ABSTRACT
            A study examined the longstanding theory of the Bavelas
group which suggests that the only consistent cause of interpersonal
equivocation is avoidance-avoidance conflict (AAC). The study also aimed to
uncover a psycholinguistic profile of equivocation, especially in the form of
paralinguistic cues such as disfluencies. Subjects, 18 college
undergraduates, responded orally to questions from hypothetical interlocutors
within scenarios designed to manipulate both the presence/absence of AAC and
level of situational formality. Their responses were audiotaped, transcribed,
rated for degree of equivocation, and coded for disfluencies. Results of
ANOVA showed that AAC did result in equivocation, but also that formality
level interacted with AAC in influencing equivocation. Subjects used filled
pauses, surprisingly, in the condition within which they equivocated the
least, although they produced other disfluencies (combined) within conditions
where they equivocated the most. Findings demonstrate that, with regard to
the antecedents of equivocation, the Bavelas group was right in claiming that
AAC routinely leads to increased equivocation. Future research should aim for
a clearer conceptual definition of "formality," and the search for
antecedents should extend to individual differences as well. A more reliable
method of rating degree of equivocation (as defined by Bavelas) must be used,
employing more trained judges. With regard to the psycholinguistic profile of
equivocation, the notion that both filled pauses and false starts might
provide a substantive index of AAC-based equivocation are not supported.
(Contains 2 tables of data and 12 references; an appendix contains
"experimental stimuli.") (NKA)

ED 422 598

CS 505 894

Causes and Psycholinguistic

Correlates of Interpersonal Equivocation

Richard Bello

Nicholls State University

Department of Speech and Communicative Disorders
Box 2027 (NSU)
Thibodaux, LA 70310
504-448-4585
spcd-rsb@nich-nsunet.nich.edu

1

ERIC
Full Text Provided by ERIC

Abstract

This paper examines the long standing theory of the Bavelas group which suggests that the only consistent cause of interpersonal equivocation is avoidance-avoidance conflict (AAC), and it also attempts to uncover a psycholinguistic profile of equivocation, especially in the form of paralinguistic cues such as disfluencies. Eighteen college undergraduates responded orally to questions from hypothetical interlocutors within scenarios designed to manipulate both the presence/absence of AAC and level of situational formality. Their responses were audiotaped, transcribed, rated for degree of equivocation, and coded for disfluencies. Results of ANOVA showed that AAC did result in more equivocation, but also that formality level interacted with AAC in influencing equivocation. Participants used filled pauses, surprisingly, in the condition within which they equivocated the least, although they produced other disfluencies (combined) within conditions where they equivocated the most. Results are discussed in terms of the notion that filled pauses are special and in terms of interpersonal deception theory.

Causes and Psycholinguistic

Correlates of Interpersonal Equivocation

The most thorough research program on the causes of

equivocal communication has been conducted by the psychologist

Janet Beavin Bavelas and her colleagues (see esp. Bavelas, Black,

Chovil, & Mullett, 1990 and Bavelas & Chovil, 1986). In a series

of mostly laboratory experiments, they have repeatedly and

conclusively demonstrated that equivocation (intentionally vague,

ambiguous, or nonstraightforward communication) results when

individuals are placed in avoidance-avoidance binds that result

in situational conflict. Such equivocation, which occurs whether

the communication produced is strictly written, strictly spoken,

or face-to-face, is a result (according to this conflict

explanation) of being faced with two unappealing choices like,

for example, having to lie versus having to hurt someone's

feelings with the truth. People equivocate in order to avoid

either extreme in such dilemmas. In other words, equivocation

can be seen as the result of not being able to choose between

outright truth or outright deceit, and it is viewed as a common,

normal response to such situations (Bavelas et al., 1990). For

example, in one experiment, participants were placed in a bind

between telling the truth about a former employee and telling a

lie to someone who might hire that employee. In contrast to the

nonconflict condition, participants in this conflict condition

produced vague responses such as "Well, um, that depends on what

you call a good employee" and "Overall, or in certain areas?"

(Bavelas et al., 1990, p. 147).

However, although the research of the Bavelas group strongly supports the theory that avoidance-avoidance conflict (AAC) routinely leads to equivocation, it does not (with only a few exceptions, such as approach-approach binds and general unpleasantness) rule out many other conceivable causes of equivocation. Yet, the Bavelas group argues that no explanation other than AAC has merit (Bavelas et al., 1990), essentially claiming that because AAC is a sufficient cause of equivocation, it is a necessary cause of equivocation.

Some research, however, does suggest the possibility of other antecedents of equivocation. For example, Besnier's (1989) and Channell's (1994) empirical studies, though nonexperimental, suggest that level of situational formality might be implicated as a factor contributing to equivocation. In particular, Channell's naturally-occurring linguistic data strongly imply that situational "informality and atmosphere" (p. 191) influence the degree of equivocation. The idea here is that a goodness-of-fit principle can be used to explain some equivocation. That is, even in the absence of AAC, people in very informal interpersonal situations should equivocate more than those in formal situations because precision is more integral to formal situations than to informal ones, much like a specific dress code is more likely to apply to formal settings than to more informal settings.

In addition, the possibility of an interactive effect between AAC and formality level in influencing equivocation seems

quite likely, as suggested by the following logic. A person being interviewed for a job opening (formal situation) should communicate unequivocally when asked about college GPA, assuming there is no AAC (his/her GPA is strong). But notice that in the presence of AAC (GPA is weak), the formality of this situation might have a seemingly opposite effect, leading to even more equivocation than would informality or AAC working alone. In other words, in a formal situation the consequences of not neutralizing AAC (through equivocation) are more serious, and so the pressure to equivocate should be greater than it would be in a less formal situation with less serious consequences. The current study hypothesizes, then, that formal situations without AAC should produce the lowest levels of equivocation; however, formal situations with AAC should produce the highest levels of equivocation. Informal situations should produce moderate levels of equivocation, with or without AAC.

Still other research suggests certain psycholinguistic correlates of equivocal communication itself, especially with regard to the form of the language produced (i.e., paralinguistic cues such as filled pauses, false starts, repetitions, silent pauses, response latency, and message length). A general expectation is that, since equivocation resulting from AAC is likely quite strategic in nature, it should reflect a different language self-monitoring profile (Carroll, 1994) than equivocation caused merely by informality, with possibly more editing expressions and longer response latencies. Previous

6

research, however, is anything but clear on this issue, and seems
to suggest three fairly distinct possibilities.

According to one approach to such paralinguistic
disfluencies, the filled pause ("uh," "um," "er," etc.) is
special. It has been experimentally associated with language
production in situations where self-consciousness about speaking
is increased (Christenfeld & Creager, 1996), but does not
necessarily increase with anxiety per se (whereas other kinds of
disfluencies do--see esp. the work of Mahl, 1987). In addition,
Levelt (1989) argues that the filled pause is universal, the most
commonly used kind of editing expression, and particularly
accompanies problem expressions (those in need of repair) that
have just recently occurred. And finally, in an experiment in
which the number of options facing speakers was manipulated by
altering the complexity of mazes that the speakers had to
describe, Christenfeld (1994) showed that speakers used more
filled pauses when having to deal with more options, although
even speakers describing less complex mazes used a substantial
number of filled pauses. Taken together, such studies imply that
filled pauses might exist as the most prominent paralinguistic
correlate of AAC-based equivocation, since communicators faced
with AAC will likely do more self-conscious monitoring of their
speech and are challenged by extra (albeit conflicting) options.

A second approach to disfluencies would suggest that, in
addition to filled pauses, false starts should also accompany
ACC-based equivocation. False starts occur when speakers begin

7

an utterance, but then interrupt themselves, start over, and change information (see Tree, 1995), as in "we ended up, I ended up being released from the job." Levelt (1989) provides evidence that false starts, as a means of repair, are tied positively to language that the speaker sees as socially awkward or inappropriate. The speaker's awareness of such contextually inappropriate language might very well be heightened by AAC, especially in formal situations. Therefore, such a view would suggest that <u>both</u> filled pauses and false starts might be equally prominent in their association with AAC-based equivocation.

Third, interpersonal deception theory, although it has yet to show clear experimental evidence of the idea, suggests that any highly strategic communicative process (such as AAC-based equivocation and other forms of deception) should display nonstrategic leakage in the form of disfluencies <u>in general</u>, or what are referred to as "performance decrements" (Buller, Burgoon, Busler, & Roiger, 1994, pp. 409, 413; see also Buller, Burgoon, White, & Ebesu, 1994). Such a model would not grant a special status to filled pauses as indicators of self-monitoring, but instead would suggest that all disfluencies beyond conscious control would increase as the level of strategy (and hence self-monitoring) increases. This implication apparently stems from the idea of an "increased cognitive load" associated with strategic processes such as equivocation (Buller, Burgoon, Busler, & Roiger, 1994, p. 413). Accordingly, the prediction of such a theory would be that a combined index of several verbal

disfluencies would be most closely associated with AAC-based equivocation.

Taken together, the previous research strongly suggests that, primarily because of its self-conscious, strategic nature, AAC-based equivocation should be associated with a different paralinguistic profile than either equivocation due to informality or nonequivocation. The precise form of this difference, however, is unclear, as implied by the three models discussed above.

In addition, previous findings are mixed with regard to both response latencies and length of equivocal messages. Some of the original work of the Bavelas group (Bavelas et al., 1990) indicated longer response latencies for AAC-based equivocation, perhaps due to the increased degree of planning when producing such messages. However, other research has found shorter response latencies for deception in general, including equivocation (Buller, Burgoon, Buslig, & Roiger, 1994). Similarly, at least two studies found no differences in message length (Bavelas et al., 1990; Buller, Burgoon, Busler, & Roiger, 1994), while another suggested (though indirectly) that equivocal messages were viewed as briefer than completely false messages (Buller, Burgoon, White, & Ebesu, 1994).

Method

Participants

This experiment used 23 participants drawn from a psychology department subject pool at a southern university, although five

of these were excluded from final data analysis because of concerns about proper completion of the experimental task. All were undergraduate students who received extra credit in psychology classes for their participation. Twelve of the participants were females and six were males.

Procedure

On a computer monitor, participants were presented with four interpersonal scenarios, two of which represented formal situations (a job interview and an elegant dinner) and two of which represented informal situations (a chat with a friend and a party). Each of these scenarios ended with one of four questions from a hypothetical interactant, two of which provoked AAC (regarding a previous job from which one was fired and regarding one's poor driving record) and two of which promoted no AAC (dealing with one's strong grade point average and dealing with one's favorite pastimes). (For more detailed information, see Appendix.)

All participants were asked to imagine themselves as vividly as possible within each of the scenarios. As they read, participants were instructed to press the space bar to move from one screen to the next, so that the scenario gradually unfolded and so that each question appeared on a screen separate from the scenario itself. Eventually, for each scenario, participants would reach a screen that simply read "Oral Response Now," at which point they were instructed to give an actual oral response to the question that had been posed. Here, response latencies

were measured and responses were recorded on audiotape for later analysis.   In order to reduce any tendency for participants to delay moving to the next screen, which could give an unrealistic appraisal of response latency, two additional filler scenarios were included that were designed to make it more difficult to anticipate when the "Oral Response Now" screen would appear.

Scenarios and questions were constructed so that any question could realistically complete any of the scenarios.   In this way, all participants could receive all scenarios and all questions, with questions counterbalanced across scenarios so that no particular combination was repeated for any one participant.   In addition, the order of presentation was randomized to avoid response bias.   This setup resulted in a 2 x 2 within-subjects design (formality level by presence/absence of AAC).   Dependent variables included degree of equivocation as well as disfluency types, response latency, and message length.

Data Coding and Analysis

Oral responses were transcribed for further analysis.   In the process of transcription, care was taken to include all relevant information, including filled pauses, repetitions (of any word or phrase, such as "I have, I have been . . .), false starts, and silent pauses (any unfilled pause judged to be obtrusive).

After transcription, each response was rated for degree of equivocation on each of the four semantic dimensions of equivocation identified by the Bavelas group: content (Just what

11

is being said?), sender (Who is responsible for the message?),
receiver (To exactly whom is the message directed?), and context
(To what degree does the message answer the question?) (Bavelas
et al., 1990; Bavelas & Smith, 1982). This was done after all
information identifying treatment conditions had been removed
from the responses. For each dimension, a seven-point scale was
used ranging from "extremely clear" to "extremely unclear," then
these four ratings were averaged to produce a mean equivocation
score for each response, with higher scores implying more
equivocation. Also, an independent rater was trained in the
dimensions and then asked to rate 25% of the responses (chosen at
random) for the content and context dimensions, the two
dimensions which by far provided the most variance in
equivocation. Interrater reliability (Pearson's r) was .79.

A measure of each disfluency variable for each response was
computed by counting how many times it occurred and dividing by
response length (in total words), producing for all responses a
percentage score for each variable. In addition, a combined
percentage for all disfluency variables was computed for each
response. Also, for each response, message length was measured
in total words and response latency in milliseconds.

Because of the within-subjects design, repeated measures
ANOVA (in SPSS) was used to examine the impact of the independent
variables on each dependent variable.

Results

Equivocation

The study's primary hypothesis regarding degree of
equivocation was clearly supported. As expected, there was a
significant main effect for conflict, $F(1, 17) = 65.64$, $p <$
.0001, strongly reaffirming the findings of the Bavelas group
that AAC leads to greater equivocation. However, also as
expected, results showed that AAC does not tell the whole story,
as there was a significant interaction between AAC and formality
level, $F(1, 17) = 9.61$, $p = .007$, with the most equivocation
(mean = 3.61) occurring in the formal conflict condition and the
least occurring in the formal nonconflict condition (2.29).
Moderate amounts of equivocation occurred in the informal
conflict condition (3.24) and the informal nonconflict condition
(2.64). (See Table 1.)

Psycholinguistic Profile

The findings regarding paralinguistic cues do suggest a
distinct profile for AAC-based equivocation, although these
findings are somewhat mixed and more difficult to interpret than
those on equivocation per se.

For percentage of filled pauses, a finding approaching
significance was obtained for the interaction between formality
level and AAC, $F(1, 17) = 4.24$, $p = .055$, although no main
effects were found. What is surprising about this finding is
that it is in an unexpected direction, with moderate numbers of
filled pauses in both formal conflict and informal conflict

conditions (3.16% and 3.45% respectively), and with the most filled pauses occurring in the condition that had the least equivocation, the formal nonconflict condition (4.75%). Participants produced the smallest percentage of filled pauses in the informal nonconflict condition (2.10%). (See Table 2.)

False starts show quite a different profile than do filled pauses, with a main effect for formality level, F(1, 17) = 4.27, p = .054, and one approaching significance for AAC, F(1, 17) = 3.27, p = .088. Participants used more false starts overall when they were in conflict as opposed to nonconflict situations and when they were in informal rather than formal situations. Since the total number false starts was low (21), these findings need to be interpreted cautiously, although it is interesting that the least number of false starts (0%) occurred in the same condition that produced the least equivocation (formal nonconflict). (See Table 2.)

Although silent pauses did happen more frequently in conflict situations (3.00%) than in nonconflict situations (1.71%), the effect was not significant, F(1, 17) = 2.80, p = .112.

For repetitions, there was a main effect finding for formality level, F(1, 17) = 6.88, p = .018, as well as a significant interaction, F(1, 17) = 6.03, p = .025. Participants used more repetitions in formal than in informal situations, perhaps reflecting increased anxiety. However, the interaction is of most interest to the issue of equivocation in that most

repetitions (1.56%) occurred in the same condition (formal conflict) where the most equivocation took place. (See Tables 1 and 2). Although repetitions, therefore, tended to accompany the most strategic kind of equivocation, this finding, like the one on false starts, must be viewed cautiously because of the low total number of repetitions (19).

When combined disfluencies were examined, a main effect finding for AAC emerged, $F(1, 17) = 5.19$, $p = .036$. Participants were more disfluent overall in conflict situations (8.02%) than in nonconflict ones (5.98%). (See Table 2.) It is safe to say, however, that this finding occurred despite the influence of filled pauses, since we have already seen that most filled pauses occurred in the formal nonconflict condition (see above).

Although the findings suggest that, generally speaking, disfluencies accompany AAC-based equivocation (where strategy and planning are paramount), this is not reinforced by the finding on response latency, where we might similarly expect longer reaction times in conflict situations as evidence of increased strategy and self-monitoring. Instead, the only significant finding here was a main effect for formality level, $F(1, 17) = 4.69$, $p = .045$, indicating that participants took longer to respond to questions in formal scenarios (mean = 2196.34 ms) than they did to questions in informal scenarios (1588.09). One explanation of this apparent anomaly could be methodological. Although data from five participants were discounted because of suspicions that they were anticipating the "Oral Response Now" screen, and so

planning their responses before ever advancing to that screen, it
is certainly conceivable that other participants were behaving
similarly but went unnoticed by the experimenter.   Certainly
research that more carefully controls for unwanted influences on
response time is warranted.

There was no significant effect on message length, although
the interaction approached significance, F(1, 17) = 3.60, p =
.075.   There was a trend toward longer messages in both the
formal conflict (mean = 46.94 words) and informal nonconflict
conditions (43.83) as opposed to the formal nonconflict and
informal conflict conditions (37.94 and 38.11 respectively).
Although more research is needed to clarify (especially since
previous work has also been inconclusive), this suggests the
possibility that people are more verbose both when they are
behaving quite strategically, where they need (or feel they need)
longer responses to adequately neutralize the dilemma created by
AAC in a formal situation, and when they are the most spontaneous
and probably the least anxious, in which case longer messages
occur rather naturally.

Discussion

With regard to the antecedents of equivocation itself, this
study clearly and strongly demonstrates that the Bavelas group
was right in claiming that AAC routinely leads to increased
equivocation, but also that at least one other situational factor
is implicated as a cause.

People in formal situations apparently, as hypothesized, feel they must equivocate strongly when AAC is present probably because the consequences of not neutralizing the bind are greater in formal than in informal situations. In other words, AAC seems to be made most salient when the conversational occasion is formal. One participant in the formal conflict condition, for example, in a rather unskillful attempt to vacillate between either side of the bind, responded this way to the question about her poor driving record: "I'm a very good driver, but I've been caught three times." Most attempts at equivocation in such situations were, however, a bit more sophisticated, employing qualifiers, hedges, and/or vague language. For example, another participant responded to the same question quite differently, but still equivocally:

> Well, I can't say, uh, my driving record's [pause] perfect, but, uh, cause I've gotten a few tickets in the past, I kinda like to drive a little fast, cause [pause] my theory is if you're gonna [pause] be driving you might as well get from point A to point B, it's, cause it's boring just sitting in a car.

Notice how, in the following example of a response to the same question, but from someone in an informal situation, some equivocation is still present although the urgency to neutralize the bind is not quite as strong:

> Well, my driving record isn't too well, uhm, I've gotten three tickets in the past two years, uhm, those cops just

17

always seem to catch me.   I don't mean to, uh, deliberately
do it, drive bad, but it just always catches me.

When AAC is excluded, on the other hand, formality produces
extremely low levels of equivocation since people adapt to the
increased constraints present in formal situations, employing
something akin to a goodness-of-fit principle, thereby making
their language accordingly more precise.   The following excerpt
is from a formal situation, but in response to a question
designed not to provoke AAC (about a strong grade point average):
"Right now my grade point average is a three point, three point
four two.   Despite college being as hard as it is, I was able to
keep my grades up and not really fool around."   This contrasts
slightly with a response to the same question, but from an
informal situation, so that goodness-of-fit suggests less
precision (hence a bit more equivocation):   "Uhm, I have a three
point four.   I'm doing pretty well in all my classes I think.
What about yours?"

Future research should address several issues related to the
antecedents of equivocation.   First, a somewhat clearer
conceptual definition of "formality" needs to be offered, so that
it can be more readily distinguished from related concepts (like
degree of familiarity with the other interactant), or perhaps
even subsume related concepts.   Second, the search for
antecedents should extend to individual differences as well.   For
example, perhaps certain personality traits or cognitive
differences predispose some people to more (or less)

equivocation, or perhaps lead them to focus more on key situational antecedents. Third, it is obvious that a more reliable method of rating degree of equivocation (as defined by the Bavelas group) must be used, employing more judges who are given more training.

With regard to the psycholinguistic profile of equivocation, especially concerning the disfluency data, the results are interesting but somewhat less straightforward.

The results do not support the notion that both filled pauses and false starts, taken together, might provide a substantive index of AAC-based equivocation (the second of the approaches to disfluencies discussed earlier). In fact, each of these distributed themselves quite differently across treatment conditions, filled pauses being most associated with the condition producing the least equivocation (formal nonconflict) while false starts were least associated with this same condition. Filled pauses and false starts appear to be at odds as "indicators" of equivocation.

Of the two remaining approaches to disfluencies previously discussed, which best fits the data obtained in this study? The results certainly support the idea that filled pauses are special, but not in the manner that one would have expected. Instead of being a strong indicator of increased AAC-based equivocation, which was suggested by Christenfeld's (1994) and Christenfeld and Creager's (1996) results showing more filled pauses when options and self-consciousness are experimentally

increased, the filled pause was used most by participants who
were reacting to a non-AAC question posed within a formal
situation. In other words, the filled pause, rather
surprisingly, most accompanied low equivocation in a nonconflict
condition. Why? One part of the answer might be found in
Christenfeld's (1994) suggestion that increased options do not
tell the whole story, that possibly any factor which interrupts
the normal flow of speech might increase filled pauses. If
formal situations can be construed as such a factor, perhaps in
that speakers are normally more likely to be interrupted by
interlocutors of higher status, then high numbers of filled
pauses might be expected in a formal nonconflict condition. In
addition to being highly speculative (at least without more
research), this explanation is incomplete because it does not
adequately explain why filled pauses were more prominent in
formal nonconflict than in both of the conflict conditions,
including formal conflict. One characteristic of AAC is that it
almost certainly increases self-consciousness about speech, which
should normally increase filled pauses (Christenfeld & Creager,
1996), unless it heightens awareness of one's own speech to such
a degree that filled pauses (not just language itself) come under
some degree of conscious control, and can therefore be
suppressed. Notice that such an explanation fits neatly into the
model holding that filled pauses are special, since other
disfluencies increased with conflict, although further research
would need to replicate the current finding and explain why

filled pauses specifically might be more subject to some
conscious control.

Another possible explanation for this unique role for the
filled pause is that it is a methodological artifact of the fact
that one of the non-AAC questions (about hobbies and interests)
was more open-ended than any of the other questions used (see
Appendix).   Perhaps the open-ended nature of this question led to
the consideration of more options by participants, resulting in
more filled pauses.   Although this explanation appears an
unlikely one, since _informal_ nonconflict produced the lowest
degree of filled pauses, future research needs to address this
methodlgical concern.

The third approach to disfluencies discussed earlier,
interpersonal deception theory, appears to have been supported by
the general trend in this study that disfluencies overall (with,
of course, the exception of filled pauses) increased in conflict
conditions, where equivocation itself was also high.   In order to
obtain a clearer picture of this trend, a measure of total
disfluencies minus filled pauses was calculated (again, as a
percentage of total words) and analyzed by treatment conditions
(See Table 2.)   As expected, this analysis produced an even
stronger main effect for conflict than did the analysis that
included filled pauses, $F(1, 17) = 6.27$, $p = .023$.   In both
formal and informal conflict conditions, disfluency percentage
was high (4.68% and 4.75%), whereas it was substantially lower in
both formal (2.37%) and informal (2.73%) nonconflict conditions.

21

Notice especially that this measure showed the smallest number of disfluencies in the condition (formal nonconflict) where equivocation was lowest and filled pauses alone were used the most (see discussion above). This finding dramatically illustrates how apparently different mechanisms underlie the use of filled pauses versus other disfluencies. Yet it also gives evidence of the fundamental prediction of interpersonal deception theory that AAC-based equivocation (as a form of strategic deception) should generally result in more disfluencies. In other words, it makes sense to say that the increased cognitive load associated with the strategic planning of equivocal messages (those produced by AAC) should result in performance (i.e., production) decrements at the nonstrategic level, and this is what the results indicate for most kinds of disfluencies.

This study, therefore, lends support both to the idea that filled pauses are special in their relation to equivocation and to the idea that other disfluencies generally serve as markers of increased equivocation.

Besides the fact that more participants and more language samples should be analyzed, future research on the psycholinguistic correlates of equivocation needs to focus on at least two areas. First, a research design should be used that allows conclusions more directly to be drawn about correlations of psycholinguistic data to equivocation. In the present study, both equivocation and linguistic data were analyzed as consequences of formality level and AAC, and then similarities of

the patterns noted and discussed. Yet, such an approach does not
<u>directly</u> tie degree of equivocation to linguistic output.
Second, some correlates of equivocation examined here ought to be
further explored and clarified, such as response latency, message
length, and the possibly unique role of filled pauses. As a
corollary, psycholinguistic features other than disfluencies need
analysis, such as the role played by hedges and qualifiers.

23

References

Bavelas, J.B., Black, A., Chovil, N., & Mullett, J.   (1990).
Equivocal communication. Newbury Park, CA: Sage.

Bavelas, J.B., & Chovil, N.   (1986).   How people disqualify:
Experimental studies of spontaneous written disqualification.
Communication Monographs, 53, 70-74.

Bavelas, J.B., & Smith, B.J.   (1982).   A method for scaling
verbal disqualification.   Human Communication Research, 8(3),
214-227.

Besnier, N. (1989).   Information withholding as a
manipulative and strategy in Nukulaelae gossip.   Language in
Society, 18(3), 315-341.

Buller, D.B., Burgoon, J.K., Buslig, A.L.S., & Roiger, J.F.
(1994).   Interpersonal deception VIII: Further analysis of
nonverbal and verbal correlates of equivocation from the Bavelas
et al. (1990) research.   Journal of Language and Social
Psychology, 13(4), 396-417.

Buller, D.B., Burgoon, J.K., White, C.H., & Ebesu, A.S.
(1994).   Interpersonal deception VII: Behavioral profiles of
falsification, equivocation, and concealment.   Journal of
Language and Social Psychology, 13(4), 366-395.

Carroll, D.W.   (1994).   Psychology of language. Belmont,
CA: Wadsworth.

Channell, J.   (1994).   Vague language. Oxford: Oxford
University Press.

Christenfeld, N.   (1994).   Options and ums.   <u>Journal of Language and Social Psychology, 13</u>(2), 192-199.

Christenfeld, N., & Creager, B.   (1996).   Anxiety, alcohol, aphasia, and *ums*.   <u>Journal of Personality and Social Psychology, 70</u>(3), 451-460.

Levelt, W.J.M.   (1989).   <u>Speaking: From intention to articulation.</u>   Cambridge, MA: MIT Press.

Tree, J.E.F.   (1995).   The effects of false starts and repetitions on the processing of subsequent words in spontaneous speech.   <u>Journal of Memory and Language, 34,</u> 709-738.

Appendix

Experimental Stimuli

Formal Scenarios

Job Interview: "You are being interviewed for a job that you really want. So far the interview is progressing well. Take a moment to imagine yourself in the room seated near the interviewer."

Dinner: "You are attending an elegant dinner as part of a university function. You are seated next to the president of the university, with whom you are talking. Take a moment to imagine yourself there."

Informal Scenarios

Chat: "You are having lunch with a friend in the student union. Take a moment to imagine yourself in these surroundings, with your friend seated at the table with you."

Party: "You are enjoying yourself at a party, talking with friends and acquaintances. Imagine yourself actually there. Envision the room and the people."

AAC Questions

Last Job: "The conversation turns to recent work experiences, and you are asked, 'How have you been enjoying your job?' (Assume that you have had problems with your last job and were fired last week.)"

Tickets: "The conversation turns to driving experiences, and you are asked, 'So, how often have you gotten a ticket?' (Assume that your driving record is rather poor, with three tickets received

Appendix (cont.)

in the last two years.)"

NonAAC Questions

GPA: "The conversation turns to your academic performance, and you are asked, 'What's your overall grade point average?' (Assume that it is strong, a 3.42.)"

Pastimes: The conversation turns to hobbies and interests, and you are asked, 'What are your favorite pastimes?'"

Table 1

Equivocation Mean Scores by Formality Level and AAC (With

Standard Deviations in Parentheses)

	AAC	
	No	Yes
Formality Level		
Informal	2.64 (.65)	3.24 (.72)
Formal	2.29 (.37)	3.61 (.58)

Table 2

Linguistic Means by Treatment Condition (As Percentage of Total

Words With Standard Deviations in Parentheses)

Measure	Condition			
	Formal/AAC	Formal/NonAAC	Inf/AAC	Inf/NonAAC
Filled Pauses	3.16(3.11)	4.75(4.76)	3.45(2.79)	2.10(3.16)
False Starts	0.50(0.75)	0.00(0.00)	1.37(2.07)	0.84(1.88)
Silent Pauses	2.62(2.55)	1.76(2.60)	3.38(4.53)	1.66(2.58)
Repetitions	1.56(2.13)	0.62(1.40)	0.00(0.00)	0.23(0.57)
Total Disf's.	7.84(5.71)	7.12(4.80)	8.20(6.62)	4.83(4.19)
Total Disf's. Minus F.Pauses	4.68(3.89)	2.37(2.54)	4.75(5.67)	2.73(2.75)

U.S. Department of Education
*Office of Educational Research and Improvement
(OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)*

ERIC

Reproduction Release
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: *Causes and Psycholinguistic Correlates of Interpersonal Equivocation*		
Author(s): *Richard Bello*		
Corporate Source:		Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY SAMPLE TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
Level 1	Level 2A	Level 2B
↑ [✓]	↑ [ ]	↑ [ ]
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) *and* paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche onl
Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.		

ERIC

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: *Richard Bello*	Printed Name/Position/Title: Richard Bello/Assistant Prof. Speech Communication
Organization/Address: Dept. of Performing Arts Nicholls State Univ. Thibodaux, LA 70310	Telephone: (504) 448-4588
	Fax: (504) 448-4674
	E-mail Address: sped-rsb@nich-nsunet.nich.edu
	Date: 10/16/98

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598
Telephone: 301-497-4080