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THE EFFECTS OF SELECTED SYNTACTICAL CHOICES ON SOURCE CREDIBILITY, ATTITUDE, BEHAVIOR, AND PERCEPTION OF MESSAGE

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This study investigated the effects of stylistic syntactical choices. Independent variables were source credibility (high, low) and selected syntactical choices within the sentence (normal order, antithesis, inversion, omission, question, repetition, and combined choices). Dependent variables were terminal source authoritativeness and character, attitude towards message, frequency of petition signing, and perception of message (clear-unclear, wordy-concise, refined-crude, well supported-poorly supported, organized-disorganized, pleasing-displeasing, biased-unbiased). No significant difference for syntactical inductions were observed on dependent variables of attitude, authoritativeness, character, or frequency of petition signatures. The message manipulations significantly altered the subject's perception of the message.

ALTHOUGH some research has investigated the attitudinal effects of language and style, the focus has been almost exclusively on lexical choices. Research such as that on language intensity,¹ opinionated language,² fear appeals,³ and militant

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¹J. Bowers, "Some Correlates of Language Intensity," *Quarterly Journal of Speech*, 50 (1964), 415-420.

²R. S. Mehrley and J. C. McCroskey, "Opinionated Statements and Attitude Intensity as Predictors of Attitude Change and Source Credibility," *Speech Monographs*, 37 (1970), 47-52; B. R. Miller and J. Basehart, "Source

language⁴ is characteristic. Direct tests of the persuasive effects of syntactical options are generally absent from the experimental research literature. Studies relating to argument have found that variations in syntax of syllogistic-type statements affect attitudes and beliefs,⁵ but provide little basis for predicting the effects of various word-orders in normal discourse. However, rhetorical theorists have suggested possible bases for predicting the effects of differing syntax. Generally, traditional theory recommends that appropriate stylistic choices can increase persuasive impact of a message.⁶ In regard to syntax, for example, Burke⁷ suggests that ordering words in a sentence in such a way that the receiver can predict or "fill-in" the subsequent words allows the receiver to participate in the construction of the message. This participation by predicting in advance what the source will say allows the receiver to identify with the source, thereby increasing persuasive impact. Therefore, those syntactical options which increase predictability would be expected to enhance persuasive effect, and those which reduce predictability would be expected to decrease persuasive impact.

Trustworthiness, Opinionated Statements and Response to Persuasive Communication," *Speech Monographs*, 36 (1969), 1-7; G. R. Miller and J. Lobe, "Opinionated Language, Open-and-Closed-Mindedness and Responses to Persuasive Communications," *Journal of Communication*, 17 (1967), 333-341.

³J. C. Gardiner, "An Experimental Study of the Effects of Evidence and Fear Appeals on Attitude Change and Source Credibility," Research Monograph, Department of Communication, Michigan State University, 1969; M. A. Hewgill and G. R. Miller, "Source Credibility and Response to Fear-Arousing Communications," *Speech Monographs*, 32 (1965), 95-101.

⁴D. Corley, "The Effects of Militant Language and Race of Source on Attitude and Credibility," Thesis, Illinois State University, 1970.

⁵See summaries of G. R. Miller, "Some Factors Influencing Judgments of the Logical Validity of Arguments: A Research Review," *Quarterly Journal of Speech*, 55 (1969), 276-286; L. J. Anderson and K. E. Anderson, "Research on the Relationship of Reasoning and Evidence to Message Acceptance," Paper presented to the Speech Association of America Convention, New York, December, 1969.

⁶For example, see L. Thonssen and A. C. Baird, *Speech Criticism* (New York: The Ronald Press Company, 1948), pp. 405-406; or J. C. McCroskey, *An Introduction to Rhetorical Communication* (Englewood Cliffs: Prentice-Hall, Inc. 1968) pp. 160-161.

⁷K. Burke, *A Rhetoric of Motives* (Berkeley, 1969), pp. 45-55.

In more contemporary terms, increased or decreased *redundancy* produced by syntactical choices should affect attitudes, credibility, and ultimately behavior. This prediction becomes more tenable when viewed in the context of reinforcement theory. In the reinforcement model, the learning of new information upon which to base a new opinion or belief is prerequisite to attitude change.⁸ This appears to be particularly true when the topic of a message is one where the receiver has little prior information upon which to base opinions or beliefs. To the extent that redundancy aids in the learning or comprehension⁹ of information upon which opinions or beliefs may be based, redundancy may affect related attitudes and subsequent behavior. If certain syntactical options increase clarity and comprehension of a message, one might expect more attitude change associated with these types of manipulations than with a comparable message not containing these manipulations.

Carpenter surveyed recommendations on syntax by rhetorical theorists.¹⁰ He classified all syntactical options under five major categories or types: repetition, omission, suspension, inversion, and antithesis. *Repetition* involves repeating words or phrases in closer proximity than usual. *Omission* involves deletions (of conjunctions, articles, etc.) that do not significantly alter elicited meaning. *Inversion* involves disturbing the usual subject-predicate order of a sentence or the order of other functional elements by positioning these elements in some less common order. *Antithesis* is produced by arranging semantic opposites in close proximity. Carpenter's *suspension* category was impossible to operationalize in this study. He indicated that the periodic sentence and the suspension of a particular element with the greatest semantic significance until the end of a sentence are types of suspensions. However, inversion of normal

⁸C. A. Insko, *Theories of Attitude Change* (New York: Appleton-Century Crofts, 1967), pp. 12-13.

⁹C. Cherry, *On Human Communication* (Cambridge: MIT Press, 1966), pp. 117-123; A. T. Jersild, "Modes of Emphasis in Public Speaking," *Journal of Applied Psychology*, 12 (1968), 611-612; R. Ehrensberger, "An Experimental Study of the Relative Effectiveness of Certain Forms of Emphasis in Public Speaking," *Speech Monographs*, 12 (1945), 94-111.

¹⁰R. H. Carpenter, "The Essential Schemes of Syntax: An Analysis of Rhetorical Theory's Recommendations for Uncommon Word Orders," *Quarterly Journal of Speech*, 55 (1969), 161-168.

syntax appears to be the means by which periodic sentences and suspension are created. Another type of suspension Carpenter suggested was "climax that repeated the last item of one segment at the beginning of another." This syntactical manipulation appears to be a function of repetition. Therefore, suspension was not operationalized as a separate form of syntax in this study. The *rhetorical question*, not considered by Carpenter, was also included as a syntactical option. This manipulation, of course, involves reordering a declarative statement into an interrogative one where the semantic effect is implied rather than directly stated.

Of these available syntactical options, some would appear to manipulate the redundancy variable. In the normal English syntax, some predictability, of course, is already present. However, syntactical options of repetition and antithesis would appear to increase predictability. Omission, inversion, and question would probably reduce redundancy.

Finally, we would expect that these manipulations of syntax would produce variations in the perception of the message. To the extent that variations in syntax deviate from normal syntax we would expect discrepant perceptions. However, at this point there is no basis for predicting what effect different syntactical conditions have on the perception of a message.

On the basis of the above rationale, the following hypotheses were tested:

1. Message conditions which include repetition and antithesis will produce greater favorable attitude change, source authoritativeness, source character, and desired behavior than the message condition employing normal English syntax.
2. Message conditions which include omission, inversion, and question will produce less desired attitude change, source authoritativeness, source character, and desired behavior than the message condition employing normal English syntax.
3. Message conditions which include syntactical manipulations will be perceived as significantly different from the message condition employing only normal syntax.

Because traditional theory suggests that skillful and appropriate combinations of stylistic choices may have persuasive impact, a message which combined all of the above syntactical

options was also tested for effects on the same dependent variables.

METHOD

The study utilized an eight by two, after-only design, including two control conditions. Independent variables were syntactical conditions (normal syntax, antithesis, inversion, omission, repetition, question, combined, and no message) and source credibility (highly credible and less credible).

The *syntactical conditions* were operationalized by first constructing a normal syntax message on foreign policy toward Brazil. The message was sixteen sentences in length. The words in those sentences were in the normal subject-verb-object order which excluded the other syntactical conditions being tested. Then, five sentences in the normal-syntax message were systematically altered to produce the other message conditions. In the antithesis condition, for example, these five sentences contained antitheses; in the repetition condition, existing words and phrases were repeated in close proximity. Lexical choice was controlled so far as that was possible so that the same words were used in each condition. However, adding conjunctions was necessary to produce antitheses; omitting articles and conjunctions was necessary to produce the omission condition. The combined-syntax condition included a combination of the seven syntactical options. Other than the five sentences that were altered in each condition, the message remained constant across conditions.

Source credibility conditions were operationalized in the following manner: (1) The highly credible source was "Charles L. Wilson, former United States Ambassador to Brazil. He recently resigned his position because of a conflict of opinion on policy toward Brazil with the State Department." (2) The less credible source was "Lin Tai, Ambassador to Brazil from Red China."

Dependent variables in the study were attitude toward U.S. foreign policy toward Brazil,¹¹ source authoritativeness, source

¹¹The six semantic differential-type scales employed were right-wrong, good-bad, beneficial-harmful, positive-negative, wise-foolish, fair-unfair. In separate factor analyses for 156 concepts, these six scales were found to load

character,¹² frequency of petition signatures, and perception of the messages. A petition encouraging amendment of current foreign aid regulations with Brazil was used to secure signatures from subjects. Seven semantic differential-type scales were selected to tap the subjects' perception of the composition of the messages. These scales were clear-unclear, wordy-concise, refined-crude, well supported-poorly supported, organized-disorganized, pleasing-displeasing, and unbiased-biased.

The sample of 747 subjects was selected from the basic speech communication course at Illinois State University. Booklets for fourteen experimental and two control conditions were randomly distributed to the sample. Booklets for experimental conditions contained source inductions, message inductions, and measuring instruments for perception of message, source authoritativeness, source character, attitude, and petition signatures. The control condition booklets contained instruments on authoritativeness, character, attitude, and petition signatures.

Analysis of variance (8x2) and chi-square statistics were used to analyze the data. The traditional criterion of .05 was required for statistical significance. Since no message was included in control condition, perception of message scales were analyzed with 7x2 analyses of variance that excluded control conditions. When significant F-ratios were obtained attributable to the message conditions, mean differences were probed with the Newman-Keuls studentized range statistic.

The data obtained from these seven scales on message perception were submitted to principle components factor analysis with varimax rotation. The cut-off criterion for rotation was

consistently among the top 12 of the 40 evaluative scales employed. Internal reliability was found to equal or exceed .90 for these six scales combined for each concept. The concept employed in this study was not included among the 156 concepts, but several similar concepts were.

¹²J. C. McCroskey, "Scales for Measurement of Ethos," *Speech Monographs*, 33 (1966), 65-72. McCroskey's semantic differential-type scales were employed. For authoritativeness the scales used were reliable-unreliable, informed-uninformed, qualified-unqualified, intelligent-unintelligent, valuable-worthless, and expert-inexpert. For character the scales included honest-dishonest, friendly-unfriendly, pleasant-unpleasant, nice-awful, unselfish-selfish, and virtuous-sinful. These scales have been found to produce internal reliability estimates in excess of .90.

set at an eigenvalue of 1.0. Items with a rotated factor loading of at least .60 and no rotated loading on another factor higher than .40 were considered loaded on a given factor.

RESULTS

Comparison of control conditions with the normal-syntax condition validated message effect. The normal-syntax message ($\bar{X} = 20.88$) produced significantly more favorable attitude ($t = 6.46$, 147 d.f.) than the control (no-message) condition ($\bar{X} = 28.25$) (The lower the attitude mean, the higher the desired attitude effect). In regard to the credibility inductions, the highly credible source ($\bar{X} = 30.32$) was perceived as significantly more authoritative ($F = 37.81$; 1,731 d.f.) than the less credible source ($\bar{X} = 27.79$). The highly credible source ($\bar{X} = 26.64$) was perceived as significantly higher in character ($F = 42.86$; 1,731 d.f.) than the low credible source ($\bar{X} = 24.56$). Also the highly credible source ($\bar{X} = 20.50$) produced significantly more favorable attitude change ($F = 11.99$; 1,731 d.f.) than the less credible source ($\bar{X} = 22.47$).

The analyses of data indicated that no significant differences in source credibility resulted from syntactical manipulations. (Authoritativeness: $F = 1.46$; 7,731 d.f.; Character: $F = 1.44$; 7,731 d.f.).

TABLE I
MEANS FOR SYNTACTICAL CONDITIONS

Dependent Variables	Normal	Anti-Thesis	Inversion	Omission	Question	Repetition	Combined	Control
Authoritativeness	29.39	29.74	28.27	29.10	28.69	28.10	30.15	29.00
Character	25.26	25.00	25.11	25.57	26.17	25.19	26.27	26.22
*Attitude	20.88	20.34	21.06	19.62	20.87	22.07	19.81	28.25
*Message Composition	23.58	23.32	21.00	21.56	20.94	19.77	23.34	
Pleasing, Unbiased	6.53	6.26	5.81	6.34	6.31	6.01	6.52	

*Significant differences obtained ($p < .05$) on these dependent variables. Note that lower attitude means are in the desired direction.

A significant main effect was observed for the syntactical conditions on attitude ($F = 15.80$; 7,731 d.f.). Post hoc analysis (Newman-Keuls studentized range statistic) indicated that all of the experimental conditions produced attitudes more consistent with the message than the control condition. However, the experimental conditions did not differ significantly among themselves.

The analysis of the petition signature data indicated no significant effects due to syntax ($\chi^2 = 4.55$, 7 d.f.) or to credibility ($\chi^2 = 0.48$, 1 d.f.).

Factor analysis of the seven message-perception scales produced two clear factors which met the previously established criteria. The first factor, accounting for 41% of the variance, appeared to relate to subjects' perception of the composition of the message. This "message composition" factor included scales on clarity, wordiness, refinement, support, and organization. The second factor, accounting for fifteen per cent of the variance, included the remaining two scales on pleasantness and bias. Data obtained from the scales were summed for each factor and the following results were observed.

Significant differences in the perception of the composition of the message (message composition factor) resulted from the manipulations of syntax ($F = 6.54$; 6,680 d.f.). Further analysis (Newman-Keuls studentized range statistics) indicated that the normal ($\bar{X} = 23.58$), combined ($\bar{X} = 23.34$), and antithesis ($\bar{X} = 23.32$) conditions differed significantly from the inversion ($\bar{X} = 21.00$) question ($\bar{X} = 20.94$) and repetition ($\bar{X} = 19.77$) conditions. No other differences were significant.

No significant differences in how pleasing or unbiased the message was perceived to be were observed among the syntactical conditions ($F = 0.88$; 6,680 d.f.).

Significant differences in perception of the message resulted from the manipulations of credibility. The message attributed to the highly credible source ($\bar{X} = 22.42$) was perceived as having better message composition ($F = 5.10$; 1,680 d.f.) than the message attributed to the less credible source ($\bar{X} = 21.43$). The message attributed to the highly credible source ($\bar{X} = 6.55$) was perceived as significantly more pleasing and unbiased ($F = 9.37$; 6,680 d.f.) than the message attributed to the less credible source ($\bar{X} = 5.96$).

DISCUSSION

This study was designed to test the effects of various syntactical options on perceived source authoritativeness, source character, attitude toward the topic, and frequency of petition signatures. Hypotheses one and two predicted that repetition and antithesis would have greater desired effect than normal syntax and that normal syntax would have greater desired effect than inversion, omission, and question conditions. Neither hypothesis was supported. An artistic combination of various syntactical conditions in one message was expected to have greater desired effect than normal syntax. No significant difference was observed.

The results of the study raise doubt about the effects of syntax on attitude, credibility, and behavior. As previous research¹³ would suggest, the principle effect of syntax may be upon comprehension, not attitudes. No effects on attitude, perceived source authoritativeness, or character were observed.

Although hypothesized effects on attitude, credibility, and behavior were not found to be significant, as hypothesis three predicted, differences in syntax did appear to affect the subjects' perception of the message. In general, a message employing normal syntax was perceived as better composed than the message employing repetition, question, or inversion. No significant differences in perceived message composition were observed between normal syntax and antithesis omission, or combined conditions. These results appear to suggest that there may be a relationship between redundancy and perception of message composition. Two of the three syntactical conditions with reduced redundancy (inversion, question) were perceived as more poorly composed than the normal syntax condition. Except for repetition, other syntactical conditions were not perceived as significantly different in message composition from the normal syntax condition.

These results suggest several interpretations. First, the differences in syntax produced differences in perceptions of the message. This would suggest that the syntactical inductions did, indeed, "take" and that experimental error was probably

¹³Cherry, Ehrenberger, Jersild.

not responsible for the lack of significant effects on some dependent variables. If this was the case, then it appears that written syntactical manipulations of the type employed in this study may not have a significant effect on attitudes, credibility, or behavior.

A second interpretation is also possible. If the syntactical inductions produced differences in perception of the message, particularly in regard to how well supported the message was, then there should have been some corresponding effect on attitude toward the message topic. It could well have been that the message actually had little impact and that the observed differences in attitude between the control and message conditions were an artifact of unfamiliarity and low-salience. Although the message conditions generated more favorable attitude than the control (no-message) conditions, this could have been a result of the unfamiliarity and low-salience of the topic. If varying syntactical manipulations were included in a more persuasive message on a highly salient topic, those differences in syntax might possibly have an effect on attitudes.

In addition, it should be noted that the message was brief (16 written sentences) and that only five sentences were manipulated to produce the various syntactical conditions. Although these brief inductions were sufficient to produce perceivable differences, they may not have been extensive enough to affect attitudes, credibility, or behavior. With a more extended message and more frequent, well written manipulations of syntax, some significant effects might be observed.