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The Language of Destructive Cults: Keyness Analyses of Sermons

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Abstract

Destructive cults are the most notable damaging religious groups in society where leaders convince their followers to engage in destructive acts. Examples of such cults include Peoples Temple led by Jim Jones and Heaven's Gate led by Marshall Applewhite who convinced their followers to commit mass suicide. Previous research into destructive cults has mainly focused on their social-psychological development. This research breaks new ground by examining the patterns of linguistic features in the sermons of destructive cults indicating the characteristics of their language using keyness analyses. The main data sets are the sermons of Jim Jones and the sermons of Marshall Applewhite in the period leading to mass suicide. As a benchmark, these sermons were compared to the sermons of Billy Graham and the sermons of Rick Warren, leaders of mainstream religious groups. The findings show that the language of destructive cults based on the sermons of the leaders upholds extreme non-religious ideologies that cannot be found in the sermons of mainstream religious groups. The styles of their language focus on othering, intensifying, elaborating, and negating with the aim of controlling their followers. The results may allow destructive cults to be identified before damaging events occur.

Keywords

Peoples Temple, Heaven's Gate, sermons, linguistic features, keyness analyses

1 Social characteristics of destructive cults

One ultimate goal of religion is to promote the purpose and value of life in society (Chatters, 2000; Koenig, King, & Carson, 2012). It aims to educate individuals on how to be healthy in both mental and emotional aspects (Ellison & Levin, 1998; Fletcher, 2004). However, some religious groups started beneficially but ended up detrimentally leading

their followers into dangerous situations such as murder and mass suicide. These religious groups are the destructive cults, for example, Aum Shinrikyo founded by Shoko Asahara that executed the deadly Tokyo subway Sarin gas attack in 1995 (Metraux, 1995), and Order of the Solar Temple that plotted a series of murders and mass suicide in 1994 and 1995 in France, Switzerland, and Canada (Introvigne, 2016; Lewis, 2016). The common social characteristics of destructive cults are being highly authoritative, manipulative, and abusive to their followers. Some of them exert extreme control over their followers by putting fear in their minds and implementing hard physical punishments (Dawson, 2018; Galanter, 1999; Richardson, 1993; The Jonestown Institute, 2018). They do not allow their followers to communicate with outsiders, and in the end, the leaders influence their followers to get involved in destructive activities such as killing, murder, and mass suicide (Chidester, 1991; Pignotti, 2000; Singer & Lalich, 1995). This study aims to examine the patterns of linguistic features (at the lexical, semantic, and syntactic levels) in the sermons of two destructive cults which describe the contents and communication styles indicating the language of destructive cults. To achieve this goal, the sermons of Jim Jones and the sermons of Marshall Applewhite leading to mass suicide were used and compared to the sermons of mainstream religious leaders. The findings of this study may provide useful linguistic indicators of communication process allowing the identification of destructive cults before they commit harmful activities.

2 Peoples Temple and Heaven's Gate as destructive cults

This section presents the historical accounts of Peoples Temple and Heaven's Gate as destructive cults and the previous studies conducted after these groups committed mass suicide. Their historical backgrounds help to establish the platform of this research particularly the purpose, data gathering, and procedures for analyses.

2.1 Peoples Temple

Peoples Temple was an American religious cult founded by a charismatic leader named Jim Jones. It started as a sect in 1955 in Indianapolis, Indiana and transformed into a cult in the mid-1970s (Abbott, 2019; Lines, 2018). In 1977, Jim Jones together with his followers moved to the jungle of Guyana to be free from media scrutiny and social judgments (Hall, 1987). However, as they developed, the leaders became extremely authoritative and abusive toward their followers (Galanter, 1999; Moore, 2000, 2011, 2018; Richardson, 1980). These claims of abuse alarmed outsiders, particularly some concerned politicians and media personalities who pushed for an investigation of Jonestown (Peters, 2013; Real Stories, 2018). After Jim Jones realized the serious threats coming from the outsiders, he gave his followers some options on how to handle the situation, and they decided to commit mass suicide as a revolutionary act (see Carter, 2015; Pehanick, 2015 for further details). On 17 November 1978, the team of Congressman Leo Ryan from San Francisco visited Jonestown to investigate the claims of abuse. When they were about to leave Jonestown the next day, Jim Jones ordered some of his members to kill them. After the death of the congressman and some of his assistants, Jim Jones and other leaders persuaded and forced their followers to commit mass suicide using cyanide poisoning. After the incident, more than nine hundred were killed including the leaders and children (see Real Stories, 2018; The Jonestown Institute, 2018 for the complete story of Peoples Temple).

2.2 Heaven's Gate

Heaven's Gate was an American UFO religious millenarian cult led by Marshall Applewhite and located in the community of Rancho Santa Fe, San Diego, California. Marshall Applewhite combined the concept of religion and the concept of science-fiction stories and made these fused concepts as the ideology of Heaven's Gate (Davis, 2016). They firmly believed that the God in the Bible was a highly developed extraterrestrial or an alien existing in outer space which they viewed as the heavenly kingdom. In addition, in order to enter in the heavenly kingdom, they must give up their human nature particularly their attachments to their family, friends, sexuality, jobs, money, and possessions (Zeller, 2010). They also believed that the planet Earth would be recycled, and the only way to escape from this phenomenon was to leave their human bodies by committing mass suicide (Ramsland, 2015). Before they performed the said dangerous activity, the group updated their website with the farewell message: "*Our 22 years of classroom here on planet Earth is finally coming to conclusion – 'graduation' from the Human Evolutionary Level. We are happily prepared to leave 'this world' and go with Ti's crew.*" On 26 March 1997, the authorities found the dead bodies of 39 members of Heaven's Gate in their monastery in the San Diego village of Rancho Santa Fe (see Balch & Taylor, 2002; Muesse, 2011; Zeller, 2014 for the complete story of Heaven's Gate).

2.3 Previous studies into destructive cults

Mass suicide is one destructive social activity of a religious group. Indeed, many religious groups in the past committed mass suicide (Beyer, 2019; Mosher, 2008). Some groups viewed this event as a form of protest while other groups found it as a way to escape from social accusation and depression (Bromley & Melton, 2002). After the repeated mass suicide events in the world of religion particularly in cult society, numerous research studies have been conducted aiming to explain the social-psychological reasons for committing mass suicide (Cook, 2014; Dein & Littlewood, 2000; Gearing & Lizardi, 2009; Pescosolido & Georgianna, 1989; Simpson & Conklin, 1989; Stack, 1981, 1983).

The previous studies into Peoples Temple and Heaven's Gate have primarily focused on social-psychological factors explaining the characteristics particularly the philosophical background, social practices and behavior, and the formation of destructive social goals of these groups (Balch & Taylor, 2002; Chidester, 1991; Chrystides, 2016a, 2016b; Davis, 2016; Hall, 1988; Hall & Schuyler, 1998; Hall, Schuyler, & Trinh, 2000; Johnson, 1979; Lincoln & Mamiya, 1980; Lindt, 1981; Moore, 2000; Muesse, 2011; Ulman & Abse, 1983). According to the study of Wessinger (1998), the two destructive cults had millennial expectations or beliefs which shaped their views to form an isolated community. Jim Jones found Jonestown as a paradise-like place and a new world where he could freely implement his beliefs. Marshall Applewhite believed that there was a heavenly kingdom (in outer space) that was beyond the level of human comprehension where his group could have refuge from the rejuvenation of the planet Earth. Peoples Temple and Heaven's Gate displayed patterns of behavior similar to other destructive cults. The groups had a strong commitment coming from their self-acquired ideologies which shaped their decision to commit mass suicide (Bohm & Alison, 2001).

The previous studies into destructive cults were highly interpretative aiming to explain the social characteristics of destructive cults. In this study, we intend to employ keyness analyses to investigate the language in the sermons of destructive cults (Bondi & Scott, 2010; Culpeper, 2009; Gabrielatos, 2018). We focus on identifying the linguistic features (at the lexical, semantic, and syntactic levels) to explain the keyness or contents and communication styles of the sermons of destructive cults indicating the characteristics of their language. In order to identify the linguistic features in the sermons of destructive cults, we need to compare the sermons of destructive cults to the sermons of mainstream religious groups as a benchmark. In this way, we could view the common characteristics of destructive cults from a linguistic perspective which has not been the focus of previous research. To achieve this goal, this study was guided by this research question: what are the linguistic features in terms of content and communication style in the sermons of destructive cults that contrast with the sermons of mainstream religious groups? The findings of this study may provide linguistic evidence which could be used to examine the sermons of other existing cults to predict whether they are potentially destructive in the long run.

3 Corpora and methods

3.1 Corpus selection

The main corpora used in this study are the transcribed sermons of Jim Jones (The Jonestown Institute, 2018) and Marshall Applewhite (HeavensGateDatabase, 2013) both in the period leading to mass suicide. The sermons of destructive cults as the target corpus were compared to the sermons of constructive religious groups as the benchmark corpus. Two respected mainstream Christian preachers, Billy Graham and Rick Warren, were chosen on the basis that the timeline of their preaching coincided with that of the destructive cults and that they had never been accused of misdoings (see Martin, 2018; Tangenberg, 2008; Wallace, 1985 for further information on mainstream religion). The benchmark corpus is set by the purpose of this study which allows the discourse of destructive cults to be identified through its distinctiveness when compared to similar socially accepted discourse. Basic information about the corpora used in this study is given in Table 1.

Table 1: The sermons of destructive cults and mainstream religious groups

Target corpus				Benchmark corpus			
Sermons	Text files	Word tokens	Word types	Sermons	Text files	Word tokens	Word types
1. Jim Jones	10	97,246	6,839	1. Billy Graham	19	91,074	5,472
2. Marshall Applewhite	11	93,135	4,464	2. Rick Warren	9	98,470	4,673

Sermons are textual evidence which describe the internal and external characteristics of a religious group. They show the main philosophy or structures of beliefs which are manifested in social actions. In order to examine these large data sets, three corpus-based methods were applied: (1) keyword analysis, (2) key semantic tag analysis, and (3) key part-of-speech analysis. These methods are useful since they allow us to quantify the frequencies and measure the keyness of linguistic features which describe the contents and communication styles of the sermons of destructive cults. Taking a quantitative approach to analyzing the sermons provides several potential benefits. It allows the complete data set to be analyzed (rather than focusing on a few selected extracts), it increases the reliability of the findings, and it reduces the chances that personal judgments will influence the results.

3.2 Keyness analyses

Keyness is a corpus-based approach which includes keyword analysis, key semantic tag analysis, and key part-of-speech analysis. These methods are applicable in this study since they measure the relative frequencies of linguistic features that describe the contents and communication styles of the sermons of destructive cults. They allow features salient to one corpus when compared to another corpus to be identified. These salient features allow us to identify those features which distinguish the target corpus and thus characterize it. Features analyzed are countable surface features of a text, and in this study, the features analyzed for keyness are keywords, key semantic tags, and key part-of-speech tags (Bondi & Scott, 2010; Culpeper, 2009; Gabrielatos, 2018). To identify the meaningful linguistic features in the sermons of destructive cults, Jim Jones' sermons and Marshall Applewhite's sermons were compared to Billy Graham's sermons and Rick Warren's sermons. Comparing each target corpus in two comparisons may help to identify the common and most meaningful linguistic features in the sermons which indicate the characteristics of destructive cults (see Table 2).

Table 2: Procedures for identifying the key linguistic features

Comparisons	Target results	
Jim Jones' sermons vs. Billy Graham's sermons	Common linguistic features in Jim Jones' sermons	Common linguistic features in the sermons of destructive cults
Jim Jones' sermons vs. Rick Warren's sermons		
Marshall Applewhite's sermons vs. Billy Graham's sermons	Common linguistic features in Marshall Applewhite's sermons	
Marshall Applewhite's sermons vs. Rick Warren's sermons		

In these analyses, we used the probability statistic called log-likelihood (LL) to measure the keyness of linguistic features which helps us to see the difference between the target corpus and the benchmark corpus. LL is an appropriate keyness statistic application since it has been widely used in previous research and it allows us to characterize the specific register under investigation (Dunning, 1993; Pojanapunya & Watson Todd, 2018). To reveal the LL values, this significance test statistic compares the frequencies of linguistic features in the target corpus to the frequencies of linguistic features in the benchmark corpus while taking the overall size of corpus in each data set into account (Pojanapunya & Watson Todd, 2018). This means that the linguistic features with higher LL values are useful to determine the contents and communication styles of the sermons of destructive cults. Since the LL values or probability values are greatly influenced by the size of the corpora being investigated, setting thresholds for words/tags to be considered key based on LL values is inappropriate. Therefore, we applied the Top N method as an appropriate way of setting a threshold (Pojanapunya, 2017; Pojanapunya & Lieungnapar, 2017). However, identifying what N-value should be used is problematic. Ideally, the N-value should be large enough that the comparison list provides at least some coverage of all the major patterns of features in the target corpora, but not so large that minor issues where chance differences exist are identified as meaningful patterns. One way in which this can be done is setting a low N-value (e.g. Top 25) to identify the major patterns of linguistic features. It can then be extended (e.g. Top 50, Top 100, etc.) up to a saturation point to see if such extensions add any new information or just confirm the existing patterns.

3.2.1 *Keyword analysis*

Keyword analysis is a corpus-based method that aims to identify the meaningful words (keywords) in a corpus. This is the primary method used in this study that highlights the meaningful words in the sermons of destructive cults. These keywords show the contents and communication styles of Jim Jones' sermons and Marshall Applewhite's sermons which describe the language of destructive cults. To determine the most meaningful words that represent the specific descriptions of the sermons of destructive cults, firstly, we prepared the keyword lists using the corpus tool AntConc 3.4.4 (Anthony, 2014). Secondly, we applied the dispersion method using Num_Files tool to show how words are dispersed across different texts in a corpus (Pojanapunya, 2017). Viewing the dispersion level of words may be helpful to select the most meaningful words which characterize the entire corpus. It is possible that for a word with a high LL value, its keyness is due to its frequency of occurrence in only a few texts in a corpus which is not strong enough to characterize the entire data. Therefore, we consider the dispersion method as a preliminary procedure for keyword analysis in this study (Gries, 2008; Rayson, 2008).

After the tool revealed the dispersion level of words in the two comparison lists of Jim Jones' sermons and in the two comparison lists of Marshall Applewhite's sermons, we selected the words with high dispersion level (words which occur in 50 percent of the text files). Afterward, we applied the Top N method (starting with Top 25) to set the threshold (Top 200) in order for us to see the meaningful patterns of keywords based on their explicit meanings and functions. Finally, we identified the shared keywords in the comparison lists of Jim Jones' sermons and in the comparison lists of Marshall Applewhite's sermons as the most significant words. The identified patterns of shared keywords were put into themes to determine the contents and communication styles of the sermons of destructive cults.

3.2.2 *Key semantic tag analysis*

Key semantic tag analysis is a corpus-based method that aims to identify the meaningful semantic tags in a corpus. Semantic tags are the semantic groups of words which show the semantic fields in a corpus that explain the holistic meaning or implication of a corpus (Jones, Rayson, & Leech, 2004; Wilson & Rayson, 1993). This is the secondary method used in this study since it helps to determine the semantic tags which describe the contents and communication styles of Jim Jones' sermons and Marshall Applewhite's sermons. This method also helps to confirm the keyword findings and highlight or add new features that support the previous results. Key semantic tag analysis is fairly similar to keyword analysis since both of them aim to determine the contents and communication styles of the sermons based on the meaningful words. However, they are different when it comes to application. Keyword analysis identifies the patterns of individual words in the sermons based on the meanings and functions of words, while key semantic tag analysis determines the groups of words in the sermons based on the patterns of shared meanings and functions of sets of words. Therefore, this method helps to validate and strengthen the previous findings by allowing synonyms and other related words to be categorized together. To identify the key semantic tags in the sermons of destructive cults, we used the UCREL semantic tagger that tags the words semantically (see <http://ucrel.lancs.ac.uk/usas/> for the semantic tagger), and AntConc 3.4.4 that compares the frequencies of semantic tags in the two data sets. This procedure helps to highlight the key semantic features in the sermons of destructive cults which occur with a higher relative frequency than in the sermons of mainstream religious groups.

Following the same procedure in keyword analysis, we applied the Top N method (starting with Top 25) after the tool revealed the key semantic tags to set the threshold (Top 50) in order for us to see the major patterns of meaningful semantic features. Subsequently, we identified the shared tags as the most significant semantic tags in the two comparison lists of Jim Jones' sermons and in the two comparison lists of Marshall Applewhite's sermons. The identified patterns of shared key semantic tags were put into themes to determine the contents and communication styles of the sermons of destructive cults.

3.2.3 *Key part-of-speech analysis*

The final corpus-based method we used in this study is key part-of-speech analysis that focuses on investigating the communication styles of the sermons based on the meaningful syntactic features (Biber, 1992; Rayson, Wilson, & Leech, 2002). Syntactic features are the grammatical groups of words which show the patterns of discourse functions that describe the communication styles of a corpus (Hardie, 2007). Based on the purpose of this study, this method is slightly different in terms of application compared to key semantic tag analysis. Key semantic tag analysis provides semantic fields which help us to interpret the meanings and functions of the tags, while key part-of-speech analysis shows syntactic items with grammatical labels which allow us to identify the communication styles. The concordance lines of syntactic items and their occurrence patterns were also viewed to confirm the identified styles of a corpus. This method provides confirmation that increases the validity and reliability of the previous findings. To identify the

meaningful syntactic features, we used the Multidimensional Analysis Tagger (MAT) 1.3 that syntactically tags the words (Nini, 2015), and AntConc 3.5.8 that compares the frequencies of syntactic items in the two data sets (Anthony, 2019).

After the tool revealed the comparison lists of the positive syntactic items, we initially viewed the Top 25 to see the most meaningful syntactic features. We also extended viewing the features until we set up the cutoff point (Top 100) in order for us to see if there is a new information added. Finally, we identified the most significant syntactic features in the comparison lists of Jim Jones' sermons and Marshall Applewhite's sermons based on their shared discourse functions. The selected key part-of-speech tags were used to determine the communication styles of the sermons of destructive cults.

4 Key linguistic features in the sermons of destructive cults

This section presents the patterns of linguistic features which describe the contents and communication styles of Jim Jones' sermons and Marshall Applewhite's sermons.

4.1 Keywords

To see the major patterns of keywords, we initially viewed the Top 25 words in the comparison lists of Jim Jones' sermons and in the comparison lists of Marshall Applewhite's sermons. We found the most significant words which describe the general characteristics of the sermons of destructive cults such as *they, she, shit, soviet, black, her, union, hell, USA, socialist, white, ass, 'd, Stoen*, and *socialism* in Jim Jones' sermons; and *that, kingdom, we, human, our, they, Father, vehicle, level, as, Ti, overcoming, information, member, certainly, overcome, and might* in Marshall Applewhite's sermons. To find more significant words that give additional information and confirm the top words, we considered the Top 50 and Top 100 words in the lists. However, the result shows that the reliability of some patterns needs to be confirmed by adding more words. Therefore, we extended viewing the words to Top 200 as the threshold for identifying words as keywords. We also viewed the concordance lines of these keywords to identify the content and communication style themes.

In Jim Jones' sermons, we found six content themes and four communication style themes (see Table 3). The content themes are related to: (1) states and nations or words relating generally to the socialist and communist states and nations, (2) political philosophies or words characterizing generally the political ideologies of socialist and communist nations, (3) people or words referring to the names of significant individuals and common groups of people in society, (4) political events or words relating to the social activities of the government agencies, (5) social reports or words describing generally the different social events, and (6) destructive events or words relating to death or life destruction. The communication style themes are related to: (1) swearing or words describing the language expressions of Jim Jones, (2) negating or words showing retrictions toward the situations and actions of the Peoples Temple members, (3) othering or words showing the separation of the Peoples Temple members from wider society, and (4) intensifying or words showing emphasis toward the content themes of Jim Jones' sermons.

Table 3: Keywords in Jim Jones' sermons

Keywords	Jim Jones' sermons vs. Billy Graham's sermons			Jim Jones' sermons vs. Rick Warren's sermons		
	Rank	F	LL	Rank	F	LL
I. Non-religious content themes						
A. States and nations						
1. Soviet	6	120	128.9	4	120	173.3
2. Guyana	35	32	43.7	47	32	46.2
3. USSR	48	25	34.1	65	25	36.1
4. Rhodesia	91	17	23.2	108	17	24.6
5. Russia	136	19	15.6	130	19	20.8
B. Political philosophies						
1. socialist	9	74	101.0	11	74	106.9
2. socialism	17	53	72.4	20	53	76.5
3. fascist	28	37	50.5	37	37	53.4
4. communist	32	44	46.4	28	44	63.5
5. capitalism	63	21	28.7	78	21	30.3
C. People						
1. Stoen	14	59	80.6	16	59	85.2

2. black	20	90	63.1	6	90	130.0
3. white	23	80	57.6	12	80	106.1
4. seniors	70	20	27.3	87	20	28.9
5. president	74	50	26.2	27	50	63.7
<i>D. Political events</i>						
1. CIA	25	39	53.3	33	39	56.3
2. government	30	49	48.2	46	49	47.7
3. force	44	31	34.8	117	31	22.4
4. conspiracy	71	20	27.3	88	20	28.9
5. movement	82	23	24.5	119	23	21.9
<i>E. Social reports</i>						
1. news	36	74	41.4	40	74	50.8
2. foreign	53	24	32.8	92	24	27.6
3. medical	56	35	31.0	43	35	50.5
4. public	66	41	28.5	31	41	59.2
5. community	138	36	15.1	76	36	31.3
<i>F. Destructive events</i>						
1. killed	58	40	30.3	55	40	40.0
2. kill	61	30	28.8	110	30	24.0
3. suicide	110	32	19.0	62	32	38.6
4. nuclear	127	23	17.0	120	23	21.9
II. Communication style themes						
<i>A. Swearing</i>						
1. shit	1	140	191.2	3	140	202.2
2. ass	10	70	95.6	13	70	101.1
3. damn	26	38	51.9	34	38	54.9
4. hell	96	94	21.3	9	94	113.0
<i>B. Negating</i>						
1. 't	2	1166	178.3	59	1166	38.9
2. no	37	363	41.3	22	363	71.2
3. won'(t)	111	78	18.9	102	78	24.9
4. wouldn'(t)	115	58	18.5	145	58	18.9
<i>C. Othering</i>						
1. they	7	1061	112.8	1	1061	275.4
2. their	51	251	33.0	24	251	68.1
3. them	103	271	19.8	77	271	30.6
<i>D. Intensifying</i>						
1. much	31	184	47.3	32	184	57.3
2. very	57	176	30.5	21	176	73.8
3. too	67	113	27.7	111	113	23.9

In Marshall Applewhite's sermons, we found five content themes and three communication style themes (see Table 4). The content themes are related to: (1) cult-specific ideology or words describing the structures of beliefs of Heaven's Gate, (2) learning concepts or words relating to the principles of Heaven's Gate and the way for learning these principles, (3) people or words referring to the Heaven's Gate members and the people from wider society, (4) psychological concepts or words relating to mental (thinking) activities and development, and (5) science-fiction elements or words characterizing the science-fiction perspective of Marshall Applewhite in interpreting the religious concepts such as God (Father) and the heavenly kingdom. The communication style themes are related to: (1) elaborating or words that tend to condition the perception or thinking process of the followers of Marshall Applewhite, (2) othering or words describing the separation of the Heaven's Gate members from wider society, and (3) intensifying or words that tend to magnify the content themes particularly the cult-specific beliefs in Marshall Applewhite's sermons.

Table 4: Keywords in Marshall Applewhite's sermons

Keywords	Marshall Applewhite's sermons vs. Billy Graham's sermons			Marshall Applewhite's sermons vs. Rick Warren's sermons		
	Rank	F	LL	Rank	F	LL
I. Non-religious content themes						
<i>A. Cult-specific ideology</i>						
1. kingdom	1	784	783.0	2	784	924.7
2. human	3	380	357.7	4	380	420.7
3. father	4	490	308.7	7	490	246.8
4. level	6	183	216.6	9	183	194.1
5. overcoming	13	119	162.3	13	119	154.0
<i>B. Learning concepts</i>						
1. information	14	117	159.6	15	117	151.1
2. classroom	27	61	83.2	43	61	79.1
3. instruction	36	64	72.2	32	64	92.3
4. discussed	78	30	40.9	71	30	43.3
5. lessons	83	34	38.7	116	34	28.8
<i>C. People</i>						
1. member	23	126	94.4	17	126	146.0
2. students	42	58	64.4	64	58	45.6
3. individuals	104	38	31.0	97	38	33.7
4. female	105	22	30.0	130	22	24.8
5. male	165	15	20.5	198	15	15.5
<i>D. Psychological concepts</i>						
1. mind	37	149	69.8	84	149	37.7
2. sense	39	90	68.7	60	90	48.2
3. truth	51	99	57.6	92	99	35.5
4. process	65	40	46.6	111	40	30.1
5. behavior	88	32	36.1	165	32	18.8
<i>E. Science-fiction elements</i>						
1. crew	32	55	75.0	42	55	79.3
2. planet	113	52	28.1	68	52	44.4
3. Doe	119	20	27.3	114	20	28.9
4. space	122	31	26.2	101	31	32.3
5. spacecraft	200	12	16.4	177	12	17.3
II. Communication style themes						
<i>A. Elaborating</i>						
1. that	2	3761	481.7	1	3761	1032.6
2. or	9	694	179.1	26	694	110.7
3. if	10	761	178.6	47	761	73.6
4. though	58	118	50.5	23	118	121.3
5. because	102	437	31.2	89	437	35.7
<i>B. Othering</i>						
1. we	5	1627	235.9	3	1627	489.2
2. our	18	626	113.5	5	626	300.3
3. they	19	1059	111.2	6	1059	273.0
4. their	30	325	76.7	21	325	127.7
5. them	67	329	45.8	51	329	62.4
<i>C. Intensifying</i>						
1. certainly	17	135	117.9	18	135	131.4
2. frequently	150	16	21.8	144	16	23.1
3. easily	172	19	19.4	117	19	27.4

4.2 Key semantic tags

To find the most significant semantic tags in the comparison lists of Jim Jones' sermons and in the comparison lists of Marshall Applewhite's sermons, we viewed the Top 25 semantic tags as a preliminary step. We found that some tags initially confirm the keyword findings and some tags show new information which describe further the language of

destructive cults. Therefore, we extended viewing the tags to Top 50 as threshold which help us to draw more meaningful semantic tags and enlarge their patterns. We also viewed the lexical items of these tags to determine the content and communication style themes.

As presented in Table 5, the findings show that most of the semantic tags in Jim Jones' sermons confirm the content themes in keyword findings such as: (1) states and nations (e.g. Z2 Geographical names), (2) political philosophies (e.g. G1.2 Politics), (3) people in society (e.g. S2 People, O4.3 Colour and colour patterns, and Z3 Other proper names), (4) political events (e.g. S5+ Belonging to a group and G1.1 Government), (5) social reports (e.g. G2.1 Law and order, A9+ Getting/possession, S1.2.1- Formal/unfriendly, X8+ Trying hard, S1.1.3+ Participating, A1.4 Chance/luck, I3.2 Professionalism, and T3- Time: New and young), and (6) destructive events (e.g. G3 Warfare, defence and the army). Other tags that give more content descriptions are *B3 Medicines and medical treatment*, *B2-Disease*, *I2.1 Business: Generally*, and *I1 Money generally*, which show that Jim Jones' sermons contain medical/health and business economic issues, and these tags are all considered as non-religious contents. For the communication style themes, the tags confirm that Jim Jones' sermons are highly intensified based on the extensive use of intensifiers and intensifying expressions (e.g. A13.3 Degree: Boosters, A6.2+ Comparing: Usual, N5+ Quantities: many/much, N5 Quantities, N5.2+ Exceed; waste, and A13.7 Degree: Minimizers). Jim Jones also used a swearing style in his sermons which is not a common communication style of the sermons of mainstream religious groups (e.g. S1.2.6- Foolish).

In Marshall Applewhite's sermons, most of the semantic tags as presented in Table 6 confirm the content themes in keyword findings such as: (1) cult-specific ideology of Heaven's Gate (e.g. N3.7 Measurement: Length/height, A7+ Likely, A1.5.1 Using, S7.3 Competition, G1.1 Government, B5 Personal belongings, A6.1+ Comparing: Similar, S5+ Belonging to a group, X8+ Trying hard, A1.2+ Suitable, M3 Vehicles/transport on land, A1.4 Chance/luck, O4.1 General appearance, A3+ Existing, N3.3- Distance: near, and M6 Location and direction), (2) learning concepts (e.g. X4.1 Conceptual object, P1 Education in general, X2.2 Knowledge, X2.4 Investigate/examine, X2.2+ Knowledgeable, and A5.3 Evaluation: Accuracy), and (3) psychological concepts (e.g. X1 Psychological states). For the communication style themes, the tags confirm that Marshall Applewhite's sermons display extreme elaborative statements which tend to condition the understanding and perspective of his followers (e.g. Z7 If and A13.1 Degree: Non-specific). They also exhibit extensive use of linguistic intensifiers and intensifying expressions which tend to magnify the content themes of his sermons (e.g. A13.3 Degree: Boosters, A4.2+ Detailed, and A13.5 Degree: Compromisers).

Based on the overall results revealed by keyword analysis and key semantic tag analysis, it is confirmed that the sermons of destructive cults contain non-religious contents in place of the traditional religious content present in the mainstream sermons, despite the fact that the texts analyzed are still sermons. Jim Jones frequently talked in his sermons about political philosophies, social activities of the government agencies particularly in communist states and nations, significant individuals and groups of people in society, reports related to medical health and business economics, general social news, and destructive events. Marshall Applewhite frequently preached his personalized ideology such as the heavenly Father (God) and the heavenly kingdom from a science-fiction perspective. He also emphasized in his sermons the ways for overcoming human nature as one requirement to reach eternal life in the heavenly kingdom or outer space. For the communication styles, the sermons of destructive cults extensively apply othering that separates the members from wider society. They use intensifying style as well that emphasizes the content themes of their sermons. The other styles such as negating and swearing styles in Jim Jones' sermons and elaborating style in Marshall Applewhite's sermons were validated through key part-of-speech analysis to see whether they are communication styles of destructive cults or individual cult.

Table 5: Key semantic tags in Jim Jones' sermons

Key semantic tags	Jim Jones' sermons vs. Billy Graham's sermons			Jim Jones' sermons vs. Rick Warren's sermons			Lexical items	Content and style themes
	Rank	F	LL	Rank	F	LL		
1. G1.2 Politics	2	618	507.7	2	618	780.4	Marxist, socialism, communism	Political philosophies
2. Z2 Geographical names	3	1492	322.6	1	1492	1064.2	Chile, China, Germany	States and nations
3. G1.1 Government	5	465	148.3	8	465	228.7	diplomatic, citizens, council	Political events
4. S2 People	6	2085	146.9	4	2085	411.8	Guyanese, Indians, Jews	People in society
5. G3 Warfare, defence and the army	7	359	122.3	5	359	281.7	forces, guns, military	Destructive events
6. O4.3 Colour and colour patterns	8	248	119.4	7	248	236.8	nigger, white, blacks	People in society
7. B3 Medicines and medical treatment	9	246	110.8	13	246	151.0	doctor, drugs, healed	Medical health issues
8. Z3 Other proper names	10	360	100.3	14	360	95.3	Parks, Rockefeller, Stoen	People in society
9. S5+ Belonging to a group	12	456	94.5	10	456	190.1	committee, FBI, community	Political events
10. G2.1 Law and order	13	351	92.6	11	351	186.0	trial, arrest, attorney	Social reports
11. B2- Disease	14	327	91.3	23	327	57.2	sick, cancer, wounded	Medical health issues
12. A13.3 Degree: Boosters	16	585	78.3	29	585	44.0	particularly, really, seriously	Intensifying
13. S1.2.6- Foolish	17	116	78.0	18	116	78.7	stupid, ass, fool	Swearing
14. A9+ Getting and possession	18	1540	76.7	24	1540	56.1	grab, having, keeping	Social reports
15. I2.1 Business: Generally	20	116	69.0	28	116	44.7	capitalism, corporation, office	Business economic issues
16. S1.2.1- Formal/unfriendly	22	57	50.7	45	57	22.9	enemies, hostile, disharmony	Social reports
17. I1 Money generally	23	162	47.3	26	162	51.8	dollars, cents, money	Business economic issues
18. A6.2+ Comparing: Usual	25	146	44.4	49	146	19.1	basic, common, naturally	Intensifying
19. X8+ Trying hard	26	181	43.0	32	181	41.1	attempt, attempts, attempted	Social reports
20. S1.1.3+ Participating	27	97	42.7	22	97	59.7	attending, forum, interfere	Social reports
21. A1.4 Chance, luck	28	114	41.4	39	114	31.1	opportunity, chance, fortunate	Social reports
22. I3.2 Professionalism	29	105	40.7	47	105	21.9	lawyer, pilot, secretaries	Social reports
23. N5+ Quantities: many/much	35	751	32.8	35	751	32.8	lot, many, much	Intensifying
24. N5 Quantities	37	545	30.2	21	545	64.2	two, number, two-thirds	Intensifying
25. N5.2+ Exceed; waste	38	134	29.4	37	134	31.7	many, much, over	Intensifying
26. A13.7 Degree: Minimizers	42	99	27.1	34	99	39.3	barely, hardly, least	Intensifying
27. T3- Time: New and young	49	387	23.0	27	387	45.6	revolutionary, young, youth	Social reports

Table 6: Key semantic tags in Marshall Applewhite's sermons

Key semantic tags	M. Applewhite's sermons vs. Billy Graham's sermons			M. Applewhite's sermons vs. Rick Warren's sermons			Lexical items	Content and style themes
	Rank	F	LL	Rank	F	LL		
1. Z7 If	1	838	237.4	10	838	95.7	If	Elaborating
2. N3.7 Measurement: Length/height	2	170	177.1	4	170	161.1	level, elevation, length	Cult-specific ideology
3. A7+ Likely	3	1801	159.2	1	1801	323.5	clarified, explain, clear	Cult-specific ideology
4. A1.5.1 Using	4	222	157.3	25	222	40.0	recycle, use, consume	Cult-specific ideology
5. S7.3 Competition	5	210	155.0	5	210	159.3	overcoming, overcomer	Cult-specific ideology
6. G1.1 Government	6	479	142.5	2	479	222.3	diplomatic, kingdom, nations	Cult-specific ideology
7. X4.1 Conceptual object	7	249	110.2	22	249	44.9	idea, theologies, principle	Learning concepts
8. A13.1 Degree: Non-specific	8	249	108.5	20	249	55.4	degree, degrees, even	Elaborating
9. A13.3 Degree: Boosters	9	665	105.2	16	665	64.8	extremely, seriously, really	Intensifying
10. P1 Education in general	10	476	94.1	26	476	36.7	lessons, classroom, graduated	Learning concepts
11. B5 Personal belongings	13	184	70.6	7	184	126.8	trousers, trunk, suits	Cult-specific ideology
12. X1 Psychological states	14	158	68.5	21	158	45.3	crazy, mind, stuff	Psychological concepts
13. A6.1+ Comparing: Similar	16	250	63.4	17	250	60.9	reproduce, same, equal	Cult-specific ideology
14. S5+ Belonging to a group	18	420	60.9	6	420	142.1	crew, department, flock	Cult-specific ideology
15. X8+ Trying hard	19	215	60.8	19	215	58.9	effort, attempt, trying	Cult-specific ideology
16. X2.2 Knowledge	21	42	58.3	18	42	60.6	Misinformation	Learning concepts
17. X2.4 Investigate, examine, test	23	168	47.3	41	168	17.8	examine, searching, checking	Learning concepts
18. X2.2+ Knowledgeable	24	844	46.8	24	844	42.4	awaken, information, aware	Learning concepts
19. A4.2+ Detailed	28	162	43.0	27	162	35.8	certain, exactly, specific	Intensifying
20. A13.5 Degree: Compromisers	30	65	37.9	28	65	32.7	pretty, quite, sufficiently	Intensifying
21. A1.2+ Suitable	31	27	37.5	40	27	17.9	appropriate, qualified, suited	Cult-specific ideology
22. M3 Vehicles, transport on land	32	246	37.3	9	246	96.6	vehicles, freeway, path	Cult-specific ideology
23. A1.4 Chance, luck	33	110	34.1	34	110	24.6	opportunity, happened	Cult-specific ideology
24. A5.3 Evaluation: Accuracy	37	27	30.2	45	27	15.6	check, checking	Learning concepts
25. O4.1 General appearance	42	165	27.0	33	165	27.5	hard, loose-fitting, structures	Cult-specific ideology
26. A3+ Existing	43	3304	25.7	49	3304	13.9	existence, reality, event	Cult-specific ideology
27. N3.3- Distance: Near	46	74	24.1	32	74	28.2	closer, closest, neighborhood	Cult-specific ideology
28. M6 Location and direction	47	1711	23.1	13	1711	72.7	opposite, outside, under	Cult-specific ideology

4.3 Key parts of speech

This section presents the communication styles of the sermons of destructive cults. The findings reveal 13 most meaningful syntactic items in Jim Jones' sermons and in Marshall Applewhite's sermons which reconfirm the communication styles in the previous analyses. As presented in Table 7, the key part-of-speech tags in Jim Jones' sermons which shared discourse functions reveal that the language of Peoples Temple is highly elaborative, separatist (othering), intensified, and restrictive. The othering style allows Jim Jones to view the people from wider society as outsiders and consider the Peoples Temple members as insiders (a separated group of people that views its world as morally right). He also used statements frequently in detailed and complex manner which tend to condition and shape the perception of his followers toward the ideology of Peoples Temple. Other communication styles of Jim Jones' sermons tend to boost the meaning and implication of his sermons through the extensive use of intensifiers and intensifying expressions and put restrictions over the situations and actions of the Peoples Temple members through the frequent use of negativity.

Table 7: Key part-of-speech tags in Jim Jones' sermons

Key part-of-speech tags	Jim Jones' sermons vs. Billy Graham's sermons			Jim Jones' sermons vs. Rick Warren's sermons			Communication style themes
	Rank	F	LL	Rank	F	LL	
1. Independent clause coordination	1	1199	635.7	49	1199	56.4	Elaborating
2. Amplifiers	69	218	36.8	33	218	74.6	Intensifying
3. Third person pronouns	-	-	-	2	3390	460.8	Othering
4. Analytic negation	12	1715	130.7	-	-	-	Negating
5. Demonstrative pronouns	15	961	98.1	-	-	-	Elaborating
6. Synthetic negation	-	-	-	36	253	73.0	Negating
7. Quantifiers	-	-	-	37	1490	72.5	Intensifying
8. Determiners	-	-	-	62	5429	48.7	Elaborating
9. Emphatics	47	722	48.2	-	-	-	Intensifying
10. <i>That</i> relative clauses on subject position	-	-	-	64	214	47.9	Elaborating
11. Present participial clauses	50	84	47.7	-	-	-	Elaborating
12. Pronoun <i>it</i>	63	1482	40.6	-	-	-	Elaborating
13. Sentence relatives	90	42	31.1	-	-	-	Elaborating

As shown in Table 8, the key part-of-speech tags in Marshall Applewhite's sermons which shared discourse functions show that the language of Heaven's Gate is highly elaborative, separatist (othering), intensified, and restrictive. Marshall Applewhite frequently used detailed and complex ideas to convey the structures of his beliefs toward his followers. He also viewed the Heaven's Gate members as insiders which mean a separated group of people that belongs to the heavenly kingdom as one content element of his sermons. Other communication styles of Marshall Applewhite's sermons tend to maximize his personalized ideology through the extensive use of intensifiers and intensifying expressions and keep the situations, understanding, and viewpoints of his followers within his boundary through the frequent use of negativity.

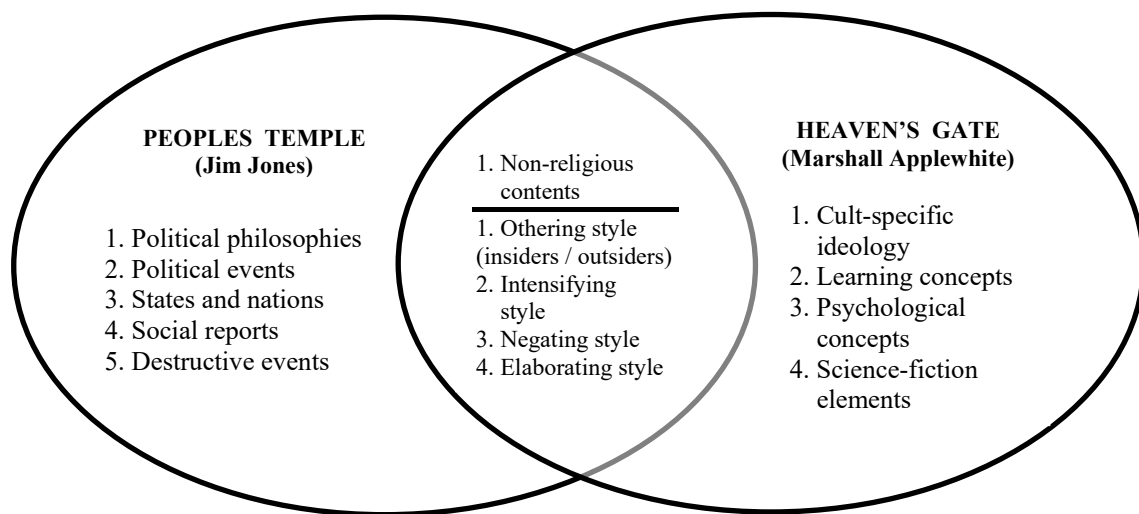
Table 8: Key part-of-speech tags in Marshall Applewhite's sermons

Key part-of-speech tags	M. Applewhite's sermons vs. Billy Graham's sermons			M. Applewhite's sermons vs. Rick Warren's sermons			Communication style themes
	Rank	F	LL	Rank	F	LL	
1. Demonstratives	4	2259	339.6	4	2259	424.2	Elaborating
2. First person pronouns	6	5298	271.1	66	5298	60.9	Othering
3. Pronoun <i>it</i>	9	1991	198.4	65	1991	62.0	Elaborating
4. Conditional adverbial subordinators	14	776	172.7	52	776	79.4	Elaborating
5. Nominalizations	59	1509	60.9	67	1509	60.4	Elaborating
6. Concessive adverbial subordinators	76	119	50.4	31	119	118.7	Elaborating
7. <i>That</i> verb complements	84	572	46.0	11	572	206.4	Elaborating
8. <i>That</i> relative clauses on object position	97	389	40.1	18	389	159.4	Elaborating
9. <i>That</i> relative clauses on subject position	-	-	-	16	384	183.9	Elaborating
10. Demonstrative pronouns	20	1114	157.2	-	-	-	Elaborating
11. Emphatics	22	928	129.1	-	-	-	Intensifying
12. Third person pronouns	-	-	-	50	2550	81.4	Othering
13. Analytic negation	51	1582	66.9	-	-	-	Negating

5 The language of destructive cults

The implications of the key linguistic features in the sermons of destructive cults revealed by the keyness methods are highlighted in this section to explain the characteristics of the language of destructive cults (see Figure 1). The main findings on content features show that the sermons of destructive cults uphold extreme non-religious ideologies which are not the features of the sermons of mainstream religious groups. Jim Jones mainly focused on sociopolitical issues, while Marshall Applewhite mostly focused on his personalized ideology which involves religious concepts reinterpreted from a science-fiction perspective. These findings imply that upholding extreme non-religious ideology allows the leader or the entire congregation to conduct an unusual (or dangerous) act that is not part of the mainstream religious cultures. For Peoples Temple and Heaven's Gate, the content features in their sermons formed structures of beliefs which motivated the members to view mass suicide as a helpful social activity to reach their goals. The Peoples Temple members viewed mass suicide as a revolutionary act to defend their group against social threats (Carter, 2015; Pehanick, 2015), while the Heaven's Gate members viewed mass suicide as a way to reach eternal life in outer space (Ramsland, 2015; Zeller, 2010, 2014).

Figure 1: Contents and communication styles of the sermons of destructive cults



The findings regarding the communication styles based on the patterns of linguistic features show that the language of destructive cults frequently exhibits othering, intensifying, negating, and elaborating styles. Othering is the first communication style that we found in the sermons of destructive cults. This style was formed through the extensive use of personal pronouns such as *they*, *their*, *them*, *we*, *our*, and *us* which form a pattern of occurrence in sermonic discourses that tends to classify and view different groups of people as insiders and outsiders. This style indicates the language of destructive cults based on Jim Jones' sermons and Marshall Applewhite's sermons since the leaders viewed their groups as insiders where they could easily implement their personal beliefs and require their followers to follow them. For Peoples Temple and Heaven's Gate, as groups separated from wider society, the political ideology of Jim Jones led him to impart his perspective on mass suicide as a revolutionary act to his followers against those who threatened them, while the personalized ideology of Marshall Applewhite led him to convince his followers to detach themselves from wider society and leave the planet Earth to enter in the heavenly kingdom (outer space) by committing mass suicide.

The second communication style associated with othering we found in the sermons of destructive cults is intensifying. This style was generally formed through the extensive use of boosters and quantifiers. Linguistic boosters and quantifiers may have the power to boost up the dimension of meaning and implication of discourse contents, which can draw and increase the attention or interest of individuals toward the information. For Peoples Temple and Heaven's Gate, as insiders who viewed their groups as morally right, the leaders used these features to magnify the contents of their sermonic discourses with the aim to convince their followers to follow their beliefs and courses of actions.

The third communication style associated with othering we found in the sermons of destructive cults is negating. This style was formed through the extensive use of negativity such as *t*, *not*, *never*, *nothing* and *no*. Frequent application of negations in discourse may have the power to restrain the situations and actions of individuals which might lead to controlling and coercion. For Peoples Temple and Heaven's Gate, as insiders, the leaders

expressed extreme restrictions to control the situations and actions of their followers while heading to their destructive social activity that was mass suicide.

The final communication style associated with othering we found in Jim Jones' sermons and Marshall Applewhite's sermons is elaborating. This style was formed through the extensive use of conditional adverbial subordinators, independent clause coordination, and *that* relative clauses on subject and object positions (see Tables 7 and 8). For Peoples Temple and Heaven's Gate, as separated groups, the leaders appeared to be highly elaborative in their discourses which allowed them to condition the understanding and perception of their followers in order for them to conceive the non-religious ideologies found in the sermons.

Below are the extracts of Jim Jones' sermons and Marshall Applewhite's sermons showing how the identified communication styles were applied in their sermons. The superscript number one (1) refers to othering style, number two (2) refers to intensifying style, number three (3) refers to negating style, and number four (4) refers to elaborating style.

Extract 1 Jim Jones' sermons

...Some⁴ have stolen children from others, and⁴ they¹ are in pursuit right now to kill them¹ because⁴ they¹ stole their¹ children...I don't³ think it⁴ is what⁴ we⁴ want to do with our¹ babies...It⁴ is said by the greatest² of prophets from time immemorial: "No³ man may take my life from me; I lay my life down."...You¹ can't³ steal people's children. You¹ can't³ take off with people's children without expecting a violent reaction...The world suffers violence, and⁴ the violent shall take it⁴ by force. If we¹ can't³ live in peace, then⁴ let's¹ die in peace. We¹ have been so² terribly² betrayed. Now. Do it now! Don't³ be afraid to die. You¹ 'll see, there⁴ 'll be a few² people land out here. They¹ 'll torture some² of our¹ children here. They¹ 'll torture our¹ people. They¹ 'll torture our¹ seniors...We¹ used to think this⁴ world was – this⁴ world was not³ our¹ home...We¹ said – one thousand² people who⁴ said, we¹ don't³ like the way the world is. Take some². Take our¹ life from us¹. We¹ laid it⁴ down. We¹ got tired. We¹ didn't³ commit suicide, we¹ committed an act of revolutionary suicide protesting the conditions of an inhumane world.

Extract 2 Marshall Applewhite's sermons

...if⁴ you¹ study the meaning in the Hebrew you¹ learned that⁴ Earth doesn't³ just mean planet Earth it⁴ means everything out of the part of the heavens that⁴ belongs to the kingdom of God all² other physical parts of Terra Firma whether its⁴ planet Earth or⁴ other planets or⁴ other parts of the heavens, in other words there⁴ can be what⁴ humans would call space aliens that⁴ certainly² aren't³ in our¹ father's house ... in the last few² years they¹ re not³ the way of our¹ father's Kingdom they¹ are the way of this misinformation people who do not³ believe that they¹ are misinformation they¹ are not³ knowingly misinformation they¹ ve bought into another idea into another information... I'm staying in it⁴ seems restricted to me it⁴ seems that⁴ I'm limited -- don't³ forget we¹ discussed the other day that⁴ you¹ can't³ lose option of rejecting your¹ connection you¹ can't³ lose the option of rejecting the truth that⁴ option always² stays with you¹ even⁴ in the kingdom of heaven.

6 Conclusion

From the sermons analyzed in this study using keyness analyses, there is substantial linguistic evidence to describe objectively the characteristics of the language of destructive cults. The linguistic features in the sermons of destructive cults show extreme non-religious ideologies imparted by the leaders to their followers with the extensive use of othering, intensifying, elaborating, and negating as communication styles. Destructive cults uphold their extreme personalized ideologies which lead them to engage in dangerous activities such as murder and mass suicide. These forms of ideologies may have the power to influence the perspectives of individuals or entire cult congregations through intensifying and elaborating styles, which allow them to view dangerous activities as helpful ways to achieve their goals. The leaders lead their followers to isolation through othering style and control their situations and actions through negating style. We hope that this paper provides a warning system based on the patterns of linguistic features which characterize the language of destructive cults for identifying other potential destructive cults before they can do harm.

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