should not discriminate. *Discriminate* is particularly mentioned in response to two

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[16] Twelve Muslim respondents and fifty-seven Christian respondents (i.e., 3.3 percent of Muslim respondents and 5 percent of Christian respondents in the KEO English corpus) recommend wifely submission.

sets of survey questions: one about how religious or political leaders such as pastors, imams, *babalawo* and *oniṣẹgun*[17] or *ọba*s[18] should engage with people of other religions, and the second, about what advice respondents would give to those researching religious tolerance. The concordances for *discriminate* suggest a widely held understanding that people in a position of power should not abuse their power to discriminate against others on the basis of religion, as in the following quotations, taken from the concordances for *discriminate*:

> Oba must practise all religions and should not discriminate against any religion.

> Imam should not discriminate against other religions for peaceful co-existence.

> Pastor should not discriminate any religion because Christianity is a religion of peace and love.

> They [babalawo or oniṣẹgun] should co-operate with them [people of other religions] and never discriminate.

These answers reflect the fact that seniority, especially amongst older men who are most likely to hold religious leadership positions in Yoruba society (see Fadipẹ, 1970: 129), potentially allows individuals to privilege their own religion. From respondents' point of view, each religion can, theoretically, be dominant in a given social situation, simply by virtue of being associated with a person of high status. But simultaneously, the quotations above underline that respondents idealise the ability not to discriminate between religions as a key attribute of people with high status.

  In summary, our respondents frequently stress the importance of co-operation and tolerance in managing religious difference. They refer to the ways in which co-operation and tolerance must be negotiated or maintained within the family, and by seniors in society (e.g., religious leaders). But co-operation and tolerance are not necessarily imagined as being between equals – rather, they are sometimes framed by other social hierarchies or categories that are important in Yoruba society, particularly age/seniority and gender. Widely shared norms and hierarchies such as age and gender can be more important than religious differences when negotiating family and broader social relationships. But, simultaneously, the key lemmas indicate the respondents' view that those in positions of power should not abuse their positions to discriminate between religions. Our respondents' answers place the burden of 'submission' on women and young people, and the imperative not to discriminate on older men and especially those of high social status,

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[17] Traditional divination priests and healers.
[18] Traditional ruler of a Yoruba town, still an important political position in contemporary south-west Nigeria.

religions. Belief matters, I don't adopt what I	don't like	as solution. Since their medicine also
God so as to be worthy of his kingdom. I	don't like	asking for advice from such people. for
supported Sagamu day because it's fun. I	don't like	because some people use charm for one another
I don't like them. In the sense that God	doesn't like	being sharing praise with all this small
religion . I can't serve two God. because I	don't like	celebrating family customs. Giving them
involve rituals. I don't have interest. I	don't like	chieftaincy title. My belief do not support
of it. It is the right of my lineage. I	don't like	chieftaincy title. It requires a lot of
that I will not accept their religion. I	don't LIKE	CHIEFTAINCY TITLE. because I knows nothing
Christian. because I do not have faith in it. I	do not like	chieftaincy titles. because it is an honour
because I am next child of my parents. I	do not like	chieftaincy titles. It is my right. because
serve my people. I am a female child. I	do not like	chieftaincy titles. because, I am a born
of the traditions. Respect for elders. I	do not like	customs and traditions. I believe they
because we are living together as family. I	don't like	discrimination. because they too can gain
come in good faith. They are my people. I	didn't like	discrimination in anything I do. Tree ca
my problems. If I trust his divination. I	don't like	divination. I don't have faith in it. I
issues. Personal relationship with God. I	don't like	divination. Most of them are liar. I had
is my way of life. I believe in God . I	don't like	divination because it is un Godly. But
if he is Christian and a truthful one. I	don't like	diviner. Diviners glorifies demons. As
They should not discriminate. God him self	don't like	does who join order Gods with him. Positively
always invite me. don't believe in it. I	don't like	doing so. neighbours share gifts during
and pastor to do that for me. No. I just	do not like	doing such. I don't believe in asking for
because of their usual worship before God. I	don't like	everything in it. We don't belong to the
created by same God . Except Christians. I	don't like	excess celebration. The love I have for

Figure 10: Concordance list for *DO not like*.

suggesting that shared Yoruba-ness and the associated ideal of harmonious inter-religious relations rely on the affirmation of gendered and age-related inequality.

7. Religious disagreement and criticism as personal rather than general

This section uses a different kind of corpus output: trigrams (the most frequent strings of three words in a corpus). By focussing on the phraseological tendency of language (see Greaves and Warren, 2010), *n*-grams (extended units of meaning in comparison to the other corpus outputs we have explored so far) offer valuable insights into meaning-making in corpora. Many of the lemmatised trigrams in our corpus have an interpersonal function (see Carter and McCarthy, 2006: 834–7 for a list of all the functions of *n*-grams). They are concerned with the assertion of boundaries between people from different religious backgrounds, often expressing personal preferences (e.g., *DO not believe*, as in 'I do not believe in the rites of our family' and *it BE against*, as in, 'it is against my religion').

This section draws on concordances for one of these lemmatised trigrams, namely *DO not like*. *DO not like* is the nineteenth most frequent lemmatised trigram in the KEO corpus (368 occurrences), and it underscores how our respondents manage personal preferences, particularly their dislike of certain religious practices. Our list of trigrams therefore allows us to explore the interplay between personal preferences and wider social norms.

So far we have discussed respondents' emphasis on units greater than the individual (e.g., the family, human beings and Yoruba-ness) which we interpreted as being able to overcome individual differences

in inter-religious encounters. However, the trigram *DO not like* reveals respondents' expressions of personal dislike of certain religious practices. The concordances of the lemmatised trigram *DO not like* indicate that this phrase is used almost exclusively in combination with the first-person singular pronoun *I* (338 out of 368 occurrences of *DO not like*), hence indicating what the respondent does not like, with very few mentions of things *they* (7 occurrences), *some* (1), *she* (6), *he* (2), *she/he* (2) *husband* (6), *God* (2), *some* (1) or *people* (3) do not like.

Based on the concordances of *DO not like*, we have devised a frequency list of things or people respondents say they do not like (see Figure 11).

Some answers, such as 'to be famous' and 'to be noticed' refer to respondents' reluctance to take chieftaincy titles; while these do not explicitly relate to religion, they nonetheless refer to local hierarchies that are closely associated with traditional practices and authority. The majority of answers, however, relates more closely to religion. These answers reveal that respondents often describe not liking 'anything' about other religions, especially traditional religion, or they express dislike for aspects of religious life that we asked about, such as divination, family customs or traditional medicine.

Respondents also describe actions they do not like, referring to ways they manage encounters with religious difference while drawing boundaries around personal behaviour. This includes 'visiting Muslims during this period', 'taking medicine', 'sharing in celebrations' or 'celebrating family customs'. The concordances also show that thirteen respondents used *their* after *DO not like*, to refer to their *behaviour*, *customs*, *doctrine*, *religion*, *ways* or *ways of worship* – thus distancing themselves from the actions, preferences or beliefs of others. These concordance lines suggest that the dislike of certain religious practices is framed in personal terms rather than as a general truth (i.e., the emphasis is on one's own behaviour rather than that of others). Thus while the phrase *DO not like* asserts boundaries and active disavowals of certain practices, it is often a recognition of personal taste, not an expression of wider or more general social norms such as those expressed in Section 5 about 'normal' human beings and shared Yoruba values.

The phrase *I DO not like them* also featured in eighteen cases, where respondents replied to questions about how they interacted with people or events associated with other religions, and used this phrase to justify their lack of interaction. As described in Section 5, behaviour in relation to others is managed through reference to shared norms, such as behaving 'normally', co-operating and tolerating one another. The context in which *I DO not like them* was used suggests that respondents do not wish to proscribe particular aspects of others' behaviour; rather, they describe avoiding situations in which social norms might force them to accommodate certain religious practices.

Thus, while respondents have a clear sense of behavioural norms, they seem to leave room for personal preference within these norms as long as they do not impinge on others' choices. However, this is not to say that

Object of *DO not like*	Freq.	Object of *DO not like*	Freq.
it	151	*their doctrine*	2
chieftaincy titles	23	*this*	2
them	18	*to give them money*	2
yoruba customs and traditions	12	*to hold such a post*	2
anything about them	13	*traditional things*	2
such/such things	11	*all*	1
the way they worship/do their service	9	*any more*	1
islam/muslims	8	*any of it*	1
the religion	6	*any publications*	1
their religion	5	*anything contrary to God*	1
anything	4	*anything in*	1
divination or diviners	4	*anything in their life*	1
traditional medicine	4	*anything in their traditions*	1
any	3	*anything that goes with rituals*	1
anything about it	2	*asking for advice*	1
discrimination	2	*celebrating family customs*	1
doing so/such	2	*everything in it*	1
getting involved in fetish/traditional	2	*excess celebration*	1
going to hospital	2	*family customs*	1
his	2	*going to Nasfat every Sunday*	1
that	2	*her husband religion*	1
their behaviours	2	*her religion*	1

Figure 11: (*continued on following page*): Frequency list of objects of *DO not like* (grouped into categories; for example, 'chieftaincy titles' and 'chieftaincy title' grouped together as 'chieftaincy titles').

Object of *DO not like*	Freq.	Object of *DO not like*	Freq.
inter-religion marriage	1	to associate with traditionalist	1
king	1	to be famous	1
moving around	1	to be noticed	1
none of their customs	1	to consult them	1
pay instruction	1	to do their husband religion	1
sharing in celebrations	1	to follow their wife	1
taking medicine	1	to get involved in them	1
the catholic doctrines	1	to marry another religion	1
the festival	1	to support them	1
the idea of going to a mosque	1	to	1
the rituals they perform during the festivals	1	traditional engagement ceremony	1
the service	1	traditionalist christian friend	1
the song	1	traditional friend muslim	1
the type of cloth they are using	1	traditionalist religions	1
the way muslims do their burial	1	using it	1
their way	1	visiting muslims during this period	1
these festivals	1	walking by my foot	1
things like that	1		

Figure 11: (*continued from previous page*): Frequency list of objects of *DO not like* (grouped into categories; for example, 'chieftaincy titles' and 'chieftaincy title' grouped together as 'chieftaincy titles').

the KEO corpus does not provide evidence of disagreement about religious differences: some respondents described occasions on which they felt their religious or personal freedoms had been curbed by others' religious practices. For example, in response to a question about whether they had experienced religious disagreements in their town, two respondents said the following:

> Churches and mosques disturbing with their loud speakers at night cos of night prayers.

> During the last Agemo festival where the traditionalists tried to force an alfa to remove his cap in respect of their religion.

In these examples, critique of religious others is expressed as a perception that those others impose their religion, rather than as the respondents' own desire to limit others' freedoms. This supports the view that in the Yoruba context, it is socially unacceptable to impose one's own religious preferences on others, and echoes the way the trigram DO *not like* does not generally indicate respondents' disapproval of others' behaviour but, rather, acknowledges personal preference.

 In summary, by examining collocations and concordances for the multi-word expression DO *not like*, this section argues that respondents assert their own freedom to like – and especially dislike – particular religious practices. This applies to traditional practices which are recurrently referred to in the collocations of DO *not like* (e.g., 'I do not like divination' and 'I don't like getting involved in fetish/traditional practices'). However, respondents generally do not impinge on the freedom of others to assert their own likes and dislikes or on social norms they perceive as distinctively Yoruba or as 'human' (see Sections 5 and 8). When respondents withdraw from activities they do not like, they assert the boundaries between religions, rather than question the validity of other religions.

8. Conclusion

The investigation into the KEO corpus confirms existing anthropological arguments that within the Yoruba context, shared Yoruba-ness and other forms of communal identity, including shared humanity, are considered to be more important than religious difference. However, the article's analysis of the discourse captured by the survey reveals that the subordination of religious difference to both shared Yoruba-ness and humanity relies on the importance of social hierarchies that are associated with gender and age, expressed through the idiom of 'respect' and 'submission', in particular. In most Yoruba contexts, women and young people are expected to subordinate their religious preferences to those of their social seniors. Our respondents also appear to assert their own religious boundaries by insisting on their personal dislike for certain practices, but they do so by formulating them as

personal opinions rather than as normative statements. Thus, this expression of dislike does not seem to challenge existing hierarchies but, rather, reflects personal withdrawal from them.

By describing the complex dynamics of inter-religious relations in Yorubaland, this article makes an important contribution to ongoing anthropological debates about both ethnicity and inter-religious relations in south-west Nigeria. Our findings suggest that a closer examination of gender and inter-generational relations are crucial for an understanding of the overall peaceful nature of relationships between Yoruba Muslims, Christians and traditionalists therefore constitute a promising avenue for future research. Moreover, the contrast between the widely shared norms of 'respect' and 'submission' at the level of social encounters and the assertion of personal religious preference through withdrawal point to the need to explore inter-religious relations through a focus on social identity and individuation.

Our methodology has also allowed us to reconcile micro-linguistic analyses of respondents' personal experiences with explorations of larger social phenomena and broader ideas about religious difference in Yoruba society. Whilst we had not planned to use corpus methods at the time we compiled the survey (i.e., our corpus was not devised with corpus linguistics in mind), we consider that the type of corpus linguistic work presented in this article has much to offer beyond the disciplinary boundaries of corpus linguistics. Corpus linguistic methods were not only able to confirm the validity of existing anthropological arguments concerning inter-religious relations in Yorubaland, but they also offered a more complex understanding of the way in which respondents spoke about inter-religious encounters than traditional ethnographic methods alone would have permitted. By casting light on the importance of social hierarchies and the phrasing of disagreement as an individual preference, corpus linguistic techniques became more than an entry point into our data: they helped illustrate new relationships and allowed new questions to be answered.

We posit that without our anthropological knowledge of Yorubaland and our resulting understanding of the subtleties of Nigerian English and Yoruba, the findings of our corpus analyses might have been easily misinterpreted. Our understanding of local terms and religious and traditional practices was useful in our discussion of the key lemmas and in appreciating, for example, that the term 'respect' in the Yoruba context normally refers to interactions between individuals of unequal status. Our investigation into the use of the salient multi-word expression *DO not like* was also informed by our awareness of its meaning in the Nigerian context; we were then able to use corpus tools to investigate the use of this expression in more detail. We suggest, therefore, that the analysis of corpora of international Englishes, including Nigerian English, should be informed by detailed knowledge and understanding of the social context in which these varities of English are used.

Our work highlights the potential of cross- and inter-disciplinary research between anthropology and corpus linguistics. We know from

personal experience that this potential can only be realised through ongoing dialogue. Our own epistemological debates suggest that the crossing of discipline-specific boundaries cannot be achieved without the preparedness of all collaborators to engage sincerely with disciplines and methodologies beyond their own. Our work seems to mark the emergence of a cognate discipline of anthropology, corpus-assisted anthropological research, which relates corpus linguistic description with anthropological appreciation (see Mahlberg, 2013: 5, for comparable claims about corpus stylistics as 'relating the critic's concern of aesthetic appreciation with the corpus linguist's concern of linguistic description'). Future research could aim, for example, to compile anthropological data as corpora from the outset or choose existing anthropological data for their potential to be used as corpora.

Acknowledgments

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Appendix A: Core corpus linguistic concepts used in this article.

Collocation list for a specific word/phrase	List of words/phrases within a given span of another node word/phrase (i.e., it captures the reality that certain words appear together more often than would be expected by chance). These can be listed in order of raw frequency or specific statistical measures can be used (e.g., t-score and MI score).
Concordance lines for a specific word/phrase	List of all occurrences of a given word/phrase in a corpus. A concordance line (unless expanded) consists of a single line of text with the given word/phrase in the centre and a few words before and after. Concordance lines can be ordered alphabetically so that frequently occurring phrases can easily be identified (e.g., based on the word immediately preceding or succeeding the word/phrase under scrutiny).
Corpus	Large collection of electronically available texts that can be searched by means of software.
Frequency list	List of words appearing in a text/group of texts organised in order of frequency
Keyness	Quality a word or phrase has of being 'key' (unusually salient) in its context. This involves comparing one's corpus with another corpus (usually called 'reference corpus').
Keyword	Word that is statistically more frequent in one set of texts in comparison to another. Keyness analysis consists in exploring keyword lists.
Multiword expression	Contiguous sequence of words (sometimes termed *n*-gram, word cluster, lexical bundle, lexical phrase, chunk and multiword unit). The number of words may be specified (e.g., in the case of *n*-grams focus may be on bigram, trigram, *etc.*). Multiword expressions occur frequently and indicate a pattern of use.

Appendix B (*continued on following page*): Top sixty key lemmas of the KEO corpus.

	Lemma	Freq. in the KEO corpus	Freq/mill	Freq. in reference corpus	Freq_ref /mill	Score	Comment
1	RELIGION	9,907	18,938.9	100	114.4	152.3	
2	TOLERANT	392	749.4	3	3.4	56.5	
3	FESTIVAL	493	942.5	6	6.9	56.5	
4	CHRISTIANITY	796	1,521.7	17	19.5	52	
5	TOLERANCE	459	877.5	7	8	49.3	
6	BEHAVE	1,071	2,047.4	28	32	48.9	
7	HUSBAND	2,067	3,951.4	62	70.9	48.9	
8	RITE	483	923.3	8	9.2	48.7	Usually refers to traditional practices
9	TRADITIONALIST	238	455	0	0	46.5	Someone who practises Yoruba 'traditional' religion (e.g., divination, òrìṣà worship and ancestral cults).
10	MUSLIM	1,997	3,817.6	65	74.4	45.4	
11	HERB	274	523.8	2	2.3	43.4	Often (but not always) refers to traditional medicines and cures
12	CUSTOM	635	1,213.9	16	18.3	43.2	
13	CONVERT	531	1,015.1	13	14.9	41.2	
14	PREACH	579	1,106.9	15	17.2	41.1	
15	TOLERATE	505	965.4	13	14.9	39.2	
16	IDOL	206	393.8	1	1.1	36.2	Often used dismissively to refer to Yoruba traditional practices
17	DISAGREEMENT	226	432	2	2.3	36	
18	ALFA	177	338.4	0	0	34.8	A learned Muslim teacher
19	CHRISTIAN	2,723	5,205.5	123	140.8	34.6	
20	WORSHIP	1,062	2,030.2	44	50.4	33.8	
21	FAITH	748	1,429.9	33	37.8	30.1	

Appendix B (*continued from previous page*): Top sixtykey lemmas of the KEO corpus.

	Lemma	Freq. in the KEO corpus	Freq/mill	Freq. in reference corpus	Freq_ref /mill	Score	Comment
22	DRESSING	284	542.9	8	9.2	28.9	Colloquial way of referring to the way people dress (not medical dressings)
23	DOCTRINE	247	472.2	6	6.9	28.6	
24	CO-OPERATE	137	261.9	0	0	27.2	
25	CHIEFTAINCY	136	260	0	0	27	Refers to a town chieftaincy title, under the oba (ruler of the town)
26	NO.	192	367	4	4.6	25.9	
27	BELIEF	919	1,756.8	51	58.4	25.8	
28	ISLAM	682	1,303.8	36	41.2	25.7	
29	PRACTISE	1,029	1,967.1	62	70.9	24.4	
30	DENOMINATION	213	407.2	7	8	23.2	
31	RELATE	1,320	2,523.4	87	99.6	23.1	
32	GODLY	154	294.4	3	3.4	22.7	
33	TRADITION	547	1,045.7	32	36.6	22.6	
34	TRADITIONAL	1,220	2,332.2	83	95	22.3	
35	ADVISE	880	1,682.3	58	66.4	22.2	
36	DISCRIMINATE	122	233.2	1	1.1	21.8	
37	NONE	694	1,326.7	45	51.5	21.7	
38	CAESAR	121	231.3	1	1.1	21.7	Used as part of the Biblical injunction 'Render therefore unto Caesar the things that are Caesar's'
39	MARRIAGE	1,192	2,278.7	87	99.6	20.9	
40	ORO	113	216	1	1.1	20.3	A 'traditional' ancestral cult
41	FRIENDLY	268	512.3	14	16	20.1	

Appendix B (*continued from previous page*): Top sixty key lemmas of the KEO corpus.

	Lemma	Freq. in the KEO corpus	Freq/mill	Freq. in reference corpus	Freq_ref /mill	Score	Comment
42	FETISH	97	185.4	0	0	19.5	Often used dismissively to refer to Yoruba traditional practices
43	LOVE	1,911	3,653.2	157	179.7	19.3	
44	BIBLICAL	104	198.8	1	1.1	18.7	
45	MUTUAL	148	282.9	5	5.7	18.6	
46	OBA	369	705.4	25	28.6	18.5	The ruler of a town
47	RELIGIOUS	966	1,846.7	79	90.4	18.5	
48	CHRIST	724	1384	58	66.4	18.3	
49	ENGAGEMENT	187	357.5	9	10.3	18.1	
50	DIVINE	154	294.4	6	6.9	18	
51	BABALAWO	132	252.3	4	4.6	18	A traditional diviner
52	SUBMISSIVE	88	168.2	0	0	17.8	
53	PREACHING	97	185.4	1	1.1	17.5	
54	ACCEPT	866	1,655.5	76	87	17.2	
55	MODE	305	583.1	22	25.2	16.9	
56	UNDERSTANDING	413	789.5	33	37.8	16.7	
57	REJOICE	149	284.8	7	8	16.4	
58	IMAM	204	390	13	14.9	16.1	
59	FAMILY	1,990	3,804.2	199	227.7	16	
60	RITUAL	203	388.1	13	14.9	16	