
Misako Ohkuma

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A CROSS-CULTURAL STUDY OF THE RESPONSE
OF JAPANESE AND AMERICAN STUDENTS
TO CHRISTIAN CONCEPTS

BY

MISAKO OHKUMA

A thesis submitted
in partial fulfillment of the requirements for the
degree Master of Arts, Major in
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A CROSS-CULTURAL STUDY OF THE RESPONSE
OF JAPANESE AND AMERICAN STUDENTS
TO CHRISTIAN CONCEPTS

This thesis is approved as a creditable and independent investigation by a candidate for the degree, Master of Arts, and is acceptable for meeting the thesis requirements for this degree. Acceptance of this thesis does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Harold L. Widvey
Thesis Adviser

Judith Zivanovic
Head, Department of Speech
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CHAPTER I

INTRODUCTION

For the past few decades there has been a converging interest in several fields of study on problems of communication. Especially, concern has been keenly demonstrated for the relation of language to culture and of formal structure to the problems of meaning. This concern results from increasing opportunities to communicate with people from various cultural backgrounds, due to the advancement of technology and transportation. Communication has been taking place between people of different languages, habits, attitudes, thought patterns, philosophy, and religion.

Among varied aspects and phenomena of communication, this study is designed to focus on meanings of concepts connected with culture, which is based on religion. To be specific, this research is designed to determine connotative meanings of Christian concepts structured by individuals from Japanese and American cultures and to examine the influence of each culture on frame of reference of the two different groups of people.
Statement of Purpose

The purpose of this study was to examine the response across two selected cultures toward particular concepts in Christian messages. This research attempted to investigate if there was any difference between Japanese and American students studying at universities in the United States in the response to some words carrying Christian concepts. This study used the semantic differential technique to measure the intensity of response that individuals have toward the concepts. The following null hypotheses relative to Christian concepts were tested for this study:

1. There is no difference in response to the concept "Prayer" between Japanese and American students.

2. There is no difference in response to the concept "Eternal life" between Japanese and American students.

3. There is no difference in response to the concept "God's love" between Japanese and American students.

4. There is no difference in response to the concept "Man's sin" between Japanese and American students.

5. There is no difference in response to the concept "God's word" between Japanese and American students.
6. There is no difference in response to the concept "Faith" between Japanese and American students.

7. There is no difference in response to the concept "God's forgiveness" between Japanese and American students.

8. There is no difference in response to the concept "Savior for our sins" between Japanese and American students.

9. There is no difference in response to the concept "God's plan for your life" between Japanese and American students.

10. There is no difference in response to the concept "Separation from God" between Japanese and American students.

**Origin and Justification of the Study**

According to the 1983–84 official report of the Institute of International Education, there were 338,890 foreign students enrolled in institutes of higher education in the United States. Of these, 13,010 students were from Japan.¹ These individuals come to face a different way of life and value system here in the United States. In addition to this cultural milieu, they often encounter Christian messages. Since evangelical Christians "attempt to carry the message of salvation down to the world of men,"² these foreign students become
an accessible mission field. Communication occurs between individuals of different cultural and religious background--a message sender of Christian background and a receiver of non-Christian Japanese background. "Other people's meanings are always slightly different from our own--often, radically different," and a receiver decodes a message according to the meanings of concepts he/she has developed as he/she acquires various code systems. Therefore, it would be difficult for the receiver to understand a message loaded with some concepts whose connotative meanings do not exist, or are not familiar in his/her culture.

After World War II, Japan adopted Western economic principles and some other elements of Western culture. However, although Christianity is a basic attribute of Western culture, it has little impact in Japan. Jared Taylor reports that "fewer than one percent of all Japanese are Christians. This is one of the lowest figures in the world." As receivers of Christian messages, most Japanese have little exposure to Christian concepts such as "sin," "forgiveness," "Savior," and "God." On the other hand, the Americans might have these concepts as a part of their life. This influence from the receiver's culture may affect the ways in which messages are interpreted.
This study was conducted to examine connotative meanings that Japanese and American students studying in the United States had of these Christian concepts as measured by the semantic differential technique.

**Personal Experience Initiated Interest in the Study**

This author has been exposed to the people and the culture of several nations since the arrival in the United States in fall, 1984, and also has become especially interested in world religions. This researcher was brought up in Japan in a culture with roots in Buddhism, Confucianism, and Shintoism. Here in the United States this author had opportunities to talk about theological issues with Christian friends and wrote a report for the course, General Semantics, based on this experience. While writing this report entitled "Christian Fundamentalists: My Response," this researcher realized that she had difficulty finding meanings for the Christian messages and felt uncomfortable with them. Christian concepts did not appear to be intelligible or have a reasonable basis to a Japanese student whose culture, according to Ruth Benedict's *The Chrysanthemum and the Sword*, is not based on "guilt" or "consciousness of sin" as in Christian culture of the United States.\(^5\)

In Persuasion course this author learned about the semantic differential, which consists of a series
of adjective-bipolar, seven-step scales and is the "technique to measure the intensity of reaction individuals have toward words and concepts," indicating "the differences in connotative meaning that can arise between . . . individuals as a result of different experiences." Thinking about communication between Christians and the Japanese, this researcher became interested in using the semantic differential technique to examine the response of these two cultural groups to the particular concepts in Christian messages.

Other Research That Justifies Further Study

A number of studies have examined the generality of affective meaning systems across selected language and culture groups, using the semantic differential as a measure for people's frame of reference.

Hideya Kumata and Wilbur Schramm in 1956 did a pilot study to explore the possibilities of using the semantic differential in a translated form in other cultures, using Japanese, Korean, and American college students at a midwestern university in the United States. They found from the results that perhaps there is a pervasive semantic frame of references used by humans, and comparative meanings cross-culturally may be promising and hopeful.
Hideya Kumata in 1958 made a factor analytic study of semantic structures for his doctoral dissertation. He conducted a bilingual study to check for the influence of language itself, using Japanese and Korean students studying in the United States with the tests in their native language and English and American students with the tests in English only. A monolingual study was also done to examine the influence of culture plus language, using monolingual students in Japan and the United States. In this study he concluded that meaning of concepts differ as a function of culture and that the semantic differential can be utilized in cross-cultural research.

George J. Suci in 1960 studied semantic structures, using American Southwest culture groups, that is, Navaho, Hopi, Zuni, Spanish, and English-speakers. This research also revealed the similarity of semantic structures in different groups of subjects.

Yasumasa Tanaka, Tadasu Oyama, and Charles E. Osgood in 1963 further examined the generality of the affective semantic space, whose factors are labeled Evaluation, Potency, and Activity. They used as subjects Japanese students in Japan and American students in the United States and let them judge the colors, abstract words, and line forms on translation-equivalent scales
in their native language. As a conclusion of this study, it was found that the characteristic attribute of a concept or a concept class exerts a selective influence upon semantic judgments by causing rotation of scales within the semantic space, although a few exceptional scales, nonetheless, display specific cultural uniqueness.

In consideration of the results of these studies, the semantic differential was found to be effective to measure and compare Japanese and American response to concepts.


Kennard examined communication between Christians and Hindu students from India studying in the United States. After analyzing the interviews with the Hindus about impressions and interpretations of Christianity, she pointed out some inappropriate aspects of Christian communication of their faith to the Hindus and suggested
better ways. This study laid the emphasis on the theological aspect in the two religions and on the problem-solving from the theory of educational psychology. This study was beneficial for analyzing the problems that Christians have for cross-cultural communication.

Shipp analyzed communication within and across cultures, based on communication models presented in Message and Mission by Eugene A. Nida. This study was a useful source of information for cross-cultural communication between Christians and non-Christians.

On the foundation of the above previous studies, this research examined the response of Japanese and American students to particular concepts in Christian messages measured by the semantic differential technique.

Procedures

Investigation of the Research Resources

1. The following sources were surveyed to determine if any previous studies had been undertaken to examine the response of Japanese and American students to Christian concepts, using the semantic differential technique.


Dissertation Abstracts International: The Humanities and Social Sciences, Ann Arbor, Michigan: University Microfilms, 1956-84.


The survey of the preceding literature revealed no duplicate studies.

2. The following studies were examined and revealed an interest in the area considered in this study, but none duplicated the study.


Method of Gathering Data

1. Ten Christian concepts were selected to structure a questionnaire for this study. The chosen concepts were the ones which appeared most frequently and were found to be most fully developed in Christian messages as the result of counting the frequency of occurrence of each concept in the eleven evangelical tracts given to Japanese students by Christians. The selected concepts were checked by Dr. David Fee of the Department of Philosophy and Religion at South Dakota
State University to validate their selection as Christian concepts.

2. Fifteen bipolar adjective scales to measure Christian concepts were selected from the seventy-six scales used in the Thesaurus factor analysis of Charles E. Osgood and his associates. The scales were selected to be relevant to the types of concepts.

3. The written instructions adapted the usual semantic differential instructions for use.

4. The questionnaire, structured with ten Christian concepts and fifteen bipolar adjective scales, was sent to sixty Japanese students who were registered as full-time students at the University of Minnesota. They were also asked the questions on their duration of stay in the United States and religious background. Their addresses were obtained from International Student Adviser's Office at the University of Minnesota. A cover letter written in Japanese and an envelope for return were enclosed together with the questionnaire. (See Appendixes A and B.)

5. The questionnaire asked the Japanese students to indicate whether they were Christian. It was felt that a Japanese who was a Christian would not reflect the Japanese cultural background.

6. Because the lists from which the Japanese students were chosen were nearly six months old when this
study began, and because some would be rejected for other reasons, a 50 percent return rate was established as the minimum acceptable. If fewer than thirty returns were received after follow-up letters were sent, other Japanese students from other campuses would be asked to respond.

7. Four American students were selected randomly from each of the sixteen lab sections in SpCm 101 Fundamentals of Speech in the spring semester, 1986 at South Dakota State University. Sixty-four American students were given the same questionnaire as was sent to the Japanese students through their instructors. (See Appendixes C and D.)

Analysis of Data

1. The raw data obtained with the semantic differential are a collection of check marks against bipolar scales. To calculate the scores, the digits +3, +2, +1, 0, -1, -2, and -3 were assigned to each of the seven positions on the fifteen scales. A check mark which was put nearest to one end of the scale where the adjective has a more evaluative, potency, or activity factor than the adjective at the other end was calculated as +3. Therefore, the highest score might be +45, and the lowest might be -45.

2. The t test was chosen to measure the relationships established in the hypotheses of this study. The
_t_ test is one of the simplest and most common types of statistical analysis. Since this study investigated differences in response to Christian concepts between Japanese and American students, it was possible to use a _t_ test, which shows the significance of difference of means of two independent samples. According to Kerlinger:

> The most obvious analysis of the data . . . would be to compare the means of concepts. . . . With the data of a single individual, there is question of the legitimacy of the use of the usual statistical tests of significance. If the scores . . . [are] averages--means of medians--of the scores of a group of individuals, it would be possible to use such tests. In this case, we might be interested in the significance of the differences between the . . . concept means. . . . Such analytical possibilities should be clear to the student.

3. The _t_ test demonstrates the significance of the difference by using a table of critical values of the _t_ distribution. The determination of the level of significance is important because this level is arbitrarily set by the researcher before running the study. According to _The Practical Statistician_, "the .05 level is accepted as the most appropriate choice."¹⁷ For this study the .05 level of significance was selected to investigate the probability of rejecting or not rejecting the null hypotheses.
Possible Contributions

This proposed study offers potential contributions to research on the problems of communication between people of different cultural and religious backgrounds. This research could provide an insight into the connotative meanings of concepts in Christian messages and their effects on the Japanese. The study could be utilized by evangelical Christians who wish to communicate their beliefs to the Japanese. This research demonstrates the influence of culture on people's frame of reference and their meanings of concepts. This research also demonstrates a use of the semantic differential technique to measure connotative interpretations of religious concepts across cultures.
ENDNOTES


13 The tracts examined and referred to for this study were those distributed to foreign students by Christian groups at South Dakota State University:


The Sunday School Board of the Southern Baptist Convention, "I'd Like You To Meet My Friend," Nashville, Tennessee.


The frequency of occurrence of each concept and its synonymous word or phrase in these tracts are as follows: Prayer, 35; Eternal life, 25; God's love, 22; God's word, 22; Man's sin, 22; Faith, 19; God's forgiveness, 17; Savior for our sins, 17; God's plan for your life, 12; Separation from God, 8.

15 See Osgood, Suci, and Tannenbaum, pp. 82-84 for an example of the instructions generally given for the semantic differential.


CHAPTER II

REVIEW OF PREVIOUS STUDIES

This study was designed to examine the responses of Japanese and American students to selected Christian concepts as measured by the semantic differential, and to determine whether there is any difference in the meanings of Christian concepts as understood by the students from the two selected cultures. This chapter will investigate the previous studies of cross-cultural communication of Christians and will examine the use of the semantic differential to examine the generality of the semantic space across cultures.

The Studies on Cross-Cultural Communication

Many studies have been conducted on communication across cultures. However, very few studies have been done regarding cross-cultural communication with a focus on religious differences.

Two studies of the impact of cultural background on religious communication have been found and examined. One is Eva Marie Kennard's doctoral dissertation, "Communication of the Christian Faith to Hindu Students on an American Campus: A Critical Analysis." The other

Eva Marie Kennard in 1965, analyzed Christian communication to Hindu students studying in the United States. She attempted to validate the hypothesis that "the majority of Hindu students enrolled in colleges and universities in the United States have faulty and inadequate concepts of the Christian faith partially as the result of a failure in communication on the part of American Christians."¹ To examine this hypothesis, Kennard had interviews with Hindu students on American campuses. She did a descriptive analysis of the data.

Through the interviews Kennard attempted to examine the impressions and interpretations that Hindu students had of Christianity. She asked them about the similarities and differences between Christianity and Hinduism which the students found, their impressions of the Christian worship services, the appealing and offensive aspects of Christianity for them, and their understanding of Christian faith.²

After examining the results of the interviews, Kennard found that "Although the Indians had gleaned smatterings of Christian truths, the majority held gross
misconceptions of the Christian gospel, despite their contacts with American Christians and their attendance at Christian worship services."³ Thus, she concluded that "The failure of Hindu students to comprehend the essentials of the Christian faith is partially the result of the Christian's inability to communicate his faith intelligibly and convincingly."⁴ Kennard concluded that her hypothesis was validated.

Kennard applied certain principles of educational psychology to a partial solution for the problem of communication breakdown between Christians and the Hindu students. For "the task of educational psychology . . . is to understand how the learning processes of students may be most effectively guided."⁵ As a teacher needs to understand the nature and characteristics of his student, so does the Christian need "to utilize his knowledge of the learning processes in communicating the Christian gospel to Hindu students."⁶

Kennard used interviews to secure information on what occurred between a communicator of Christian faith and a receiver of Hindu background. She concluded that Hindu students did not understand many of the Christian concepts in the same way as Christians did. She assumed that this failure of the Hindus was partially due to the Christian's ineffective communication. Her
study did not use objective instruments to examine possible specific differences in the meanings of Christian concepts as they are understood by Hindus and Americans.

To determine whether statistically significant differences in meanings do exist, this study will compare the responses of Japanese and American students to Christian concepts, using the semantic differential and the statistical analysis of the data. This approach should reveal some cultural differences in meaning of Christian concepts.

Glover H. Shipp in 1967 attempted to acquaint the Christian missionary with cross-cultural communication "to equip him for more effective communication across barriers of culture and language." He made a review of studies on cross-cultural communication concerned with the Christian missionaries working abroad. He approached his thesis from a broad base, rather than limiting it to one particular aspect of the subject. In the introduction of his study Shipp said:

To share the message of Jesus with another person whose language, religious experience, and total cultural setting are radically different from those of the communicator is a vastly more complex exercise in communication.

To solve the difficulties of communicating with someone of a different culture, Shipp began his study with the definition of the word "communication." He
defined it as "the exchange of ideas between men or groups of men." It is a vital activity for human experience and the perpetuation of its varied cultures and institutions. There are a number of means of communication, including facial expression and gesture, touch, pictures, visual signs, mathematical and scientific signs and symbols, music, dance, concepts of time and space, attitudes toward organization, and the use of formal, informal, and technical learning. However, Shipp concluded:

Language is human symbolic activity in its highest form. It clarifies and transmits the culture of a particular people; it develops and preserves human institutions; and it is, in fact, the very essence of human communication.

Shipp felt that language is a strong factor in shaping thought processes and defining mental classifying systems within the culture. "An individual thinks and reasons in the logical processes imposed by his mother tongue." Shipp examined the structure and process of cross-cultural communication, using a series of communication models taken from Message and Mission by Eugene A. Nida. Since the culture of a people shapes a pattern of thought, basic philosophy, and habit through generations in their society, all the elements in the culture "are intimately related to the process of communication within that culture."
The following model, Figure 1, represents communication across cultures. Within a particular culture, $\Delta$, the message sender, the message, and the receiver are all included in the culture and influenced by its philosophy, thought patterns, attitudes, habits, and language. Communication within another culture, $\square$, has this process, too.

Figure 1. A model of cross-cultural communication

Since all parties concerned in each culture are influenced by that culture, the receiver in a second culture interprets both the sender and the message as they are colored by his culture. Therefore, it is not easy for a receiver in a different culture to understand a message in the same way as it is interpreted in the culture from
which the message is transmitted. This is because the receiver's culture does not include a similar connotative meaning of a word the sender wants the receiver to understand. The receiver's language may not even include the word or its equivalent. "No symbols can have meaning of and through themselves, but they always stand for something else. This assigning of 'meaning' is done by the culture."^15

In consideration of the interrelationship between culture, language, and communication, some important factors for effective communication in another culture are suggested:

1. In speaking to those with limited knowledge of the total message the communicator must select from the revelation those features which are culturally relevant.^16

2. He must find certain cultural parallels which will make such a message significant within the immediate context of people's lives.^17

3. He must master well the language of those to whom he communicates a message, as a means of reaching their culture. ^18

Ultimately, attitude is a basic factor in cross-cultural communication. "Cultural sensitivity," or a deep understanding of and respect for what is good in another culture is required especially for communication across cultures. ^19
After exploring various aspects of cross-cultural communication, Shipp came to the conclusion: all the human beings are same in the sense that they share common, universal experience and needs; the message of the Good News, therefore, must be presented in the words which speak to the heart, and this requires an insight into the culture of the message receiver. \(^{20}\)

Shipp developed theory about religious communication but did not actually test the conclusions. While he conducted a survey of missionaries who had worked in foreign missions, he did not make any attempt to directly establish differences in meaning of religious concepts between cultures. This study will attempt to determine whether measurable differences in meanings exist.

The two studies of the relationship of culture to Christian communication were descriptive analyses of theory and of data secured through unstructured interviews. They were also prescriptive, offering guidance to those people who would serve as missionaries. They were not empirical studies—the studies which use a carefully structured method and accurately observe original occurrence in a communication phenomenon. These researchers did not attempt to determine the precise differences in the meanings of Christian concepts held by Americans and by people from non-Christian cultures.
Both studies assumed that significant differences existed between cultures, but neither study included tests to establish the difference in meanings of Christian concepts. However, these two studies demonstrate a scholarly concern for the study of cross-cultural communication between people of different religious backgrounds. They also demonstrate a need to test the assumptions that meanings for Christian concepts differ between cultures.

The Studies on the Semantic Differential

Since 1957 when Charles E. Osgood and his associates published *The Measurement of Meaning*, the semantic differential has attracted attention from researchers in communication, speech, attitude change, advertising, and psychotherapy. It is a method using bipolar adjectives on seven-interval scales to measure meanings and/or attitudes that individuals have toward concepts. Subjects respond to concepts by checking marks on the scales to describe each concept. "Differences in the patterns of check marks on the scales are assumed to represent . . . differences in groups of subjects judging the same concepts." 21

A series of studies using the semantic differential technique provided evidence for the existence of a limited number of connotative semantic factors—evaluation, potency, and activity. Without equivalence of such a
semantic space, communication between individuals concerning the meaning of their concepts is seriously impeded. A psychological theory of meaning was expanded further to determine the generality of the semantic space across cultures.\(^{22}\)

Although there is still some room for questioning the reliability and validity of the scaling procedure,\(^{23}\) "It seems clear that one can obtain useful information from such an instrument if it is carefully constructed and validated for the specific application."\(^{24}\)

Osgood expressed his opinion on the semantic differential in 1971, introducing a new semantic-space vehicle called the Semantic Interaction Technique. He said that "This vehicle has much greater range for semantic space exploration . . . but for getting down into the guts of human behavior, the old SD (semantic differential) still has its values."\(^{24}\) This author found no studies after 1973 regarding reliability and validity of the semantic differential, but many of the textbooks on communication theory introduce this instrument as a useful way of measuring meanings.

Four of the cross-cultural studies using the semantic differential to examine the generality of the semantic space were investigated to demonstrate the usefulness of the semantic differential for this study.
Hideya Kumata and Wilbur Schramm in 1956 attempted to explore the possibilities of using the semantic differential in a translated form in other cultures. They examined three areas of concern:

1. Whether the same semantic factors operate in the judgments of different culture groups as is seen in the American culture group.

2. Whether there is a difference in a bilingual's meaning judgments in one language and the other.

3. Whether the meaning of certain internationally-important concepts differs in different culture groups.

Twenty scales and thirty concepts were selected for the study. The concepts were selected with a view toward obtaining cultural meanings of certain ideological terms, countries, nationalities, and personalities. Three groups of students at a midwestern university were used for the subjects: 25 Japanese; 22 Koreans, and 24 Americans. Length of residence in the United States for the two foreign groups ranged from three months to six years. The Korean and Japanese groups received one test in English and the other in their native language. All instructions were given in the language appropriate to the version of the test in order to encourage "thinking" in one language. The American group received the identical English test form.
The results of the study showed:

1. There was not a significant difference between the Japanese language version and the English language version for the Japanese group. Similarly, there was no significant difference between the Korean language version and the English one for the Korean group.

2. The first and dominant factor might be identified as evaluative, and the second factor might be labeled as dynamism, which combined both the potency and activity factors. This order of the semantic factors was relevant with that of the American culture group.

3. The American, Japanese, and Korean groups differ most in their judging concepts of their own country and people.\(^2^7\)

Kumata and Schramm, based on this pilot study, confirmed the possibility of a pervasive semantic frame of references used by humans, or at least Korean, Japanese, and American college students studying in the United States, and the possibility of using the semantic differential for cross-cultural studies of comparative meanings.\(^2^8\)

Hideya Kumata in 1958 explored the feasibility of using the semantic differential as a cross-cultural measuring instrument and the tenability of the Sapir-Whorf linguistic relativity hypothesis in the area of connotative meaning.\(^2^9\) He designed two kinds of experiments: the
bilingual study to check the influence of language itself and the monolingual study to examine the influence of culture plus language.

For the bilingual study, Kumata used bilingual Japanese and Korean exchange students in the United States and monolingual American college students. They were given the semantic differential test which consisted of twenty scales and thirty concepts. The Japanese and Korean groups took the forms once in their native language and once in English while the American group took the test twice in English. For the monolingual study, monolingual college students in Japan and the United States were used. The test form was constructed with thirty-six scales and twenty-two concepts.30

The bilingual study showed that the language used did not produce different semantic dimensions; the first factor was identified as evaluation, and the second was labeled as dynamism. However, individual scale usage did show some differences as a function of the culture rather than of language. Meanings of concepts differed also as a function of culture. The monolingual study showed these differences, and the first two factors in the study were also identified as evaluation and dynamism.31

From the results of his study, Kumata drew these conclusions:
1. Use of different languages does not produce different semantic structures.

2. Differences in culture do not produce different semantic structures.

3. Use of certain scales does differ as a function of culture.

4. Meaning of concepts does differ as a function of culture.

5. The semantic differential can be utilized in cross-cultural research.

6. Comparability can be obtained in which differences in meanings of concepts can be measured between different culture and language groups.

7. The Sapir-Whorf position of different languages producing different world-views is not supported by these findings in the area of dimensions of connotative judgment.\textsuperscript{32}

Furthermore, George J. Suci in 1960 attempted to extend the comparison of semantic structures to subjects from the American Southwest--Spanish, Hopi, Zuni, and Navaho subjects.\textsuperscript{33} He used 32 Spanish speakers, 28 Hopi, 26 Zuni, 27 Navaho Indians for the experimental subjects, and thirty-three Americans for the control subjects. All the experimental subjects were fluent speakers of their native language, but they also spoke English with varying degrees of competence.
Suci selected fifteen bipolar adjective scales and ten concepts for the semantic differential, after investigating common and translatable adjectives and concepts shared by each cultural group. Because some of the concepts touched on sensitive areas, new concepts had to be substituted in some cases. 34

The results of his study showed that with the exception of the Navaho group, there was a high degree of similarity in the semantic structure of subjects from different cultural backgrounds. The first factor was interpreted as evaluative and the second was interpreted as dynamism, or activity-potency. 35

In 1963 a difference of factorial composition in the semantic space between one class of concepts, such as words, and the other, such as sounds or colors was examined by Yasumasa Tanaka, Tadasu Oyama, and Charles E. Osgood. 36 Sixteen colors, fourteen abstract words, and fourteen line forms were used as concepts for the semantic differential. These stimuli were measured by a 35-scale form of semantic differential. The scales were selected partly to represent the three dominant factors and partly to reflect the meaningful aspects of judging the colors, abstract words, and line forms used in this study. The subjects for the test were 108 Japanese and 67 American college girls. Forty-three Japanese and twenty-one American subjects
judged the colors; twenty-five Japanese and twenty-three Americans rated the abstract words; and forty Japanese and twenty-three Americans judged the line forms. Both of the subjects took the test in their native language.

The results of the study demonstrated cross-cultural generality along with cross-concept uniqueness. More specifically, it was found that:

1. The first three most salient factors were identifiable as evaluative, potency, and activity in all the concept classes, although the relative importance of these factors across concept classes was changed.

2. The shifts in relative salience tended to be parallel for both subject groups. An activity factor was most salient for both Japanese and American groups when judging the colors. In the same way, the abstract words were related to an evaluative factor and the form lines were related to a potency factor.

3. The shifts of scales within the three-factor scale tended to be similar across the subject groups.

4. Cross-concept uniqueness was demonstrated both by different orderings of factor salience and different compositions of the factors for three different concept classes.37

These results led to the conclusion that the characteristic attribute of a concept class caused rotation scales within the semantic space, although
the orderings of factor salience and the shifts of scales
within a concept class tended to be parallel across
cultures. 38

The four studies above attempted to provide
evidence for a universal framework underlying certain
connotative aspects of language. They also indicated
the possibility of using the semantic differential for
cross-cultural studies of comparative meanings. However,
these studies did not attempt to examine differences
of connotative meanings of Christian concepts across
cultures.

This study will proceed to use the semantic
differential as the instrument for an actual experiment
to measure and compare the meanings of Christian concepts
between Japanese and American students studying in the
United States. This study will investigate possible
specific differences in the meanings of Christian concepts
as perceived by Japanese and American students.
ENDNOTES


2 Ibid.

3 Ibid., p. 160.

4 Ibid.

5 Ibid., p. 161.

6 Ibid., p. 162.


8 Ibid., p. 2.

9 Ibid., p. 8.

10 Ibid., p. 11.


12 Ibid., p. 40.


14 Ibid., p. 42.


16 Shipp, p. 58.

17 Ibid.

18 Ibid., pp. 60-75.

19 Ibid., pp. 89-100.
20 Ibid., pp. 116-124.


22 Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, 1973), pp. 564-67. Kerlinger defines Osgood's terms by example. Evaluation factor of the semantic space includes such adjectives as good-bad and pleasant-unpleasant; potency factor relates to strength and includes strong-weak and rugged-delicate; activity factor relates to motion or action, fast-slow and hot-cold.

23 Criticisms, including both positive and negative evaluations of the semantic differential, are summarized in Darnell's "Semantic Differentiation," in Methods of Research in Communication, pp. 181-196.

24 Darnell, p. 194.


27 Ibid.

28 Ibid.

29 Ibid.


31 Ibid.

32 Ibid.

33 Ibid.

35 Ibid.

36 Ibid.


38 Ibid.

39 Ibid.
CHAPTER III

ANALYSIS OF DATA

This chapter will analyze the data gathered and provide the rationale for statistical analysis of each of the ten hypotheses presented in Chapter I. These null hypotheses were tested to determine the possible differences between Japanese and American students in response to each of the ten Christian concepts: Prayer, Eternal Life, God's love, Man's sin, God's word, Faith, God's forgiveness, Savior for our sins, God's plan for your life, and Separation from God. The semantic differential was completed by a group of Japanese college students in the United States and a group of American college students. The data from the tests were analyzed statistically to measure the significance of observed differences.

The Data Collected

Among sixty questionnaires sent to the Japanese students at the University of Minnesota, thirty were filled out and returned within two weeks after mailing them. Twenty-four of them were eligible for this research. Six responses from Christian Japanese were eliminated. Since at least six more responses were
needed, follow-up calls were conducted through two of
the Japanese students who completed the questionnaire,
and three more responses were returned. To secure
additional responses, five Japanese subjects from
Brookings, South Dakota were asked to answer the
questionnaire. Finally, the total of thirty-two responses
from Japanese subjects were obtained.

Forty-three out of sixty-four questionnaires
were collected from American students randomly selected
from SpCm 101 Fundamentals of Speech classes at South
Dakota State University in the spring semester, 1986.

This chapter presents the data and its analysis
as it relates to each of the hypotheses examined in this
study.

The Computation of the Data

The t test was applied to the data, and the .05
level of significance was established for this study.
The t value reaching the .05 level of significance means
that Japanese and American subjects respond to a concept
in the same way by chance only five times in one hundred
trials. This is regarded as significant and sufficient
to reject a null hypothesis. The exact level of
significance will be reported for each of the t tests.

The results of the t test are given in the tables
with the analysis of each hypothesis. The tables
demonstrate the sum of individual scores, the mean for Japanese subjects and for American subjects, and the achieved value of $t$.

The computing formula which was used for $t$ test is as follows:

$$
t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{\sum X_1^2 - (\sum X_1)^2}{n_1} + \frac{\sum X_2^2 - (\sum X_2)^2}{n_2}\right) \left(\frac{1}{n_1 + n_2 - 2}\right)}}{\sqrt{\left(\frac{n_1 + n_2}{n_1 n_2}\right)}}
$$

where $X_1$ = any score from Group 1
$\bar{X}_1$ = the mean of Group 1
$n_1$ = the number of subjects in Group 1
$X_2$ = any score from Group 2
$\bar{X}_2$ = the mean of Group 2
$n_2$ = the number of subjects in Group 2.

All the scores for each of the subjects appear in Appendix E. Also, the questionnaire used for this study and the cover letters given to Japanese and American students appear in Appendixes A, B, C, and D.

**Analysis of Each Hypothesis**

**Hypothesis 1.** There is no difference in response to the concept "Prayer" between Japanese and American students.

The results of the analysis of the first hypothesis are presented in table 1. The achieved value
of \( t \), 5.70, demonstrates that there is a significant difference in response to the concept "Prayer" between Japanese and American students.

TABLE 1.--Comparison of the response to the concept "Prayer" between Japanese and American subjects

<table>
<thead>
<tr>
<th>Sum of Individual Scores</th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Subjects</td>
<td>154</td>
<td>953</td>
</tr>
<tr>
<td>Mean</td>
<td>4.81</td>
<td>22.16</td>
</tr>
</tbody>
</table>

Critical value of \( t \) with \( df \) 73 for significance at .05 level = 2.00.

Achieved value of \( t \) = 5.70.

The value of \( t \) exceeds 3.46, the critical value required for the .001 level of significance. This means that the response of Japanese and American subjects would be the same only one time in one thousand trials. This provides evidence that the null hypothesis can be rejected.

Hypothesis 2. There is no difference in response to the concept "Eternal life" between Japanese and American students.

Table 2 provides the results of comparing response to the concept "Eternal life" between Japanese and American students. The achieved value of \( t \), 7.49, shows there is a significant difference between the two groups of
subjects. The mean of the scores demonstrates the tendency that the American subjects have a more complete meaning for "Eternal life" while the Japanese do not have a clear attitude toward it. The value of $t$ achieved not only the .05 level of significance but also the .001 level of significance. The null hypothesis can be rejected.

**TABLE 2.**—Comparison of the response to the concept "Eternal life" between Japanese and American subjects

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Individual Scores</td>
<td>150</td>
<td>1073</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>4.69</td>
<td>24.95</td>
</tr>
</tbody>
</table>

Critical value of $t$ with df 73 for significance at .05 level = 2.00.

Achieved value of $t$ = 7.49.

**Hypothesis 3.** There is no difference in response to the concept "God's love" between Japanese and American students.

The difference in meaning of the concept "God's love" between Japanese and American subjects also appeared the same as that of "Prayer" and "Eternal life." The Americans tend to show a more positive response to "God's love" than the Japanese. The value of $t$ reached .001 level of significance. A significant difference was
found between the subjects from the two different cultures. The null hypothesis can be rejected.

TABLE 3.--Comparison of the response to the concept "God's love" between Japanese and American subjects

<table>
<thead>
<tr>
<th>Sum of Individual Scores</th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>246</td>
<td>1423</td>
<td></td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>7.69</td>
<td>33.09</td>
</tr>
</tbody>
</table>

Critical value of $t$ with df 73 for significance at .05 level = 2.00.

Achieved value of $t$ = 7.27.

_Hypothesis 4._ There is no difference in response to the concept "Man's sin" between Japanese and American students.

The data in Table 4 presents the results of analyzing the response of Japanese and American subjects to the concept "Man's sin." The achieved value of $t$, 0.90, shows that there is no significant difference between the two groups of subjects. Comparison of the means demonstrates that the Americans had higher scores than the Japanese. However, it is not a significant difference and the null hypothesis cannot be rejected.
TABLE 4.--Comparison of the response to the concept "Man's sin" between Japanese and American subjects

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Individual Scores</td>
<td>14</td>
<td>91</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>0.44</td>
<td>2.12</td>
</tr>
</tbody>
</table>

Critical value of $t$ with df 73 for significance at .05 level = 2.00.

Achieved value of $t = 0.90$.

**Hypothesis 5.** There is no difference in response to the concept "God's word" between Japanese and American students.

A significant difference does exist between the meaning of "God's word" for the Japanese subjects and for the American subjects. The value of $t$ achieved .001 level of significance greater than the .05 level of significance. The American subjects recognized "God's word" as having strong positive meanings while Japanese subjects did not. The significant difference in the response of Japanese subjects and American subjects to the concept "God's word" allows the rejection of the null hypothesis as shown in Table 5.
TABLE 5.--Comparison of the response to the concept "God's word" between Japanese and American subjects

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Individual Scores</td>
<td>178</td>
<td>1296</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>5.56</td>
<td>30.14</td>
</tr>
</tbody>
</table>

Critical value of $t$ with df 73 for significance at .05 level = 2.00.

Achieved value of $t = 7.38$.

**Hypothesis 6.** There is no difference in response to the concept "Faith" between Japanese and American students.

As table 6 demonstrates, there is a significant difference in the response to the concept "Faith" between the Japanese and American subjects. The achieved value of $t$, 8.05, is far greater than 3.46, the critical value.

TABLE 6.--Comparison of the response to the concept "Faith" between Japanese and American subjects

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Individual Scores</td>
<td>369</td>
<td>1132</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>11.53</td>
<td>36.52</td>
</tr>
</tbody>
</table>

Critical value of $t$ with df 73 for significance at .05 level = 2.00.

Achieved value of $t = 8.05$. 
of $t$ at .001 level. The Americans tend to respond to the concept of "Faith" more positively than the Japanese. The null hypothesis can be rejected.

Hypothesis 7. There is no difference in response to the concept "God's forgiveness" between Japanese and American students.

The results of the analysis of the meaning of "God's forgiveness" for the Japanese and the Americans are presented in table 7. There is a significant difference between the two groups of subjects. For the American subjects, "God's forgiveness" had a much more positive meaning than for the Japanese subjects. The value of $t$ achieved, 7.95, is greater than that needed for .001 level of significance. The null hypothesis is rejected.

TABLE 7.--Comparison of the response to the concept "God's forgiveness" between Japanese and American subjects

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Individual Scores</td>
<td>59</td>
<td>1261</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>1.84</td>
<td>29.33</td>
</tr>
</tbody>
</table>

Critical value of $t$ with $df$ 73 for significance at .05 level = 2.00.

Achieved value of $t = 7.95$. 

Hypothesis 8. There is no difference in response to the concept "Savior for our sins" between Japanese and American students.

The value of \( t \) from the results of comparing the responses of the Japanese and the Americans to the concept "Savior for our sins" reached 8.45. This value achieved .001 level of significance. It is apparent that there is a significant difference in the meaning that each group of subjects has toward the concept "Savior for our sins." The concept tends to mean much more to the Americans than the Japanese. The null hypothesis can be rejected.

<table>
<thead>
<tr>
<th>Sum of Individual Scores</th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-72</td>
<td>1181</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>-2.25</td>
<td>27.47</td>
</tr>
</tbody>
</table>

Critical value of \( t \) with df 73 for significance at .05 level = 2.00.

Achieved value of \( t = 8.45. \)

Hypothesis 9. There is no difference in response to the concept "God's plan for your life" between Japanese and American students.
The data in table 9 shows the existence of difference in the response of the Japanese and the Americans to the concept "God's plan for your life."
The American subjects presented a positive attitude while the Japanese subjects responded negatively toward "God's plan for your life." The value of $t$ reached .001 level of significance, and this led to rejecting the null hypothesis.

TABLE 9.--Comparison of the response to the concept "God's plan for your life" between Japanese and American subjects

<table>
<thead>
<tr>
<th>Sum of Individual Scores</th>
<th>Number of Subjects</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese</td>
<td>-169</td>
<td>-5.28</td>
</tr>
<tr>
<td>Americans</td>
<td>931</td>
<td>13.60</td>
</tr>
</tbody>
</table>

Critical value of $t$ with $df$ 73 for significance at .05 level = 2.00.

Achieved value of $t$ = 3.90.

**Hypothesis 10.** There is no difference in response to the concept "Separation from God" between Japanese and American students.

In analysis of the last result a more exact calculation was also used for critical value of $t$ with $df$ 73 for significance at .05 level. Actually, the value, 2.00, is that of $df$ 60. A more accurate critical value
of $t$ with $df$ 73 can be obtained through extrapolating the value between $df$ 60 and $df$ 80, that is, 2.00 and 1.99. The precise critical value of $t$ with $df$ 73 for significance at .05 level is 1.9935. And the value of $t$ reached 1.9970. Since the achieved value of $t$ was greater than the critical value of $t$, it can be concluded that the difference in the response of the Japanese and American subjects to the concept "Separation from God" was significant. This concept had a more negative meaning for the Americans than the Japanese. The results of the analysis of this difference allow rejection of the null hypothesis.

TABLE 10.--Comparison of the response to the concept "Separation from God" between Japanese and American subjects

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Individual Scores</td>
<td>-114</td>
<td>-457</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>Mean</td>
<td>-3.56</td>
<td>-10.63</td>
</tr>
</tbody>
</table>

Critical value of $t$ with $df$ 73 for significance at .05 level = 2.00.

Achieved value of $t$ = 2.00.

Summary

This chapter provided a statistical analysis of the data collected to examine each of the ten null hypotheses advanced earlier. Data from the semantic
differential completed by the two groups were accumulated, and t test was applied to them. The results of the analysis allow all but the fourth hypothesis to be rejected. The null hypotheses which tested the response of Japanese and American students to Christian concepts, including "Prayer," "Eternal life," "God's love," "God's word," "Faith," "God's forgiveness," "Savior for our sins," "God's plan for your life," and "Separation from God," can be rejected, because the value of t achieved was equal to or greater than that needed for rejection at the .05 level of significance. A significant difference does exist in the meanings of these concepts that Japanese and American students have. However, no significance of difference can be seen for the concept "Man's sin." The null hypothesis dealing with this concept failed to meet the .05 level of significance. Therefore, the fourth hypothesis cannot be rejected.
CHAPTER IV

INTERPRETATION, SUMMARY, AND CONCLUSIONS

Interpretation and Summary

The purpose of this study was to examine connotative meanings of Christian concepts that Japanese and American students had. This research was designed to focus on the influence of non-Christian and Christian culture on the frame of reference of the two groups of people as shown by the responses of subjects on the semantic differential to ten concepts selected from Christian tracts. Since no study was found concerning a systematic analysis of meanings of Christian concepts for people from a different culture, this thesis conducted an original study, adapting the semantic differential as a measurement of meanings that Japanese and American students had of Christian concepts. This research was an extension of previous studies regarding Christian communication with people of non-Christian cultures.

Ten null hypotheses were advanced as the hypotheses of this study. These hypotheses postulated no difference in response to each of the ten Christian concepts between Japanese and American students. Data was collected from thirty-two Japanese subjects and forty-three American
subjects through the questionnaire which applied a semantic differential analysis to ten Christian concepts. The data was analyzed by the t test to examine the significance of difference. The .05 level of significance was selected to determine the probability of rejecting or not rejecting the null hypotheses. The results of statistical analysis of the data will be summarized, and the interpretation of the results with a focus on relationship between culture and meanings of concepts will be discussed.

The ten hypotheses were structured to examine any difference between Japanese and American students in response to the concepts "Prayer," "Eternal life," "God's love," "Man's sin," "God's word," "Faith," "God's forgiveness," "Savior for our sins," "God's plan for your life," and "Separation from God." The results of the t test of the data presented a significant difference in the meanings of "Prayer," "Eternal life," "God's love," "God's word," "Faith," "God's forgiveness," "Savior for our sins," and "God's plan for your life." The value of t achieved not only .05 level but also .001 level of significance in the results for these concepts. As Tables 1, 2, 3, 5, 6, 7, 8, and 9 in Chapter III clearly demonstrate, the means of the scores of the American subjects are significantly greater than those of the Japanese subjects. The result of analysis of
the meaning of "Separation from God" also showed that there was a significant difference between the two groups of subjects, with the value of $t$ achieving .05 level but not .001 level of significance. Table 10 demonstrates, through the mean of scores, that the American subjects evaluated the concept "Separation from God" much more negatively than the Japanese subjects. As for the concept "Man's sin," the value of $t$ did not reach .05 level of significance. It was concluded that no significant difference was found in the meaning of "Man's sin" between Japanese and American students, though the latter had higher scores than the former, as is shown by comparing the means of both subjects in Table 4.

Examination of the results of analysis of the data suggested several conclusions concerning certain patterns seen in the response of the Japanese and American subjects to the ten Christian concepts.

It appears clear that eight of the concepts, including "Prayer," "Eternal life," "God's love," "God's word," "Faith," "God's forgiveness," "Savior for our sins," and "God's plan for your life," have a more positive connotation to American students than the concepts, "Separation from God" and "Man's sin." The American subjects tended to demonstrate more evaluative, potency, and activity factors in their response to the first eight
concepts. They appeared to have strong feelings toward these Christian concepts. On the other hand, the subjects from Japanese culture did not present strong attitudes to Christian concepts. They had a tendency to place check marks around the middle space, which were counted as +1, 0, and -1. Several Japanese subjects wrote a note, saying, "I have no idea on how to respond to these concepts," or "This questionnaire is too difficult for me to answer." In many cases the Japanese subjects appeared to have difficulty in responding to Christian concepts, lacking an understanding of the concepts. This difference in attitude toward Christian concepts was demonstrated by the results of statistical analysis where the value of $t$ achieved .001 level of significance for eight of ten concepts.

Since the American subjects tended to show strong feelings to Christian concepts, they presented a negative attitude toward the concept "Separation from God," which has a negative connotation in Christian belief. Evaluative, potency, and activity factors were greatly reduced in their response to this concept. This resulted in mean scores of the American subjects lower than those of the Japanese subjects, with the significance of difference at .05 level.
The concept "Man's sin" also appears to have a negative connotation in its meaning. But it is not always so. Surely it does have a negative connotation in the Roman Catholic interpretation. Huston Smith describes in *The Religions of Man*:

Sins must be compensated for, otherwise God's justice is outraged. An infinite sin demands infinite recompense, and this could only be effected by God's vicarious assumption of our guilt and payment of the ultimate penalty it required, namely death.

However, "sin in its Protestant interpretation means basically estrangement." Again Smith writes: "It is with sin . . . that explication of the Atonement must begin . . . if there is no sin, no atonement is required." It is probable that there were both Catholics and Protestants among the American subjects. The existence of both positive and negative attitudes toward the concept "Man's sin" among American students possibly caused the results that the mean of American scores was not necessarily lower than that of Japanese scores, and that no significant difference was found in the response to this concept between the two groups of subjects.

Charles E. Osgood said, "I think the semantic differential technique is one which tends to draw out . . . connotations of signs; . . ." In this study the semantic differential accomplished the ask of specifying
connotative meanings that Japanese and American students had for Christian concepts. It revealed the significance of difference in response of people from different cultures to nine out of ten Christian concepts. The results of this study are consistent with theories of the meaning of meaning offered by experts.

David K. Berlo discusses the meaning of meaning in *The Process of Communication:* Meanings are found in people, not in words or messages. He indicates several implications of this definition of meaning, saying that "Meanings result from (a) factors in the individual, as related to (b) factors in the physical world around him," and that "People can have similar meanings only to the extent that they have had similar experiences, or can anticipate similar experiences." Accordingly, people living in the same culture share similar meanings of concepts. On this matter Eugene A. Nida states that

No symbols can have meaning of and through themselves; they always stand for something else. This assigning of "meaning" is done by the culture. . . . Whether . . . a symbol is widespread or is interpreted in a particular manner is essentially a cultural matter, . . . dependent upon the way in which a particular people chooses to apprehend such an object or event.

This interrelationship between meaning, people's way of thought, and their culture gives an explanation for a significant difference in connotative meanings that Japanese and American students have to Christian
concepts. As is mentioned in Chapter I, Japanese culture has had little exposure to Christianity. Since the culture does not have the concepts of Christian belief, its people do not develop meanings of Christian concepts in their frame of reference as the people of Christian culture do. The assigning of meaning to Christian concepts is not done by Japanese culture.

People in the United States live in a culture which has developed with Christianity as its foundation. The history of the United States was influenced by the Pilgrim Fathers, Puritans from Britain who came to the New World in the seventeenth century, seeking religious freedom. The culture of the United States reflects its origin in Christianity in such ways as the phrase "IN GOD WE TRUST" on the coins to Sunday services on television. Since meanings result from factors in the physical world around the individual, American students who have grown up in this Christian culture complete meanings for Christian concepts.

Thus, the students from Japanese culture and the students from American culture have developed meanings of Christian concepts in different ways. This accounts for the significant difference existing in their response to Christian concepts as measured by the semantic differential. This study also provides significant support
for the descriptive research of Glover Shipp and Eva Marie Kennard, cited earlier.

Conclusions

This study was conducted to examine the response of Japanese and American college students studying in the United States to the ten Christian concepts--Prayer, Eternal life, God's love, Man's sin, God's word, Faith, God's forgiveness, Savior for our sins, God's plan for your life, and Separation from God. Ten null hypotheses related to each of the Christian concepts were tested and in nine, significant differences were apparent. Analysis of the results allows these conclusions:

1. A significant difference was discovered in connotative meanings that the Japanese and American subjects had of the concepts, "Prayer," "Eternal life," "God's love," "God's word," "Faith," "God's forgiveness," "Savior for our sins," "God's plan for your life," and "Separation from God." However, there was no significant difference in their response to the concept "Man's sin." This could be explained by the difference in theological understanding among the American subjects. From the results of analysis by the t test, nine out of the ten null hypotheses were rejected.

2. This study supported the theory of the influence of culture on meanings of concepts. The students who
have been brought up in an American culture based on Christianity demonstrated strong feelings toward Christian concepts. The students who have grown up in a Japanese culture structured on non-Christian religions and philosophies experienced difficulties in responding to the concepts. This empirical study presented the difference in the response to particular concepts between people who developed their frame of reference in different cultures.

Limitations and Recommendations for Further Study

This study was limited in the sample size. The Japanese subjects were not selected randomly. Rather they were chosen from those Japanese students at the University of Minnesota and South Dakota State University who were willing to respond. The American students were randomly selected. However, they were chosen only from among the student population in SpCm 101 Fundamentals of Speech at South Dakota State University. This limits generalization to other populations. Further study should include samples from more diverse population groups.

Selection of the scales to judge a concept was carefully done, yet there appeared to be some obstacles to interpreting bipolar adjectives on the scales and the concepts. The scales of evaluative factors and the
scales of potency and activity factors showed the different
directions, depending on whether a concept had a positive
or negative connotation. When a check mark was placed
in the space for the score, +3, on the scales of the
evaluative factor as a response to the concepts "Prayer,"
"Eternal life," "God's love," "God's word," "Faith,"
"God's forgiveness," "Savior for our sins," and "God's
plan for your life," a check mark tended to be also placed
for +3 on the scales of the potency and activity factors.
That is, familiar, important, good, pleasant, believing,
beautiful, interesting, and meaningful "Prayer" tended
to be strong, stable, powerful, big, deep, and active
"Prayer." (The scale, excitable--calm, was not necessarily
in this correlation with the scales of the evaluative
factor.) The implications of such correlations may need
to be considered in future studies.

This consistent tendency was not seen in the
response to the concepts of negative connotation, "Man's
sin" and "Separation from God." These concepts tended
to have low scores on the scales of the evaluative factor.
However, the way that the subjects placed a check mark
on the scales of the potency and activity factors did
not appear to be consistent, depending on how they made
a sentence with the concepts and the adjectives in their
minds. It seems that some of them thought that "Man's
sin" is strong and stable. This kind of answer is their
particular belief. Conversely, some of the subjects appeared to present their hope in their response, thinking that "Man's sin" should be weak and changeable.

Such inconsistency among subjects from a culture could affect the use of the semantic differential for examining differences in meaning. Further study using the semantic differential to examine meanings of religious concepts may require some change in the approach to the selection of bipolar adjectives.

This study does establish a significant difference in meanings of Christian concepts in the two samples selected. Further study with appropriate samples and additional concepts would clarify the generality of the tendencies which this study revealed.
ENDNOTES


2 Ibid.

3 Ibid.


6 Ibid., p. 184.

APPENDIX A

SAMPLE OF QUESTIONNAIRE
SURVEY OF RESPONSES TO CHRISTIAN CONCEPTS

Instructions

The purpose of this study is to measure the meanings of Christian concepts to Japanese and American students by having them judge the concepts against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page you will find two concepts to be judged and beneath each is a set of scales with two-valued adjectives at the extreme ends of each scale. Here is how you are to use these scales:

If you feel that the concept is very closely related to one end of the scale, you should place your check-mark as follows:

- fair \( X:__:__:__:__:__:__:__ \) unfair
- fair \( __:__:__:__:__:__:__:X \) unfair

If you feel that the concept is quite closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:

- heavy \( ____:X:__:__:__:__:__:__ \) light
- heavy \( __:__:__:__:__:__:X:__ \) light

If the concept seems only slightly related to one side as opposed to the other side (but is not really neutral), then you should check as follows:

- sharp \( ____:__:X:__:__:__:__:__ \) dull
- sharp \( __:__:__:__:__:__:X:__ \) dull

The direction toward which you check, of course, depends upon which of the two ends of the scale seem most characteristic of the thing you are judging.

If you consider the concept to be neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, unrelated to the concept, then you should place your check-mark in the middle space:

- safe \( ____:__:__:__:X:__:__:__ \) dangerous
IMPORTANT: (1) Place your check-marks in the middle of spaces, not on boundaries:

```
THIS          NOT THIS
___:___:X:___:___:X___:___
```

(2) Be sure you check every scale for every concept--do not omit any.

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you've had the same item before on this test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make each item a separate and independent judgment. Work at a fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impression, the immediate "feelings" about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.
TEST

PRAYER

familiar: strange

calm: excitable

important: unimportant

weak: strong

changeable: stable

good: bad

powerful: powerless

pleasant: unpleasant

small: big

skeptical: believing

ugly: beautiful

interesting: uninteresting

deep: shallow

passive: active

meaningful: meaningless

ETERNAL LIFE

familiar: strange

calm: excitable

important: unimportant

weak: strong

changeable: stable

good: bad

powerful: powerless

pleasant: unpleasant

small: big

skeptical: believing

ugly: beautiful

interesting: uninteresting

deep: shallow

passive: active

meaningful: meaningless
### GOD'S LOVE

<table>
<thead>
<tr>
<th>familiar</th>
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</tr>
</thead>
<tbody>
<tr>
<td>calm</td>
<td>excitable</td>
</tr>
<tr>
<td>important</td>
<td>unimportant</td>
</tr>
<tr>
<td>weak</td>
<td>strong</td>
</tr>
<tr>
<td>changeable</td>
<td>stable</td>
</tr>
<tr>
<td>good</td>
<td>bad</td>
</tr>
<tr>
<td>powerful</td>
<td>powerless</td>
</tr>
<tr>
<td>pleasant</td>
<td>unpleasant</td>
</tr>
<tr>
<td>small</td>
<td>big</td>
</tr>
<tr>
<td>skeptical</td>
<td>believing</td>
</tr>
<tr>
<td>ugly</td>
<td>beautiful</td>
</tr>
<tr>
<td>interesting</td>
<td>uninteresting</td>
</tr>
<tr>
<td>deep</td>
<td>shallow</td>
</tr>
<tr>
<td>passive</td>
<td>active</td>
</tr>
<tr>
<td>meaningful</td>
<td>meaningless</td>
</tr>
</tbody>
</table>

### MAN'S SIN

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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<td>excitable</td>
</tr>
<tr>
<td>important</td>
<td>unimportant</td>
</tr>
<tr>
<td>weak</td>
<td>strong</td>
</tr>
<tr>
<td>changeable</td>
<td>stable</td>
</tr>
<tr>
<td>good</td>
<td>bad</td>
</tr>
<tr>
<td>powerful</td>
<td>powerless</td>
</tr>
<tr>
<td>pleasant</td>
<td>unpleasant</td>
</tr>
<tr>
<td>small</td>
<td>big</td>
</tr>
<tr>
<td>skeptical</td>
<td>believing</td>
</tr>
<tr>
<td>ugly</td>
<td>beautiful</td>
</tr>
<tr>
<td>interesting</td>
<td>uninteresting</td>
</tr>
<tr>
<td>deep</td>
<td>shallow</td>
</tr>
<tr>
<td>passive</td>
<td>active</td>
</tr>
<tr>
<td>meaningful</td>
<td>meaningless</td>
</tr>
</tbody>
</table>
### GOD'S WORD

| familiar | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | strange |
| calmer | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | excitabla |
| important | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | unimportant |
| weak | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | strong |
| changeable | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | stable |
| good | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | bad |
| powerful | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | powerless |
| pleasant | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | unpleasant |
| small | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | big |
| skeptical | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | believing |
| ugly | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | beautiful |
| interesting | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | uninteresting |
| deep | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | shallow |
| passive | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | active |
| meaningful | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | meaningless |

### FAITH

| familiar | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | strange |
| calmer | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | excitabla |
| important | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | unimportant |
| weak | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | strong |
| changeable | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | stable |
| good | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | bad |
| powerful | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | powerless |
| pleasant | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | unpleasant |
| small | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | big |
| skeptical | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | believing |
| ugly | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | beautiful |
| interesting | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | uninteresting |
| deep | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | shallow |
| passive | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | active |
| meaningful | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | ___ | meaningless |
GOD'S FORGIVENESS

familiar _________________:_________________ strange
calm _________________:_________________ excitable
important _________________:_________________ unimportant
weak _________________:_________________ strong
changeable _________________:_________________ stable
good _________________:_________________ bad
powerful _________________:_________________ powerless
pleasant _________________:_________________ unpleasant
small _________________:_________________ big
skeptical _________________:_________________ believing
ugly _________________:_________________ beautiful
interesting _________________:_________________ uninteresting
deep _________________:_________________ shallow
passive _________________:_________________ active
meaningful _________________:_________________ meaningless

SAVIOR FOR OUR SINS

familiar _________________:_________________ strange
calm _________________:_________________ excitable
important _________________:_________________ unimportant
weak _________________:_________________ strong
changeable _________________:_________________ stable
good _________________:_________________ bad
powerful _________________:_________________ powerless
pleasant _________________:_________________ unpleasant
small _________________:_________________ big
skeptical _________________:_________________ believing
ugly _________________:_________________ beautiful
interesting _________________:_________________ uninteresting
deep _________________:_________________ shallow
passive _________________:_________________ active
meaningful _________________:_________________ meaningless
### GOD'S PLAN FOR YOUR LIFE

| familiar | ___ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | strange |
| calm | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | excitable |
| important | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | unimportant |
| weak | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | strong |
| changeable | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | stable |
| good | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | bad |
| powerful | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | powerless |
| pleasant | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | unpleasant |
| small | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | big |
| skeptical | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | believing |
| ugly | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | beautiful |
| interesting | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | uninteresting |
| deep | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | shallow |
| passive | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | active |
| meaningful | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | meaningless |

### SEPARATION FROM GOD

| familiar | ___ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | strange |
| calm | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | excitable |
| important | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | unimportant |
| weak | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | strong |
| changeable | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | stable |
| good | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | bad |
| powerful | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | powerless |
| pleasant | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | unpleasant |
| small | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | big |
| skeptical | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | believing |
| ugly | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | beautiful |
| interesting | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | uninteresting |
| deep | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | shallow |
| passive | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | active |
| meaningful | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | ____ | meaningless |
APPENDIX B

COVER LETTERS TO JAPANESE STUDENTS
前略。

お待たせして Iceland 言語略です。私は South Dakota State University の言語略で教える日本とアメリカ人の相互理解の概念とそれに付与する態度をもとに調査研究しようとしています。そのアンケートの対象となる日本人学生がこの大学ではないことを含めています。そこで北米の州のある University of Minnesota の学生をアンケート調査の対象にどうするかと Human Subject Committee の方に尋ねてみたところ、実地で得ることがだいたいアンケートがこうしてどうなるか求めています。見知らぬ者たち突如郵便が送られてきてちょっと驚かれたとさまで、見知らぬ者たち突如郵便が送られてきてちょっと驚かれたとさまで、

そのうわさで、お待たせ、どうも申し訳ない時間のかかることも何といつもこのアンケートに答えて頂けない大変幸いです。それからアンケートの質問の中に答えるかどうかが議論期間（議論期間から何年何月にどうしたか）と "What is your religion?" と尋ねている際の答え（"別に何もない。" と答えた一例）をアンケートの最初のページの下に付けさせていただくと、他のもするだけ早く壁にも 3 月 8 日までに同封の封筒を投函して頂くたいと思います。どうも勝手に申し上げてすみませんがよろしくお願い申し上げます。

この Midewest に春の訪れはまだ早いこと冬と思われる居座り候補地が、どうも未だにこの外国の地アリカで御活躍下さるよう

祈っております。

1986年 2月 26日

大隈 美砂子

P.S. 申し訳ありませんがどうぞ自由におっしゃって下さい。

お待ちしております。
APPENDIX C

COVER LETTERS TO INSTRUCTORS OF
SpCm 101, LAB SECTIONS
February 28, 1986

Prof. Joel Hefling, SPCM 101 Instructor
Speech Department
South Dakota State University

Dear Prof. Hefling:

I am doing a study for my Master of Arts degree in speech this semester. I need your help to distribute and collect the questionnaire for my thesis, "A Cross-Cultural Study of the Response of Japanese and American Students to Christian Concepts." I have included the correct number of questionnaires for your classes.

I have randomly selected four students from your lab section. I would like you to give the questionnaires to these students of Section 15, #15, 16, 17, 18 in your class list and to collect their completed questionnaires in your next class.

I need the responses from individuals who have been brought up in the American culture, so if a subject happens to be a foreign student, please return the questionnaire to me or place it in Dr. Widvey's mail box in the Department of Speech office. Do not give the questionnaire to any foreign students.

I appreciate your help very much. Thank you.

Sincerely,

Misako Ohkuma
February 28, 1986

Prof. Jerry Jorgensen, SPCM 101 Instructor
Speech Department
South Dakota State University

Dear Prof. Jorgensen:

I am doing a study for my Master of Arts degree in speech this semester. I need your help to distribute and collect the questionnaire for my thesis, "A Cross-Cultural Study of the Response of Japanese and American Students to Christian Concepts." I have included the correct number of questionnaires for your classes.

I have randomly selected four students from each of your lab sections. I would like you to give the questionnaires to these students of Section 16, #3, 7, 8, 14; Section 17, #1, 3, 4, 7 in your class list and to collect their completed questionnaires in your next class.

I need the responses from individuals who have been brought up in the American culture, so if a subject happens to be a foreign student, please return the questionnaire to me or place it in Dr. Widvey's mail box in the Department of Speech office. Do not give the questionnaire to any foreign students.

I appreciate your help very much. Thank you.

Sincerely,

Misako Ohkuma
February 28, 1986

Prof. Nancy Wheeler, SPCM 101 Instructor
Speech Department
South Dakota State University

Dear Prof. Wheeler:

I am doing a study for my Master of Arts degree in speech this semester. I need your help to distribute and collect the questionnaire for my thesis, "A Cross-Cultural Study of the Response of Japanese and American Students to Christian Concepts." I have included the correct number of questionnaires for your classes.

I have randomly selected four students from each of your lab sections. I would like you to give the questionnaires to these students of Section 18, #5, 8, 14, 18; Section 21, #3, 4, 6, 8; Section 23, #1, 3, 4, 8 in your class list and to collect their completed questionnaires in your next class.

I need the responses from individuals who have been brought up in the American culture, so if a subject happens to be a foreign student, please return the questionnaire to me or place it in Dr. Widvey's mail box in the Department of Speech office. Do not give the questionnaire to any foreign students.

I appreciate your help very much. Thank you.

Sincerely,

Misako Ohkuma
February 28, 1986

Ms. Patty Boik, SPCM 101 Instructor
Speech Department
South Dakota State University

Dear Ms. Boik:

I am doing a study for my Master of Arts degree in speech this semester. I need your help to distribute and collect the questionnaire for my thesis, "A Cross-Cultural Study of the Response of Japanese and American Students to Christian Concepts." I have included the correct number of questionnaires for your classes.

I have randomly selected four students from each of your lab sections. I would like you to give the questionnaires to these students of Section 13, #1, 3, 4, 8; Section 14, #13, 15, 16, 19; Section 20, #2, 3, 6, 8; Section 24, #16, 18, 19, 20 in your class list and to collect their completed questionnaires in your next class.

I need the responses from individuals who have been brought up in the American culture, so if a subject happens to be a foreign student, please return the questionnaire to me or place it in Dr. Widvey's mail box in the Department of Speech office. Do not give the questionnaire to any foreign students.

I appreciate your help very much. Thank you.

Sincerely,

Misako Ohkuma
February 28, 1986

Mr. Randy Hanzen, SPCM 101 Instructor
Speech Department
South Dakota State University

Dear Mr. Hanzen:

I am doing a study for my Master of Arts degree in speech this semester. I need your help to distribute and collect the questionnaire for my thesis, "A Cross-Cultural Study of the Response of Japanese and American Students to Christian Concepts." I have included the correct number of questionnaires for your classes.

I have randomly selected four students from each of your lab sections. I would like you to give the questionnaires to these students of Section 11, #4, 5, 7, 11; Section 12, #3, 6, 7, 8; Section 19, #3, 4, 8, 9; Section 22, #16, 18, 19, 20 in your class list and to collect their completed questionnaires in your next class.

I need the responses from individuals who have been brought up in the American culture, so if a subject happens to be a foreign student, please return the questionnaire to me or place it in Dr. Widvey's mail box in the Department of Speech office. Do not give the questionnaire to any foreign students.

I appreciate your help very much. Thank you.

Sincerely,

Misako Ohkuma
APPENDIX D

COVER LETTERS TO AMERICAN STUDENTS
February 28, 1986

Dear Student of Fundamentals of Speech Class:

I am a graduate student, working for my M.A. thesis in speech. You were randomly selected as a subject for my research. The purpose of my study is to examine the response of American and Japanese students toward particular concepts in Christian messages. What you have just received is the questionnaire, which uses the semantic differential technique to measure the intensity of response that individuals have toward concepts.

I would like to have your response to each of the ten Christian concepts. I need your response, but I do not need to know who you are. I would appreciate it very much if you could help my research and complete the questionnaire, following the instructions on it, and return it to your instructor.

Please return the completed questionnaire to your instructor in the next class or bring it to the office of Speech Department in Pugsley Hall.

Thank you very much for your time and cooperation.

Sincerely,

Misako Ohkuma
APPENDIX E

RAW SCORES OF SUBJECTS
## Raw Scores of Japanese Subjects

<table>
<thead>
<tr>
<th>Subject Number</th>
<th>Prayer</th>
<th>Eternal Life</th>
<th>God's Love</th>
<th>Man's Sin</th>
<th>God's Word</th>
<th>Faith</th>
<th>God's Forgiveness</th>
<th>Savior For Our Sins</th>
<th>God's Plan For Your Life</th>
<th>Separation From God</th>
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<tr>
<td>1</td>
<td>4</td>
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