Distinguishing the Language of Destructive Cults from the Language of Mainstream Religion: Corpus Analyses of Sermons

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Article information	Abstract
	The language of religious leaders expressed in their sermons characterizes the social characteristics of their groups. Over the past decades, most studies into cults specifically destructive cults and mainstream religion have mainly focused on their social-psychological characteristics with limited applicability to other religious groups. In this study, corpus-based methods were applied to the sermons of the leaders of two destructive cults (namely, Peoples Temple led by Jim Jones and Heaven's Gate led by Marshall Applewhite) and the sermons of mainstream religious groups represented by Baptist preachers to distinguish the language between dangerous and beneficial religious groups based on the patterns of key linguistic features. The methodological process includes keyness analyses (namely, keyword analysis, key semantic tag analysis, and key part-of-speech analysis) and multidimensional analysis. The results from a keyness perspective show that the destructive cult sermons promote non-religious concepts with the use of othering, intensification, and strong elaboration. For the mainstream sermons, they uphold religious concepts for life development with the use of personal involvement and moderate elaboration. The results from a text dimension perspective show that the language of destructive cults and the language of mainstream religion displayed in their sermons are both persuasive and elaborative. However, the language of destructive cults is more persuasive and elaborative than the language of mainstream religion. The findings may serve as a basis for how to recognize the potential detrimental and beneficial characteristics of religious groups based on their language.

INTRODUCTION

Language plays a vital role in society since it shapes the beliefs, ideology, philosophy, perspectives, practices, and social goals of the people. In religion, the language of the religious leaders is very powerful since it shapes the mentality, emotions, and deeds of their followers. The religious groups (e.g. in Christianity, Baptists and Methodists) which aim to be productive generally belong in the circle of mainstream religion (Benitez, 2015; Cronshaw, 2019; Martin, 2018; Tangenberg, 2008; Taylor et al., 2000). The religious groups which possess harmful characteristics are destructive cults (e.g. Branch Davidians led by David Koresh and Aum Shinrikyo led by

Shoko Asahara) whose leaders lead their followers to death or damaging situations (Bohm & Alison, 2001). Generally, the leaders of destructive cults start from mainstream religion and move to form their own groups called sects aiming to revitalize some beliefs and practices of mainstream religion; however, they remain connected to mainstream religion philosophically. Later, they transform into cults by acquiring new belief systems and identifying the main leaders as godlike figures which differ markedly from the belief systems of mainstream religious groups and sects (Beaman, 1990). In the long run, these cults develop into destructive cults as they engage in damaging acts (Palayon et al., 2020).

Being able to identify whether a religious group is likely to become destructive is a useful social goal as it could allow prevention of the damaging actions of destructive cults. This paper therefore intends to distinguish the language of destructive cults from the language of mainstream religion based on the keyness from the aboutness and communication style perspectives and text dimensions from a multidimensional analysis perspective, as the aspects of language displayed in the sermons of the leaders of two destructive cults and the sermons of the leaders of two mainstream religious groups. The two sets of sermons acting as the target corpora and the benchmark corpora were compared with each other using different corpus-based methods to see the differences of the patterns of key linguistic features.

To achieve the major goal, this paper aims to (1) characterize the keyness of the sermons of destructive cults and mainstream religious groups by examining the aboutness and communication styles based on the patterns of key linguistic features (at the lexical, semantic, and syntactic levels) using keyness methods and (2) identify the text dimensions (e.g. persuasive, elaborative) of the sermons of destructive cults and the sermons of mainstream religious groups by examining the patterns of dimension scores and co-occurrence patterns of syntactic features using multidimensional analysis of Biber (1988; 1989). This study may provide insights into linguistic features associated with constructive and destructive religious groups, allowing us to potentially identify the nature of a religious group based on the language found in the sermons of the leader.

Corpus analyses into characterizing the language in the sermons

In this study, we intended to take a corpus approach to find linguistic evidence that is helpful to characterize the language in the sermons (focusing on Christianity), a research goal that is underexplored in the field of religious studies. This approach also guides us to be more objective in drawing the results and it allows us to lessen our intuition or subjective decision toward interpreting the data. Using an approach that relies heavily on empirical quantitative linguistic data may serve as a basis of interpretation of the social practices of different religious groups.

Since language is a very wide-ranging aspect of communication, we focused on keyness, a quality that is text-dependent (Scott, 2010), and this can be identified through keywords, key semantic tags, and key part-of-speech tags (Bondi & Scott, 2010) which describe the aboutness (through keywords and key semantic tags) or the total contents of texts (see Cheng, 2009; Hutchins, 1978, for further details on the concept of aboutness) and communication styles (through keywords and key part-of-speech tags) or ways of communication to convey the

content information (see De Vries et al., 2010, for further details on the concept of communication styles) as the discourse aspects in the texts. Moreover, we also focused on the text dimensions based on the framework of Biber (1988;1989) arguing that texts contain co-occurrence patterns among linguistic features (specifically grammatical features) which characterize a specific text dimension (e.g. elaboration in discourse). The aboutness, communication styles, and text dimensions are the discourse aspects that enable us to characterize the language in the sermons through the patterns of important linguistic features in order for us to differentiate the linguistic characteristics in the sermons of destructive cults from the sermons of mainstream religious groups.

To view these discourse aspects, we compared the sermons of destructive cults to the sermons of mainstream religious groups, and we applied keyness methods allowing us to identify the key linguistic features in the sermons (namely, keyword analysis for important words, key semantic tag analysis for important semantic groups of words, and key part-of-speech analysis for important grammatical groups of words) and multidimensional analysis of Biber (1988; 1989) allowing us to determine the dominant text dimensions of sermons. This study may be significant since the methodological principles provide us with a systematic procedure to examine the linguistic characteristics in the discourses of religious groups describing their social characteristics. Also, the findings specifically on the language of destructive cults may provide a warning system before the religious groups with suspicious characteristics can perform damaging activities. Finally, the overall results of this study verify the findings of Palayon et al. (2020) on the common linguistic characteristics in the sermons of destructive cults and shed light further on the language of destructive cults from a multidimensional analysis perspective.

The examinations in the two sets of sermons which aim to identify the patterns of important linguistic features characterizing aboutness, communication styles, and text dimensions, as a way to distinguish the language of destructive cults from the language of mainstream religion, were guided through the following research questions.

(1) What are the keywords and key semantic tags describing the aboutness of the sermons of destructive cults and the sermons of mainstream religious groups?
(2) What are the keywords and key part-of-speech tags describing the communication styles of the sermons of destructive cults and the sermons of mainstream religious groups?
(3) What are the dominant text dimensions in the two sets of sermons based on the patterns of dimension scores and co-occurrence patterns of syntactic features?
(4) Based on the aboutness, communication styles, and text dimensions identified through important linguistic features, how does the language of destructive cults differ from the language of mainstream religion?

METHODOLOGY

To distinguish the language of destructive cults from the language of mainstream religious groups using corpus analyses, we need to: (1) choose the sermons to be the corpora which

represent the language of destructive cults and the language of mainstream religion and identify the linguistic units in the sermons to be analyzed, (2) employ corpus-based methods to reveal the patterns of key linguistic features, (3) apply a keyness statistic that identifies linguistic features to be key, (4) determine the thresholds for keyness analyses at which items will be considered key, and (5) conduct a multidimensional analysis to identify the dominant text dimensions.

Corpora

To identify the corpora to be used in this study, we applied the 'Extremist Media Index' of Holbrook (2015). Based on the set criteria, destructive cults belong in the extreme level since they promote damaging activities which lead their members to deadly situations, whereas mainstream religious groups belong in the moderate level since they do not endorse any thoughts of violence or hatred and dangerous activities to their members and communities. Therefore, we used the sermons of Jim Jones and the sermons of Marshall Applewhite both in the period leading to mass suicide to represent the language of destructive cults, and the sermons of Billy Graham and the sermons of Rick Warren both from Baptist Churches to represent the language of mainstream religion.

Both sets of sermons are accessible online (see *http://jonestown.sdsu.edu* for Jim Jones' sermons and *https://www.youtube.com/* for Marshall Applewhite's sermons, Billy Graham's sermons, and Rick Warren's sermons). They were transcribed and cleaned, and all items in the texts (e.g. non-linguistic elements) which are not useful for data interpretation were removed before converting the sermons into text files as main steps for data comparison. The sermons of Jim Jones and the sermons of Marshall Applewhite were combined into a single corpus and termed destructive cult sermons or the sermons of destructive cults, and the sermons of Billy Graham and the sermons of Rick Warren were also combined into a single corpus and termed mainstream sermons or the sermons of mainstream religious groups. There were ten sermons with 97,246 words from Jim Jones, eleven sermons with 93,135 words from Marshall Applewhite, nineteen sermons with 91,074 words from Billy Graham, and nine sermons with 98,470 words from Rick Warren we chose to find the key linguistic features. As presented in Table 1, the linguistic feature tokens were identified to view that the two data sets are comparable using a factor of 10, a mathematical process in determining the comparability of the sizes of the data suggested by Rayson et al. (2004) cited in O'Halloran (2011) and Pojanapunya (2017). Since the aspects of language in the sermons to be examined are keyness (focusing on aboutness and communication styles) and text dimensions, the linguistic features to be analyzed are lexical items and semantic tags to identify the aboutness features, lexical items and grammatical tags to identify the communication styles, and syntactic features from a multidimensional analysis perspective to determine the text dimensions.

Table 1

Sizes of the data from different units of linguistic features

Corpus analyses	Relevant key linguistic features	Destructive cult sermons		Mainstream sermons	
		Tokens	Factor of 10	Tokens	Factor of 10
Keyword analysis	keywords for aboutness and communication styles	190,381	1.9×10^5	189,544	1.8×10^5
Key semantic tag analysis	key semantic tags for aboutness	183,674	1.8×10^5	194,286	1.9×10^5
Key part-of-speech analysis	key grammatical tags for communication styles	179,533	1.7×10^5	186,837	1.8×10^5
Multidimensional analysis	significant grammatical features for text dimensions	178,711	1.7×10^5	186,130	1.8×10^5

Keyness analyses

In corpus linguistics, keyness refers to marked differences in the relative frequencies of items in the two corpora. Items in which the frequencies are markedly higher in a target corpus than in a comparative corpus are viewed as shedding light on the nature of the target corpus. The broad characteristic of a corpus that can be highlighted through keyness analyses includes the aboutness and communication style. To identify the aboutness and communication style features in the sermons, we employed three types of keyness analysis, namely, keyword analysis that reveals the aboutness and communication styles based on the frequent lexical items using AntConc 3.4.4 (Anthony, 2014), key semantic tag analysis that generally highlights the aboutness based on the frequent semantic groups of words using the UCREL semantic tagger (Archer et al., 2004) and AntConc 3.4.4, and key part-of-speech analysis that displays the communication styles based on the frequent grammatical groups of words using the Multidimensional Analysis Tagger (MAT) 1.3 (Nini, 2015) and AntConc 3.4.4. The key semantic tag and key part-of-speech tag findings confirm the keyword findings and highlight other elements which give more details on aboutness and communication styles (see Palayon et al., 2020, for further information on these methods).

Keyness statistic

To specify the keyness of a target corpus, there are several statistical metrics that can be used such as chi-square and log-likelihood as significance test statistics and Damerau's relative frequency ratio and odds ratio as effect size statistics. However, the use of each statistic depends upon the research purpose (Gabrielatos, 2018; Pojanapunya & Watson Todd, 2018). In this study, the lists of key linguistic features with their relative frequencies showing keyness for each corpus were generated, and we employed log-likelihood (LL) as a keyness statistic to show the frequencies of these features. LL is a probability statistic normally used in a study that aims to characterize the register in a corpus (see Biber, 1995, for the meaning of register; see Palayon et al., 2020; Pojanapunya & Watson Todd, 2018; Rayson & Garside, 2000, for the use of LL), and we found this statistic appropriate in this paper based on its research goal and purpose which is showing a characterization of the language in the sermons to differentiate the characteristics between the constructive religious groups and destructive religious groups. We are aware of the recent theoretical criticisms on the use of LL such as the sensitivity of the probability values based on the item frequency and corpus sizes (see Gabrielatos, 2018, for

further details); however, the principles of this statistic and its comprehensive applicability based on the previous studies (e.g. Palayon et al., 2020; Pojanapunya, 2017; Pojanapunya & Watson Todd, 2018) allow us to use LL to examine the keyness of sermons.

Thresholds

After showing the relative frequencies of linguistic features in each of the corpora, we need to set thresholds or cutoff points to identify the items in the lists to be considered key. Since the LL values of linguistic features in the lists are influenced by the sizes of the corpora analyzed, the actual LL values or the associated probability values are not appropriate as cutoff points (e.g. Esimaje, 2012). One potential method called Top N may be applicable to set the thresholds; however, it is unclear to identify the N value and it may involve subjective decisions in order to identify the N value (e.g. Palayon et al., 2020). To address this issue, we applied a z-score cutoff point for the main reasons that it provides straightforward boundaries in the lists to identify the key items (e.g. Pojanapunya & Watson Todd, 2021), and it does not involve subjective decisions which help us to distinguish appropriately the linguistic characteristics of destructive cults from the linguistic characteristics of mainstream religion.

Given that the sizes of the total numbers of items (or linguistic feature types: word type in the keyword lists, semantic tag type in the key semantic tag lists, and part-of-speech tag type in the key part-of-speech tag lists) are noticeably different as presented in Table 2, we employed different z-scores (3 for keywords, 2 for key semantic tags, and 1 for key part-of-speech tags) to identify the final key items in the lists. This means that the features in the lists with z-scores greater than the assigned z-scores were identified as key.

Table 2
Total numbers of key linguistic features for analyses

Key linguistic feature lists	Linguistic features	Z-Scores	Destructive cult sermons vs. Mainstream sermons		Mainstream sermons vs. Destructive cult sermons	
			Types	Thresholds	Types	Thresholds
Keyword lists	word	3	8,882	18	7,654	25
Key semantic tag lists	semantic tag	2	344	2	352	3
Key part-of-speech tag lists	part-of-speech tag	1	64	2	64	2

Multidimensional analysis

The text dimension of sermons (e.g. persuasive, narrative) is another aspect of language to be examined in this study. For this we used the multidimensional analysis of Biber (1988; 1989). In this approach, a range of syntactic features in each of the corpora are identified and counted. Certain of these features are associated with certain communication styles. These styles are, in turn, associated with six text dimensions:

    (D1) involved and informational discourse,
    (D2) narrative and non-narrative concerns,
    (D3) context- independent and dependent discourse,

(D4) overt expression of persuasion,
(D5) abstract and non-abstract information, and
(D6) on-line informational elaboration.

In this analysis, we applied a comparative perspective which allows us to compare the patterns of dimension scores and the co-occurrence patterns of syntactic features in the corpora to determine the dominant text dimensions and see the degree of difference of text dimensions (see Berber Sardinha & Pinto, 2014, for further details on the perspectives of multidimensional analysis). To perform a multidimensional analysis, we used the Multidimensional Analysis Tagger (MAT) version 1.3 (Nini, 2015) that automatically calculates the frequency scores and z-scores of syntactic features and assigns scores on each of the six dimensions. After the tagger revealed the dimension scores of the two corpora, we compared the patterns of dimension scores to identify the dominant text dimensions and viewed the sets of syntactic features with positive z-scores (greater than 1.0) to interpret the dominant text dimensions.

RESULTS

This section presents the key linguistic features in the sermons at the lexical, semantic, and syntactic levels which characterize the keyness and text dimensions of sermons. These discourse aspects serve as the potential indicators to distinguish the language of destructive cults from the language of mainstream religion.

Keyness

As shown in Tables 3, 4, and 5, the key linguistic features show that the aboutness of the sermons of destructive cults is no longer religious, whereas the aboutness of the sermons of mainstream religious groups includes religious concepts associated with the biblical concepts. These results imply that the discourse of destructive cults is purely personalized or based on the leaders' beliefs, whereas the discourse of mainstream religious groups is conventional or based on what is universally believed. For destructive cults, Jim Jones' sermons heavily focus on sociopolitical concepts (e.g. soviet, Marxism, communism) and Marshall Applewhite's sermons heavily focus on science-fiction stories (e.g. level, overcoming, vehicle) which characterize their personalized belief systems or cult-specific ideologies. For mainstream religion, Billy Graham's sermons and Rick Warren's sermons frequently uphold the biblical teachings for life development (which are related to the love and commandments of God, the sacrifice of Jesus Christ for the salvation of humankind, the purpose of repentance to save life from sins) which characterize their religious philosophy from a biblical perspective.

To clarify, the keywords *kingdom* and *father* in the sermons of destructive cults may be associated with Christian discourse in which *kingdom* refers to the divine place (heavenly kingdom) and *father* refers to God (heavenly Father). However, the way these words used in the sermons of destructive cults is not in religious context. The word *kingdom* is frequent in the sermons of Marshall Applewhite which generally refers to the heavenly kingdom or outer space from a science-fiction perspective. The word *father* is frequent in both sermons of destructive cults

which generally refers to God or alien from a science-fiction perspective in Marshall Applewhite's sermons and to an earthly father in Jim Jones' sermons.

Table 3

Keywords in the destructive cult sermons describing aboutness

				Destructive cult sermons vs. Mainstream sermons	
Rank	Keywords	Freq	LL	Excerpts from Jim Jones' sermons	Excerpts from Marshall Applewhite's sermons
1	kingdom	784	685.7	---	'The fact is, that there is only one kingdom level – a kingdom level, just like there's a human kingdom…'
4	human	396	316.0	'He's a goddamned stinking hypocrite to, talk about human rights.'	'I call them aliens …They are confined to environments where there are mammalian human, equivalent or human civilizations existing.'
6	shit	140	193.5	'I mean some heavy shit. Senator Stennis is gonna keep this country strong against communism…'	---
7	vehicle	138	190.7	---	'Now, I'm in a vehicle that is already falling apart on me…'
8	level	192	178.6	'I don't know how Jagan could have ever come to allowing his Marxism to tolerate to stoop to that level.'	'I can take you out of here. I can lead you into that kingdom level above human'
9	information	127	157.6	'…they went over there to that goddamn place, and that was a son of a bitch, getting the information out of them.'	'If you've read any of our teachings - the information that we have…'
10	overcoming	119	146.8	---	'…you know that our discipline is strict, that we teach *overcoming human ways*…'
11	ti	102	141.0	---	'And here I am, I'm Do, Do of Ti and Do, of the little religious *UFO cult*…'
13	soviet	120	130.8	'…and the nuclear war, the Soviet Union was able to get such a bomb…'	---
16	father	501	119.3	'I wouldn't cooperate, because for one thing, I'm a loving and indulgent father, but the primary reason was…'	'That doesn't mean that our Heavenly Father's Kingdom…is anything less because it has physical characteristics…'

Table 4

Keywords in the mainstream sermons describing aboutness

				Mainstream sermons vs. Destructive cult sermons	
Rank	Keywords	Freq	LL	Excerpts from Billy Graham's sermons	Excerpts from Rick Warren's sermons
1	god	2407	2329.5	'…because your soul is searching for God and your soul made in the image of God…'	'If you seek first God's kingdom and His righteousness, that's His plan, His purpose…'
4	christ	627	660.2	'Jesus Christ did not have a human father, he was born of the Virgin Mary.'	'…if you really know Christ you do not practice sin…'
5	life	791	466.0	'…He gave His only begotten Son that whosoever believeth in him should not perish but have everlasting life.'	'…you that believe on the name of the Son of God that you may know that you have eternal life…'
6	bible	409	459.8	'…and the Bible tells us that this God is the creator of all the universe.'	'The Bible says, in Ephesians 6:18, pray on every occasion, as the Spirit leads.'
7	says	699	429.3	'…the Bible says God shall bring every work into judgment..'	'…as he writes most of the New Testament and he says, I'm always praying…'
8	pray	335	420.7	'…and pray for you know not what your time is we don't know when God is going to come for us.'	'He says you can pray about everything, nothing is off limits.'

Rank	Keywords	Freq	LL	Excerpts from Billy Graham's sermons	Excerpts from Rick Warren's sermons
				Mainstream sermons vs. Destructive cult sermons	
9	lord	366	388.6	'…you say Lord I am a sinner…I'm willing to change my way of life'	'The Lord's Prayer is not simply a prayer to be prayed. It is a model for life.'
11	prayer	245	329.1	'I'm going to ask people everywhere to be in prayer…'	'And he says, pray with all kinds of prayer.'
12	jesus	643	291.9	'Jesus said come unto me all ye that labor and are heavy laden and I'll give you rest.'	'It makes me think about what Jesus sacrificed for me.'
14	heart	286	240.9	'Let me tell you Jesus Christ can come into your heart right now'	'Make what you're doing significant because you're pouring your heart into it and God will notice.'
16	verse	138	191.9	'I want you to turn with me tonight to the 6th Chapter of Matthew's Gospel in the 24th verse …'	'…Hebrews 13 verse 8: Jesus Christ is the same yesterday, today, and forever.'
17	day	428	186.6	'…for the scripture says… behold! Now is the day of salvation…'	'Philippians 1:6, I am confident of this that God who began a good work in you will continue to complete it until the day of Christ Jesus.'
18	sins	137	165.7	'I have sinned against God and I need help I want to know I'm going to heaven I want to know my sins…'	'Right now all of your sins that you've committed they're all in the past…'
19	daniel	118	164.1	'…because Daniel is a book of prophecy but the thing that I want to talk about Daniel today is an incident that happened in his life…'	'Daniel 9:3, he says, right here on the screen, "I turned to the Lord"…'
20	mercy	109	141.6	'We never do know the depths of the love of God and the mercy of God…'	'But if you humbly confess and reject them, you will receive mercy.'
21	praying	122	134.4	'I'll be praying for you this week, God bless you…'	'…you're gonna be praying for other people…'
22	cross	176	128.3	'…that's why Christ came and died on the cross and shed his blood'	'I pray looking back to the cross. I pray looking up into my loving Father's face.'
23	church	204	125.8	'Have you been sowing in bible reading and prayer and church going faithfully?'	'Church means you have to come together. You have to meet.'
24	sin	188	125.7	'God sees that you have a spiritual heart disease and that spiritual heart disease is called sin'	'…the Bible says the blood of Jesus Christ, His Son cleanseth us from all sin…'
25	scripture	104	121.4	'Scripture says the first commandment thou shalt have no other gods before me. I, the Lord thy God, am a jealous God'	'…you take a scripture verse and memorize it and that'll stay with you all your life.'

Table 5

Key semantic tags in the sermons describing aboutness

Rank	Key semantic tags	Freq	LL	Lexical items
	Destructive cult sermons vs. Mainstream sermons			
1	G1.2 Politics	636	474.1	marxism, communism, capitalists, nazis, political
2	G1.1 Government	944	365.2	government, diplomatic, country, kingdom, minister
	Mainstream sermons vs. Destructive cult sermons			
1	S9 Religion and the supernatural	6258	2445.5	baptized, christianity, god, holy, spirit
2	Q4.1 The Media: Books	906	551.9	bible, gospel, testament, scripture, chapter
3	L1+ Alive	834	364.9	life, live, alive, lives

As reported in Tables 6, 7, and 8, the sermons of destructive cults contain features which describe the communication styles on othering, elaboration, and intensification allowing these

groups to promote their cult-specific beliefs, whereas the mainstream sermons contain features which describe the communication styles on personal involvement and elaboration allowing these groups to exhibit their religious beliefs. Based on the excerpts, destructive cults identified their groups as separate groups from wider society representing their worlds with discrete social and cultural characteristics using othering style (through the frequent use of *they, we, their,* and *our*), whereas mainstream religious groups tend to encourage individuals to be part of the religious world and grow in spiritual understanding for life development using personal involvement style (through the frequent use of personal pronouns). In addition, destructive cults frequently used intensifying style (such as certainly) that tends to magnify the aboutness of sermons and elaborating style (such as *that, would*, pronouns) that tends to expound the communication goals of sermons which suggest that destructive cult sermons tend to be more elaborative than the mainstream sermons (through the frequent use of *and*, verb phrases as elements of elaboration). To verify these findings, the text dimensions of sermons were examined as they most likely show the communication styles as one aspect that describes the general text dimensions of sermons.

Table 6

Keywords in the destructive cult sermons describing communication styles

Destructive cult sermons vs. Mainstream sermons					
Rank	Keywords	Freq	LL	Jim Jones' sermons	Marshall Applewhite's sermons
2	that	5715	461.5	'…it'll be us that they consider animals that don't get to feed.'	'This planet is about to be recycled… the purpose of this tape is to warn you that this is about to happen…'
3	they	2120	342.8	'You may know how to control your anarchism, but others don't. They carry it to the very lethal end.'	'…humans have the idea that through religion that if I live a good life, then I get to go to Heaven when I die. And they don't know what Heaven is…'
5	we	2551	275.4	'We have to have some respect for socialistic principle.'	'We don't believe that our Father's Kingdom has much need for these flesh bodies.'
12	their	576	139.0	'Most of them nodded their head when I said we have atheists here.'	'…but they think that Heaven is where God is, and Heaven is where whoever the leader of their religion is…'
14	our	873	122.5	'But in spite of all of my trying a handful of our people, with their lies, have made our lives impossible.'	'…and they'll take these bodies from us, and issue us the ones that belong to that Level so that we might begin our service…'
15	she	343	121.9	'Ava is one of the most controlled people sexually. She has no sexual desires…'	'…she (Ti) maintained perfectly steadfast to the mission that she was involved in and in her partnership with me…'
17	would	547	109.3	'…believing that peace between the two countries would also mean world peace.'	'…humans would say well the vehicle died and so how can you say she left her vehicle well…'
18	certainly	154	108.1	'Political leaders who are too independent or liberal certainly not any socialists in the United States…'	'…it's repulsive to me because it's certainly very human because this vehicle certainly indulged in human behavior…'

Table 7

Keywords in the mainstream sermons describing communication styles

Rank	Keywords	Freq	LL	Billy Graham's sermons	Rick Warren's sermons
				Mainstream sermons vs. Destructive cult sermons	
2	you	7497	1105.7	'…thou shalt not commit adultery but I tell you that if you even look on a woman to lust after, you've already committed it.'	'God is in every dimension all the time. He's in you, He's above you, He's around you…'
3	your	2062	886.4	'It will be an hour of decision for many of you who receive him (Jesus) today, your life will never be the same…'	'How much God loves you and even though your sins were a mess, you're completely forgiven.'
10	he	2418	373.0	'Christ has paid the price on the cross, he's been raised from the dead…'	'…God can come to earth and be a human means He's multidimensional.'
13	and	6873	261.4	'…the cross is the central fact of Christianity and it's on the cross that Christ …died for us and provided for us a righteousness…'	'God's greatness is broader than the Earth, and it's wider than the sea.'
15	gonna	501	205.9	'It's not gonna be that way. The crop is going to come in…'	'The more you understand God the better your prayers are gonna be…'

Table 8

Key part-of-speech tags in the sermons describing communication styles

Rank	Key part-of-speech tags	Freq	LL	Communication styles
	Destructive cult sermons vs. Mainstream sermons			
1	DEMO Demonstratives (e.g. that, this, those)	3264	174.3	elaboration
2	PIT Pronoun *it*	3472	100.6	elaboration
	Mainstream sermons vs. Destructive cult sermons			
1	SPP2 Second person pronouns (e.g. you, your, thou)	9812	1710.8	personal involvement
2	VPRT Present tense (e.g. is, are, say)	17886	262.8	elaboration

Text dimensions

Table 9 presents the patterns of dimension scores in D4 which is overt expression of persuasion and in D6 which is on-line informational elaboration. This means that both sets of sermons are persuasive and elaborative. However, given the fact that the scores in D4 (3.49 > 1.48) and in D6 (2.52 > 0.59) are notably different wherein dimension scores of destructive cult sermons are greater than the scores of mainstream sermons, this implies that the sermons of destructive cults are more persuasive and elaborative than the sermons of mainstream religious groups. Table 10 displays the lists of grammatical features which allow us to distinguish the text dimensions of the two sets of sermons.

The sermons of destructive cults contain syntactic features which are also present in the sermons of mainstream religious groups (such as that relative clauses on subject position, that relative clauses on object position, causative adverbial subordinators, analytic negation, predicative adjectives, and Wh-clauses). However, these features are more frequent in the sermons of destructive cults than in the sermons of mainstream religious groups based on the z-scores which suggest that the sermons of destructive cults are more persuasive and elaborative. That relative clauses in subject and object positions, causative adverbial subordinators, predicative adjectives, and Wh-clauses (supported by other features such as demonstratives,

demonstrative pronouns, and pronoun *it* that cannot be found in the mainstream sermons) may indicate strong elaboration toward the content elements and communication goals of sermons.

Furthermore, the sermons of destructive cults include syntactic features that cannot be found in the mainstream sermons (such as conditional adverbial subordinators, infinitives, and possibility modals) which may hold distinct communication styles allowing us to explain why the sermons of destructive cults are more persuasive and elaborative than the sermons of mainstream religious groups. First, the conditional statements (through the frequent use of conditional adverbial subordinators or *if* clauses) suggest that conditioning style toward the understandings of the audience is frequent in the discourse that may serve as one way for the audience to see the goal of the discourse. Next, the infinitives (through the frequent use of infinitive phrases) imply that promoting courses of actions and expressing direction in communication are present in the discourse that may serve as one way for the audience to receive the goal of the discourse. Finally, the possibility modals suggest that expressing future conditions is emphasized in the discourse which probably allows the audience to view the goal of the discourse.

Table 9

Dimension scores describing text dimensions

DIMENSION (D) (Biber, 1988;1989)	Range of Dimension Scores	Dimension scores	
		Destructive cult sermons	Mainstream sermons
D1 Involved and informational discourse	-30.0 ←→ 60.0	16.31	16.11
D2 Narrative and non-narrative concerns	-10.0 ←→ 20.0	-0.66	-0.88
D3 Context-independent and dependent discourse	-20.0 ←→ 20.0	0.26	1.04
D4 Overt expression of persuasion	-10.0 ←→ 20.0	*3.49*	*1.48*
D5 Abstract and non-abstract information	-5.0 ←→ 20.0	-0.86	-1.52
D6 On-line informational elaboration	-6.0 ←→ 10.0	*2.52*	*0.59*

Table 10

Syntactic features describing text dimensions

Destructive cult sermons		
Syntactic features	*Z-Scores*	*Discourse functions*
TSUB That relative clauses on subject position	3.63	tends to elaborate the content elements (e.g. I'm in a vehicle ***that*** is already falling apart on me)
DEMO Demonstratives	2.00	tends to elaborate the content elements (e.g. ***These*** people will--if they got down, were ready to die …)
COND Conditional adverbial subordinators	1.91	tends to condition the understanding and view (e.g. ***If*** we can't live in peace, then let's die in peace.)
TOBJ That relative clauses on object position	1.91	tends to elaborate the content elements (e.g. I want you to be aware ***that*** the focus is on the fact ***that*** this is the End of the Age)
CAUS Causative adverbial subordinators	1.65	tends to elaborate the content elements (e.g. So, he fell in trouble with USSR ***because*** USSR feels you gotta talk and negotiate)
XX0 Analytic negation	1.62	tends to restrict the thoughts and actions (e.g. You won***'t*** get back to US alive)
TO Infinitives	1.61	tends to elaborate the content elements (e.g. They just one of them wants ***to*** commit suicide…)
PRED Predicative adjectives	1.54	tends to elaborate the content elements (e.g. The rest of them are ***black***)
WHCL WH-Clauses	1.50	tends to elaborate the content elements (e.g. I'm concerned about ***what*** you people doing)
DEMP Demonstrative pronouns	1.48	tends to elaborate the content elements (e.g. ***this*** is their last chance…)

Destructive cult sermons		
Syntactic features	Z-Scores	Discourse functions
POMD Possibility modals	1.31	tends to elaborate the content elements (e.g. and was older than me I **could** see Ti's control was better than mine…)
PIT Pronoun *it*	1.28	tends to elaborate the content elements (e.g. the effect that **it** might have on our vehicles)
Mainstream sermons		
Syntactic features	Z-Scores	Discourse functions
SPP2 Second person pronouns	3.10	tends to involve such as the audience (e.g. **you** can be forgiven that **you** can have a new life…)
TSUB That relative clauses on subject position	2.00	tends to elaborate the content elements (e.g. this is a story **that** Jesus tells directly to teach…)
WHQU Direct WH-Questions	1.50	tends to involve the content elements (e.g. pray **wherever** you are, pray **whatever** you're interested in…)
WHCL WH-Clauses	1.40	tends to elaborate the content elements (e.g. You have so much time but for **what** you have time to serve Christ)
CAUS Causative adverbial subordinators	1.18	tends to elaborate the content elements (e.g. God gave His son to die for your sins **because** you see we're all sinners)
PRED Predicative adjectives	1.15	tends to elaborate the content elements (e.g. Our problems and our tensions are so **complicated**)
PHC Phrasal coordination	1.11	tends to elaborate the content elements (e.g. **and** receive him into your heart **and** it's an urgent decision)
XX0 Analytic negation	1.07	tends to restrict or change the thoughts and actions (e.g. I don'**t** need to fear the future because God's goodness is watching over me)
TOBJ That relative clauses on object position	1.00	tends to elaborate the content elements (e.g. God has assigned a work **that** only you can fill…)

DISCUSSION

This section presents the implications of keyness (through aboutness and communication styles) and text dimensions. As shown in Table 11, the discourse elements in the sermons may serve as indicators allowing us to distinguish the language of destructive cults from the language of mainstream religion. Destructive cults and mainstream religion have different aboutness features in their discourses. Destructive cults possess personalized beliefs not traditionally associated with the beliefs of mainstream religion, whereas mainstream religious groups possess conventional religious beliefs associated with the biblical concepts. For their communication styles, destructive cults detach themselves from wider society showing their own sociocultural characteristics (through othering style), whereas mainstream religious groups generally involve individuals coming from wider society for them to see the whole benefits of following the religious philosophy (through personal involvement style).

For their text dimensions, the two sets of sermons are both persuasive and elaborative which confirm the factors of persuasion, for example, the message features presented by Shen and Bigsby (2013) and approaches of elaboration presented by O'Keefe (2013). However, from the findings, the discourse of destructive cults is intensified (through intensifying style) and employs syntactic elements characterizing elaboration in which some are not common in the discourse of mainstream religion (e.g. demonstratives, conditional adverbial subordinators, infinitives, possibility modals, and pronoun *it*), and some are highly used than in the mainstream sermons based on the z-scores (e.g. *that* relative clauses on subject position, *that* relative clauses on object position, causative adverbial subordinators, analytic negation, predicative adjectives, and Wh-clauses) which make the destructive cult sermons more persuasive and elaborative than the mainstream sermons.

Table 11

Differences of the language of destructive cults from the language of mainstream religion

Discourse aspects	The language of destructive cults	The language of mainstream religion
Aboutness	Non-religious content features	Religious content features
Communication styles	1. Othering 2. Intensification 3. Strong elaboration	1. Personal involvement 2. Moderate elaboration
Text dimensions	1. Highly persuasive 2. Highly elaborative	1. Moderately persuasive 2. Moderately elaborative

The language of destructive cults

From the aboutness findings, the sermons of destructive cults contain features associated with non-religious topics characterizing their personalized belief systems. Jim Jones' sermons exhibit sociopolitical topics while Marshall Applewhite's sermons display topics (such as kingdom level above human) in the context of science fiction. As argued by Palayon et al. (2020), the ideologies of the leaders may lead their followers to see the destructive acts as appropriate ways to reach their social goals.

The sociopolitical ideology of Peoples Temple guided them to perceive mass suicide as a revolutionary act (e.g. *'The world suffers violence, and the violent shall take it by force. If we can't live in peace, then let's die in peace…This is what I'm talking about now is the dispensation of judgment. This is a revolutionary -- a revolutionary suicide council. I'm not talking about self -- self-destruction. I'm talking about that we have no other road.'*). The science-fiction ideology of Heaven's Gate guided them to view mass suicide as a way to enter in the heavenly kingdom or in outer space in which they believed to be their final destination (e.g. *'Now, the only time we have an opportunity to leave the human kingdom and go to the kingdom level above human, is when there is a member from that kingdom level, incarnate in human form, taking that body and saying to you, "I'll tell you about a kingdom level beyond here, and if you want to go there then you have to follow me, because I am the guy who's got the key at the moment."…'*) These findings imply that promoting a personalized belief system may lead a religious group to decide and conduct an act which for them is acceptable but which is unacceptable for wider society.

To convey these beliefs, the communication styles on othering, intensification, and strong elaboration employed in the destructive cult sermons may be considered as factors of being highly persuasive discourse. These styles may also serve as factors which enabled the destructive cult leaders to instill their purposes in the minds of their followers (see Athanasiadou, 2007; Méndez-Naya, 2008, on the functions of intensifiers; De Fina, 2006, on group identity and self-representations; Dervin, 2007, on othering and self-representation; Negri et al., 2020, on elaborative discourse; Reisigl & Wodak, 2009, on discourse strategies; van Dijk, 2006, on discourse strategies and manipulation).

The othering style (through the frequent use of *they* and *we*) allows them to view their world founded on their personalized ideologies as the right place for dwelling and view wider society as an outside world or a place for destruction which led them to detach themselves from wider society (Bohm & Alison, 2001; Palayon et al., 2020). For instance, Peoples Temple believed

that the event of nuclear holocaust would happen pushing them to find a secured place for them to be saved (e.g. *'…they actually constitute an important and strategic reserve of the revolution, said Stalin, the once-great leader of the Soviet Union which is now the avant-garde of liberation…And nuclear war will damage too many in Canada and USA and other parts of Europe, to even think about it…Carter is becoming aware that he is being led down the pathway to a nuclear holocaust…'*) while Heaven's Gate believed that the planet Earth would be recycled or renovated pushing them to move to outer space by committing mass suicide for them to be spared from renovation (e.g. *'We'll title this tape, "Planet Earth About to be Recycled - Your Only Chance to Evacuate is to Leave With Us." Planet Earth about to be recycled. Your only chance to survive or evacuate is to leave with us.'*).

The intensifying style (through the frequent use of intensifiers) enables the leaders to magnify the aboutness features in their sermons which can also enlarge the feelings and understandings of their followers allowing them to believe their leaders' ideologies. For Jim Jones, he extremely showed to his followers the dark side of the politics and government (e.g. *'…it was obviously killing off anyone that disagreed with the government's main line. Even in the end, was willing to kill off one of their right wing, to make the reporter look guilty. It was in the business of killing, that's no question. Political leaders who are too independent or liberal certainly not any socialists in the United States…'*). For Marshall Applewhite, he inculcated sets of beliefs in his followers about his purpose as a leader and the tasks to be performed by his followers to reach their goal that is entering in outer space which they believed the kingdom above human (e.g. *'Through His prophets, He said, "I will send a Savior, a Messiah to help you get out of the human kingdom", knowing that some humans should certainly reach a condition where they would be ready to move up into His Kingdom…'*).

The language of mainstream religion

From the aboutness findings, the sermons of mainstream religious groups contain features associated with religious topics characterizing their religious philosophy from a biblical perspective. They promote Christian philosophy taken from the scriptures which aids the members to see the way of life that is free from sinful nature (the acts which are not acceptable based on the teachings written in the Bible). Billy Graham and Rick Warren frequently used the Bible to teach the principles of Christianity helping their followers generally to understand the concepts of morality and immorality from a religious perspective and these acts were achieved through personal involvement style (e.g. through the frequent use of *he, you*, and *your*) and moderate elaboration (e.g. the use of common syntactic elements characterizing elaboration such as *that* relative clauses on object position and subject position) which make the mainstream sermons moderately persuasive and elaborative. These findings signify that a religious belief system from a scriptural perspective may contribute positive effects for the development of individuals' attitudes and viewpoints.

CONCLUSION

This study focused on distinguishing the language of destructive cults from the language of

mainstream religion. The use of different corpus-based methods helped us to identify the aspects of language found in the sermons of religious leaders which are useful to distinguish the language of destructive cults from the language of mainstream religion. The aboutness, communication styles, and text dimensions as the aspects of language in the sermons need to be examined to characterize the social characteristics of the religious groups. They may serve as indicators allowing us to inspect and describe objectively whether a religious group contains destructive or beneficial characteristics.

The evidence revealed by the patterns of key linguistic features could act as a warning that religious groups which purely promote non-religious ideologies with the use of othering, intensification, and strong elaboration can be considered as dangerous cults. These groups may conduct harmful activities to achieve their goals which for them are acceptable but which are unacceptable for wider society.

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